DRAFT

Mitigated Negative Declaration

# Kaiser Permanente Baldwin Park Emergency Department Expansion and Medical Office Building

**MARCH 2023**

*Prepared for:*

**CITY OF BALDWIN PARK**
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# Acronyms and Abbreviations

| Acronym/Abbreviation | Definition |
|---|---|
| ACM | asbestos-containing materials |
| AERMOD | American Meteorological Society/Environmental Protection Agency Regulatory Model |
| AF | attenuation factor |
| AHU | air-handling unit |
| AQMP | Air Quality Management Plan |
| BMP | best management practice |
| CAAQS | California Ambient Air Quality Standards |
| CalEEMod | California Emissions Estimator Model |
| CalEPA | California Environmental Protection Agency |
| CEQA | California Environmental Quality Act |
| CHRIS | California Historical Resources Information System |
| CO2e | carbon dioxide equivalent |
| COC | contaminant of concern |
| CSMD | Consolidated Sewer Maintenance District |
| CUP | conditional use permit |
| CUPA | Certified Unified Program Agency |
| dBA | A-weighted decibel |
| DTSC | Department of Toxic Substances Control |
| ED | emergency department |
| EIR | Environmental Impact Report |
| EO | Executive Order |
| ESA | Environmental Site Assessment |
| ESL | Environmental Screening Level |
| FAR | Floor Area Ration |
| FC | Freeway Commercial |
| FEMA | Federal Emergency Management Agency |
| FHWA | Federal Highway Administration |
| GC | General Commercial |
| GHG | greenhouse gas |
| GSF | gross square footage |
| HARP2 | Hotspots Analysis and Reporting Program Version 2 |
| HCAI | Health Care Access and Information |
| HFC | Hydrofluorocarbon |
| HFHSZ | high fire hazard severity zone |
| HRA | health risk assessment |
| HVAC | heating, ventilation, and air conditioning |
| ITE | Institute of Transportation Engineers |
| kWh | kilowatt-hours |
| LACM | Natural History Museum of Los Angeles County |
| LACoFD | Los Angeles County Fire Department |

| Acronym/Abbreviation | Definition |
|---|---|
| LBP | lead-based paint |
| LOS | level of service |
| LST | localized significance threshold |
| MGD | million gallons per day |
| MND | Mitigated Negative Declaration |
| MOB | medical office building |
| MRZ | Mineral Resource Zone |
| MT | metric tons |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| NDMA | n-nitrosodimethylamine |
| NESHAP | EPA National Emission Standards for Hazardous Air Pollutants |
| NGVD | National Geodetic Vertical Datum |
| NOx | oxides of nitrogen |
| NPDES | National Pollutant Discharge Elimination System |
| OEHHA | Office of Environmental Health Hazard Assessment |
| OSHPD | Office of Statewide Health Planning and Development |
| OU | Operating Unit |
| PCB | polychlorinated biphenyl |
| PCE | tetrachloroethene |
| PRIMP | Paleontological Resources Impact Mitigation Program |
| REC | recognized environmental condition |
| RSL | EPA Regional Screening Level |
| RWQCB | Regional Water Quality Control Board |
| SB | Senate Bill |
| SCAB | South Coast Air Basin |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCCIC | South Central Coastal Information Center |
| SCE | Southern California Edison |
| SGVA | San Gabriel Valley Airport |
| SLF | Sacred Lands File |
| SOx | sulfur oxide |
| SRA | Source-Receptor Area |
| SVP | Society of Vertebrate Paleontology |
| SWPPP | Stormwater Pollution Prevention Plan |
| TAC | toxic air contaminant |
| TCE | trichloroethene |
| UST | underground storage tank |
| UWMP | Urban Water Management Plan |
| VEC | vapor encroachment condition |
| VIMA | Vapor Intrusion Mitigation Advisory |
| VMT | vehicle miles traveled |

| Acronym/Abbreviation | Definition |
|---|---|
| VOC | volatile organic compound |
| WEAP | Workers Environmental Awareness Program |

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# 1 Introduction

## 1.1 Project Overview

The proposed Kaiser Permanente Baldwin Park Emergency Department Expansion and Medical Office Building Project (project) involves improvements and the expansion of a current medical campus. The applicant, Kaiser Permanente, has proposed the expansion of the emergency department (ED) and the construction of a medical office building (MOB) at the current Kaiser Permanente Baldwin Park Medical Campus. The construction of the MOB would be a redevelopment of a former retail site located at the northwestern corner of the medical campus.

## 1.2 California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) requires that any project in the state of California determined to have the potential to result in adverse impacts to the environment be analyzed under the CEQA Guidelines and the results disclosed to the public (14 CCR 15000 et seq.; California Public Resources Code Section 21000 et seq.). A lead agency is determined under CEQA as the agency with greatest authority over the resources or land the proposed project is likely to impact, often a city, county, school district, or public resource agency. The proposed project would be required to complete environmental review under CEQA, led by the City of Baldwin Park, to identify and disclose potential environmental impacts associated with the proposed project.

The City has prepared this Mitigated Negative Declaration (MND) in conformance with Section 15070(a) of the CEQA Guidelines. The purpose of the MND environmental evaluation is to describe the proposed project, determine any potentially significant impacts associated with the proposed project, and incorporate mitigation measures into the project design as necessary to reduce or eliminate the potentially significant effects of the project.

## 1.3 Project Planning Setting

The project site is located within the City of Baldwin Park (City). The Baldwin Park 2020 General Plan and Baldwin Park Municipal Code guide and govern planning within the city. The project site is located within the South Coast Air Basin (SCAB) and is within the jurisdictional boundaries of SCAQMD.

## 1.4 Public Review Process

Pursuant to CEQA Guidelines Section 15105(b), the MND will be available for a public comment period of not less than 30 days from March 2, 2023, to April 1, 2023.

In reviewing the MND, affected public agencies and the interested public should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment, as well as ways in which the significant effects of the project are proposed to be avoided or mitigated.

Comments may be made on the MND in writing before the end of the comment period. Following the close of the public comment period, the City will consider this MND and comments thereto in determining whether to approve the proposed project. Written comments on the MND should be sent to the following address by April 1, 2023: RGarcia@baldwinpark.com

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# 2 Project Description

## 2.1 Project Location

The Project is located at the Kaiser Permanente Baldwin Park Medical Campus in southern Baldwin Park, in Los Angeles County, California (Figure 1, Project Location). The entire project site is approximately 26.02 acres and occurs primarily on Assessor's Parcel Number 8559-006-006, 8559-008-011, and 8559-008-005. Project components would be concentrated in the northeastern (emergency department expansion) and northwestern (MOB) corners of the project site. The project site is bound by Dalewood Street to the north, Leorita Street to the West, Bess Avenue to the southwest, and Baldwin Park Boulevard to the southeast.

## 2.2 Environmental Setting

The project site is currently developed, consisting of a 24.48-acre medical campus (APN 8559-006-006) and a 1.54-acre site that consists of an abandoned retail building, herein referred to as the "Broken Horn site" (APN 8559-008-011 and 8559-008-005). The Broken Horn site is located adjacent to the existing medical campus to the northwest. The project site is zoned as Freeway Commercial (FC) and has a land use designation General Commercial. The site is relatively flat, and the site range elevation ranges from approximately 310 feet above National Geodetic Vertical Datum (NGVD). The project site is underlain by fill material, silty sand to poorly graded sand, and dense sand with varying amounts of gravels and cobbles (Appendix A, Geotechnical Investigation Report).

The project site is surrounded by existing development on all sides. The Interstate 10 (I-10) freeway is located just beyond Dalewood Street to the north of the project site, commercial uses are located south and east of the project site, and residential uses are located south and west of the project site.

Regional access to the project site is provided by I-10, which runs east-west adjacent to the project site, and I-605, which runs north–south, allowing for vehicular and transit access to the larger Los Angeles region. The project site is directly accessible via Dalewood Street, Leorita Street, and Baldwin Park Boulevard.

## 2.3 Project Characteristics

### Overview

The project consists of two main components: an emergency department expansion and the construction of a medical office building (MOB), see Figure 2, Site Plan. The first component is the construction of an expansion to the emergency department, which is part of an existing hospital tower on the south end of the Kaiser Permanente campus. Expansion of the emergency department would add approximately 23,000 square feet to the existing emergency department, expand the number of existing treatment bays from 38 to 60, add a new ambulance canopy, and include additional improvements to the existing emergency department. The expansion and improvement of the emergency department would allow better functionality within the emergency department. The second phase of the project would consist of the construction and operation of an approximately 33,000 square foot MOB. This component would expand the boundary of the medical campus to include the Broken Horn parcel currently adjacent to the medical campus to the west. Development of this site would require the demolition of an existing retail building.

## Building and Site Design

As stated above, the emergency department expansion would increase the size of the existing emergency department by 23,000 square feet, resulting in a total square footage of an approximately 40,000 square foot emergency department. This addition would not add hospital bed licenses under the California Department of Health Care Access and Information (HCAI), formerly the Office of Statewide Health Planning and Development (OSHPD). The emergency department expansion exterior wall system assembly will be a combination of metal and composite panels and cement plaster finish on light gauge metal stud framing. Glazing will be a storefront type window system with low-E insulated glass.

The proposed two-story MOB would consist of a 33,000 square foot building. This component would expand the existing medical campus to the northwest on a property that includes an existing retail building. The MOB component would also include parking.

As a project design feature, buildings constructed as part of the proposed project would include installation of sub-slab vapor barrier systems, as described in the Vapor Intrusion Mitigation Advisory published by DTSC and CalEPA in 2011 (VIMA; DTSC and CalEPA 2011a). Vapor barriers will be designed to meet the standards outlined in the VIMA and will be in general conformance with General Construction, Membrane Installation, and Ventilation Trench for Passive Gas Control System Requirements of the Los Angeles County Methane Gas Mitigation Standards. The system would include a vapor barrier membrane and passive sub-slab venting system with the ability to be upgraded to an active system in the future, as necessary. The system will be designed by a California-licensed engineer. Installation would be overseen by a California-licensed engineer and would include testing for leaks and integrity of the system. Two sets of monitoring probes would be installed in each building, both above and below the barrier system, to evaluate the effectiveness of the system. Samples would be collected twice annually for the first two years of occupancy to verify adequate operation. Should results of monitoring probe sampling indicate vapor intrusion from sub-slab soil gas contamination, modifications would be made to the system to further increase ventilation and eliminate vapor intrusion. Refer to Section 3.9, Hazards and Hazardous Materials, for additional information.

## Vehicular and Pedestrian access

The emergency department expansion would include an additional emergency department walk-in entrance to the northwest corner of the emergency department. The new ambulance canopy entry is approximately 252 feet away from the existing member walk-in entry. Existing primary entry will continue to serve member walk-in to the emergency department. Vehicle entrance to the project site would remain the same as the existing entrance. The emergency department expansion would not impact the existing parking lot. The new ambulance bay would include an addition of four ambulance parking spaces.

Access to the MOB would occur via a driveway off Leorita Street, west of the MOB site. Parking would surround the MOB to the north, east, and west. After Phase I and demolition of the existing retail building on the Broken Horn site is completed, approximately 68 parking spots would be available for interim parking for hospital use until the beginning of Phase II. Upon completion of Phase II, parking would surround the MOB to the north, east, and west. Eighty parking stalls would be provided for ADA and member parking.

## Emergency Vehicle Access

Emergency vehicle access would remain the same as the existing conditions and would be located at the northeastern end of the medical campus off Dalewood Street. The emergency department expansion would include new ambulance parking and canopy to the northeast facing side of the proposed emergency department expansion. The current ambulance bay can hold three to four ambulances, but in some cases, there are up to six ambulances bringing patients into the emergency department. The addition of the ambulance canopy would provide an additional four ambulance spaces.

## Landscaping

All project landscaping would be consistent with Section 153.160.020 of the City of Baldwin Park Municipal Code, which establishes water efficient landscape standards. The project would include tree removal as a part of both project components. The City of Baldwin Park Tree Protection ordinance would apply to trees on the project site or any trees within the public right of way that are removed of damaged as a result of project implementation. Approval from the Director of the Public Works Department is required. All tree removal will be compliant with City of Baldwin Park Municipal Code Section 97.131. None of the trees that are expected to be removed as part of the project are located within the public right-of-way.

## Infrastructure Improvements

The emergency department expansion would include new asphalt on the medical campus at the existing emergency department access point and the existing ambulance overflow parking. The expansion phase would also include improvements to the existing emergency department's electrical, mechanical, plumbing, structural, fire and life safety systems.

## Off-Site Improvements

In addition to the emergency department expansion and construction of the MOB, the project would include off-site improvements that would be divided up among the two project phases and are included in Figure 3, Off-Site Improvements. The off-site improvements are described below.

The project would include the following off-site improvements during Phase I:

- Resurfacing asphalt bordering the medical campus along Baldwin Park Boulevard (Phase I)
- New ADA compliant ramp at the corner of Baldwin Park Boulevard and Bess Avenue.
- Two new ADA compliant ramps at the Baldwin Park Boulevard entrance to the medical campus.
- New sidewalk along Baldwin Park Boulevard from Bess Avenue to Dalewood Street.
- New sidewalk on the medical campus along the Baldwin Park Boulevard entrance to the campus.
- New sidewalk along Dalewood Street from Baldwin Park Boulevard to the end of the emergency department parking lot.
- New ADA compliant driveway along Baldwin Park Boulevard on the northeast side of the proposed emergency department expansion.
- Remove and replace damaged trees along project frontage on Baldwin Park Boulevard.
- Close the northwestern driveway on Bess Avenue

The project would include the following off-site improvements during Phase II:

- New sidewalk along Leorita Street from Bess Avenue to Dalewood Street
- Resurfacing asphalt along Leorita Street and Dalewood Street bordering the medical campus.
- Refurbish truncated domes along Dalewood Street (two locations).
- New ADA compliant ramp along Dalewood Street.
- New ADA compliant ramp at the corner of Dalewood Street and Baldwin Park Boulevard.

## 2.4 Project Construction and Phasing

The project would occur in two phases. All phases would include the use of Tier 4 equipment. Phase I would include activities on both portions of the project site. Phase I activities for the emergency department expansion component would include site preparation, emergency room expansion, emergency room renovation. Phase I activities for the MOB component would include the demolition of the existing retail building at the Broken Horn site and paving the MOB site. Additionally, Phase I would include the off-site improvements listed above. Phase I is estimated to occur over a 23-month period from May 2023 to April 2025. Upon completion of Phase I, 68 parking spaces will be available at the MOB site.

Phase II would focus on the MOB component and the remaining off-site improvements. Phase II would include site preparation of the Broken Horn site, grading, and construction of the MOB building. The Broken Horn site would have limited access and its 80-space parking lot would be used by Kaiser Permanente until construction of the MOB commences. Phase II is estimated to occur over an 18-month period from June 2028 to December 2029.

## 2.5 Project Approvals

The project would be subject to the following approvals for each phase:

### Phase I

- Design Review
- Lot Line Adjustment
- Conditional Use Permit
- Variance from Development Standards
- Amendment to the Kaiser Master Sign Plan

### Phase II

- Design Review
- Conditional Use Permit
- Amendment to the Kaiser Master Sign Plan

# 3 Initial Study Checklist

1. **Project title:**

   Kaiser Permanente Baldwin Park Emergency Department Expansion and Medical Office Building

2. **Lead agency name and address:**

   City of Baldwin Park
   14403 East Pacific Avenue
   Baldwin Park, California 91706

3. **Contact person and phone number:**

   Ron Garcia
   626.813.5253
   14403 Pacific Avenue
   Baldwin Park, California 91706

4. **Project location:**

   1011 Baldwin Park Boulevard
   Baldwin Park, California 91706

5. **Project sponsor's name and address:**

   Kaiser Foundation Hospitals
   1011 Baldwin Park Boulevard
   Baldwin Park, California 91706

6. **General plan designation:**

   General Commercial (GC)

7. **Zoning:**

   Freeway Commercial (FC)

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

   As described above, the proposed project would include the expansion of the existing emergency department at the Kaiser Permanente Baldwin Park Medical Center and construction of a medical office building (MOB). For additional information please refer to Section 2, Project Description, of this MND.

**9. Surrounding land uses and setting (Briefly describe the project's surroundings):**

The project site is bound by Dalewood Street to the north and northeast, Baldwin Park Boulevard to the southeast, Bess Avenue to the southwest, and Leorita Street to the northwest. The project is surrounded by existing development on all sides. The Interstate 10 freeway is located to the north on the other side of Dalewood Street. Southeast of the project site along Baldwin Park Avenue consists of general industrial uses and is currently a UPS Customer Center. Bess Avenue and Leorita Street to the southwest of the project site consists of single- and multifamily- residential land uses.

**10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

The project would require to have a plan check and a permit for the ED expansion with approval from the State Department of Health Care Access and Information (HCAI).

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

Yes. The Gabrieleno Band of Mission Indians- Kizh Nation has requested tribal consultation.

## Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☐ Geology and Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials |
| ☐ Hydrology and Water Quality | ☐ Land Use and Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population and Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities and Service Systems | ☐ Wildfire | ☐ Mandatory Findings of Significance |

## Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

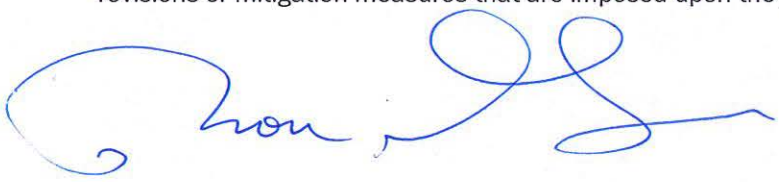
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

2/27/2023

Date

## Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance

# 3.1 Aesthetics

| | | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| I. | AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| a) | Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☒ |
| b) | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☒ | ☐ |
| c) | In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| d) | Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

***a) Would the project have a substantial adverse effect on a scenic vista?***

A scenic vista generally consists of a defined viewpoint that provides wide ranging views of a landscape. The 2020 Baldwin Park General Plan does not identify or designate scenic vistas or viewsheds in the City of Baldwin Park. The project is located in an urbanized area and surrounded by existing development. As described above, the project is surrounded by residential land uses along Bess Avenue and Leorita Street, industrial land uses along Baldwin Park Blvd, and Interstate-10 on the other side of Dalewood Street. Additionally, the project site is an existing developed medical center. The proposed project would include an expansion of the existing emergency department and the construction of a MOB. The one-story emergency department expansion would expand the current department by approximately 23,000 square feet and the MOB would consist of a two-story high, 30,000 square foot building. Due to the lack of designated scenic vistas or viewsheds near the project site, the project would have no impact to scenic vistas.

***b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

As stated above, the project site is surrounded by existing development and is currently developed. The project site is adjacent to the I-10 Freeway to the north. In addition to being visible from I-10, the project site is briefly visible from I- 605. While the project site is visible from these freeways, neither of these

highways have been designated as a state scenic highway (Caltrans 2019). There are no rock outcroppings at or near the project site that would be impacted by project implementation.

Expansion of the emergency department and construction of the MOB would result in the removal of37 trees on private property. Per Baldwin Park Municipal Code Section 153.165.090, the project would be required to obtain a tree removal permit for each tree that would be removed. Additionally, to maintain compliance with the Municipal Code, the project would replace the removed trees within six months of tree removal (City of Baldwin Park 2022a).

The construction of the MOB would require the demolition of an existing retail building that consists of two separate structures. One of these structures was constructed in 1976, requiring further investigation into the historical significance of the building because it had been more than 45 years since it was built. A Built Environment Inventory and Evaluation Report for the site was completed to evaluate the historical significance of the structures and is included as Appendix B, Built Environment Inventory and Evaluation Report. The Built Environment Inventory and Evaluation Report determined that while the structure was built over 45 years ago, the subject property is concluded to be ineligible as a designated resource in Baldwin Park, for the CRHR, and the NRHP due to a lack of significant historical associations and architectural merit. As the property is not considered a significant historic building and is not located within proximity to a state scenic highway, therefore the project would not impact views of historic buildings within a state scenic highway.

Based on the foregoing, the proposed project would not substantially damage scenic resources including, trees, rock outcroppings, and historic buildings within a state scenic highway. Impacts to these scenic resources would be less than significant.

*c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project site is located in an urbanized area surrounded by industrial, commercial, and residential land uses. The project site is currently developed with an existing medical center with associated MOBs and parking structures. Implementation of the project would include expansion of the existing emergency department at the northeastern portion of the site and the addition of a MOB on the northwestern corner of the site where an existing retail building exists.

The emergency department expansion and the MOB building would be generally consistent with the development standards for Commercial and Industrial Zones as set forth in Table 153.050.030 in the City of Baldwin Park Municipal Code and the general development standards in Municipal Code Section 153.130 (City of Baldwin Park, 2022b), except for the request for a variance in the front yard setback along Baldwin Park Boulevard. The variance would allow for an overhead projection from the building façade to encroach 2 feet, 10 inches within the required 10-foot front yard setback along Baldwin Park Blvd. The overhead project would consist of white painted metal panels that would be consistent with the projections on the second floor. Signage on the project site is currently regulated by the Kaiser Master Sign Program, because the signage regulations in the Baldwin Park Municipal Code does not currently address the needs for multi-building medical campuses. The proposed signage for the emergency department expansion would be similar to current signage at the project site that is outlined in the Master Sign Program.

The project would be consistent with the City of Baldwin Park General Plan policies that govern scenic quality. Policies include providing visual compatibility with the surrounding area and reducing lighting impacts on adjacent properties (Land Use Policy 2.5 and 2.6). As described below the project lighting would be shielded by existing buildings or be directed away from adjacent properties. Additionally, the project site currently consists of a medical campus and retail building, and the proposed project would include the expansion of an existing emergency department and a MOB.

The project would be consistent with zoning design standards and would not conflict with any other zoning regulations; therefore, this impact would be less than significant.

*d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The City of Baldwin Park Municipal Code Section 153.140.040 regulates light and glare within the city. Specifically, the lighting standards under subsection (F) require that all lighting shall be directed or shielded away from adjacent properties, public right-of-way, and driveways areas that would obstruct motorist's vision. Existing conditions at the project site consist of a medical complex that currently produces light from streetlights, pathway lights, exterior building lighting and signage, parking lot lighting, and vehicular lighting from vehicles entering and exiting the site. Currently, the emergency department is illuminated from sunset to sunrise (typically from 6:00 p.m. to 6:00 a.m. depending on the time of year) and is consistent with the Municipal Code.

The emergency department expansion component would include the removal of existing lighting along the street frontage and within the parking lot. Light fixtures would then be reinstalled along the frontage of the emergency department expansion, the ambulance canopy, and the ambulance parking area. Lighting would be provided for signage, street, parking, building exteriors, and pathways on the project site. As described above, the Broken Horn Site is currently abandoned. The MOB component would introduce lighting for signage, street lighting, building exterior, pathways. Both the ED expansion and MOB would use exterior material that has low reflectivity. Despite the introduction of additional sources of light closer to public view, lighting would be shielded downward and away from the street reducing the impacts of the lighting to sensitive receptors.

Sensitive receptors to lighting in proximity to the project site include the residential uses to the southeast of the project site. New sources of lighting would be located in the northeast and northwest corner of the project site and light from the new MOB and emergency department would be shielded by existing parking structures and buildings currently on the medical campus.

Both the emergency department expansion and the MOB are located adjacent to a public right-of-way: Baldwin Park Boulevard (emergency department expansion), Leorita Street, (MOB), and Dalewood St (MOB). Additionally, just north of Dalewood Avenue is Interstate I-10. All lighting from the emergency department expansion would be shielded downward or towards the project away from Baldwin Park Boulevard. Additionally, all MOB lighting would be shielded away from Leorita Street, Dalewood St, and I-10 to comply with the Baldwin Park Municipal Code.

In conclusion, lighting for the proposed project would be shielded by existing buildings or be directed away from sensitive receptors, roadways, and adjacent properties. Lighting from the project would be consistent with the Baldwin Park Municipal Code. Project impacts from lighting and glare would be less than significant.

## 3.2 Agriculture and Forestry Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **II. AGRICULTURE AND FORESTRY RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

*a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

According to the Department of Conservation's Farmland Mapping and Monitoring Program, the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is designated as "Urban and Built- Up Land" and completely surrounded by parcels designated "Urban and Built- Up Land" to the south and west as well as parcel's designated as "Urban and Built-Up Land". The project site is located in an urban area and there is no agricultural production in the vicinity of the project site (DOC 2016a). There would be no impact to Farmland, Unique Farmland, or Farmland of Statewide Importance or to surrounding agricultural production.

*b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

The project site is zoned as Freeway Commercial (FC) and is not zoned for agricultural uses. Additionally, the project does not contain a Williamson Act contract. No impact resulting from a conflict with existing zoning for agricultural use or a Williamson Act contract would occur.

*c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

The project site is zoned as a Freeway Commercial and is not designated as a forestry resource. No impact to forestry resources would occur.

*d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The project site has been previously developed and would not result in the loss or conversion of forest land to a non- forest use. No impact would occur.

*e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

The project site has been previously developed and it surrounded by development. The project site zoning is designated as Freeway Commercial, and implementation of the project would be consistent within the allowed uses in this zone. No agricultural or forestry uses are in the surrounding vicinity of the project site. No impact would occur.

# 3.3 Air Quality

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **III. AIR QUALITY** – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ☒ | ☐ |
| c) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

Appendix G of the State CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the project would have a significant impact on air quality.

The South Coast Air Quality Management District (SCAQMD) has established Air Quality Significance Thresholds, as revised in April 2019, that set forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality (SCAQMD 2019). The quantitative air quality analysis provided herein applies the SCAQMD thresholds identified in Table 3.3-1 to determine the potential for the project to result in a significant impact under CEQA.

### Table 3.3-1. SCAQMD Air Quality Significance Thresholds

| Criteria Pollutants Mass Daily Thresholds | | |
|---|---|---|
| **Pollutant** | **Construction (Pounds per Day)** | **Operation (Pounds per Day)** |
| VOCs | 75 | 55 |
| $NO_x$ | 100 | 55 |
| CO | 550 | 550 |
| $SO_x$ | 150 | 150 |
| $PM_{10}$ | 150 | 150 |
| $PM_{2.5}$ | 55 | 55 |
| Lead[a] | 3 | 3 |

## Table 3.3-1. SCAQMD Air Quality Significance Thresholds

| Criteria Pollutants Mass Daily Thresholds | | |
|---|---|---|
| **Pollutant** | **Construction (Pounds per Day)** | **Operation (Pounds per Day)** |
| **TACs and Odor Thresholds** | | |
| TACs[b] | Maximum incremental cancer risk ≥ 10 in 1 million<br>Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million)<br>Chronic and acute hazard index ≥ 1.0 (project increment) | |
| Odor | Project creates an odor nuisance pursuant to SCAQMD Rule 402 | |
| **Ambient Air Quality Standards for Criteria Pollutants[c]** | | |
| $NO_2$ 1-hour average<br>$NO_2$ annual arithmetic mean | SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:<br>0.18 ppm (state)<br>0.030 ppm (state) and 0.0534 ppm (federal) | |
| CO 1-hour average<br>CO 8-hour average | SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:<br>20 ppm (state) and 35 ppm (federal)<br>9.0 ppm (state/federal) | |
| $PM_{10}$ 24-hour average<br>$PM_{10}$ annual average | 10.4 μg/m³ (construction)[d]<br>2.5 μg/m³ (operation)<br>1.0 μg/m³ | |
| $PM_{2.5}$ 24-hour average | 10.4 μg/m³ (construction)[d]<br>2.5 μg/m³ (operation) | |

**Source:** SCAQMD 2019.
**Notes:** SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compounds; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; TAC = toxic air contaminant; $NO_2$ = nitrogen dioxide; ppm = parts per million by volume; μg/m³ = micrograms per cubic meter.
greenhouse gas emissions thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not include included in this table as they are addressed within the greenhouse gas emissions analysis and not the air quality analysis.

[a] The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
[b] TACs include carcinogens and noncarcinogens.
[c] Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
[d] Ambient air quality threshold are based on SCAQMD Rule 403.

The phasing out of leaded gasoline started in 1976. As gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

The evaluation of whether the project would conflict with or obstruct implementation of the applicable air quality plan (CEQA Guidelines Appendix G Threshold III-1) is based on the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993), Chapter 12, Sections 12.2 and 12.3. The first criterion assesses if the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards of the interim emissions reductions specified in the Air Quality Management Plan (AQMP), which is addressed in detail under Section 3.3(b). The second criterion is if the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase, as discussed further in Section 3.3(a).

To evaluate the potential for the project to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (CEQA Guidelines Appendix G Threshold III-2), this analysis applies the SCAQMD's construction criteria pollutants mass daily thresholds, as shown in Table 3.3-1. Only those thresholds related to potentially significant construction impacts are applied herein because the project would not generate substantial criteria pollutant emissions or related impacts associated with operational activities. A project would potentially result in a cumulatively considerable net increase in ozone ($O_3$), which is a nonattainment pollutant, if the project's construction emissions would exceed the SCAQMD volatile organic compound (VOC) or oxides of nitrogen ($NO_x$) thresholds shown in Table 3.3-1. These emissions-based thresholds for $O_3$ precursors are intended to serve as a surrogate for an $O_3$ significance threshold (i.e., the potential for adverse $O_3$ impacts to occur). This approach is used because $O_3$ is not emitted directly, and the effects of an individual project's emissions of $O_3$ precursors (VOC and $NO_x$) on $O_3$ levels in ambient air cannot be determined through air quality models or other quantitative methods.

The assessment of the project's potential to expose sensitive receptors to substantial pollutant concentrations (CEQA Guidelines Appendix G Threshold III-3) includes a localized significance threshold (LST) analysis, as recommended by the SCAQMD, to evaluate the potential of localized air quality impacts to sensitive receptors in the immediate vicinity of the project from construction and operation. For project sites of five acres or less, the SCAQMD LST methodology (SCAQMD 2008a) includes lookup tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., the emissions would not cause an exceedance of the applicable concentration limits for nitrogen dioxide [$NO_2$], carbon monoxide [CO], particulate matter with a diameter less than or equal to 10 microns [$PM_{10}$], and particulate matter with a diameter less than or equal to 2.5 microns [$PM_{2.5}$]) without performing project-specific dispersion modeling.

The LST significance thresholds for $NO_2$ and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for $PM_{10}$ represents compliance with Rule 403 (Fugitive Dust). The LST significance threshold for $PM_{2.5}$ is intended to ensure that construction or operational emissions do not contribute substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

a. Source-Receptor Area (SRA) in which the project is located
b. Size of the project site
c. Distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals)

The project would be within SRA 11 (South San Gabriel Valley). LST pollutant screening level concentration data is currently published for 1-, 2-, and 5-acre sites for varying distances (25, 50, 100, 200, and 500 meters). The project disturbs a total of approximately 1.29 acres. In accordance with the SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, the project would disturb a maximum of one acre per day during the site preparation phase (SCAQMD 2014). LSTs are more stringent for smaller areas (i.e., 1-acre LSTs are more stringent than 2-acre and 5-acre LSTs); therefore, the use of a 1-acre LST is conservative.

Sensitive receptors near the project site include residences located adjacent to the western and northern boundaries of the project site. These receptors are the closest receptors and thus capture a conservative scenario, as it is assumed that other receptors at further distances would be less exposed to potential impacts. As such, the closest LST available, 25 meters (82 feet), was applied. LST values for the project in SRA 11 and for 25 meters are presented in Table 3.3-2.

## Table 3.3-2. Localized Significance Thresholds for Source-Receptor Area 11 (South San Gabriel Valley)

| Pollutant | Thresholds (Pounds per Day) |
|---|---|
| | 1-Acre Project Site, 25 Meters |
| $NO_2$ | 83 |
| CO | 673 |
| $PM_{10}$ | 5 |
| $PM_{2.5}$ | 4 |

**Source:** SCAQMD 2008a.
**Notes:** SRA = Source-Receptor Area; $NO_2$ = nitrogen dioxide; CO = carbon monoxide; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; LST = localized significance threshold.
LSTs are shown for 1-acre project sites corresponding to a distance to a sensitive receptor of 25 meters.

The assessment of the project's potential to expose sensitive receptors to substantial pollutant concentrations (CEQA Guidelines Appendix G Threshold III-3) also includes a construction health risk assessment (HRA) (see Appendix C, Air Quality, Greenhouse Gas Emissions, and Energy). A qualitative CO hotspot analysis is also included under Section 3.3(c), based on comparison to the SCAQMD 2003 AQMP CO hotspot analysis.

The potential for the project to result in other emissions, specifically an odor impact (State CEQA Guidelines Appendix G Threshold III-4), is based on the project's land-use types and anticipated construction activity, and the potential for the project to create an odor nuisance pursuant to SCAQMD Rule 402.

*a) Would the project conflict with or obstruct implementation of the applicable air quality plan?*

As previously discussed, the project site is located within the South Coast Air Basin (SCAB) under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD has established criteria for determining consistency with the AQMP, currently the 2016 AQMP, in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993). The criteria are as follows (SCAQMD 1993):

Consistency Criterion No. 1: The project will not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

### Consistency Criterion No. 1

Section 3.3(b) evaluates the project's potential impacts in regard to CEQA Guidelines Appendix G Threshold III-2 (the project's potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation impact analysis). Emissions during construction and operation were less than the SCAQMD significance thresholds; as such, the project would not result in an increase in the frequency or severity of existing air quality violations. Therefore, the project would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook.

### Consistency Criterion No. 2

While striving to achieve the National Ambient Air Quality Standards (NAAQS) for $O_3$ and $PM_{2.5}$ and the California Ambient Air Quality Standards (CAAQS) for $O_3$, $PM_{10}$, and $PM_{2.5}$ through a variety of air quality control measures, the 2016 AQMP also accommodates planned growth in the SCAB. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook).

The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) for its Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) (SCAG 2016, which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2017a).[1] The SCAG 2016 RTP/SCS and associated Regional Growth Forecast are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans. According to the Baldwin Park Land Use Map and Zoning Map, the General Plan land use designation for the project site is currently General Commercial (GC), while the project site is presently zoned Freeway Commercial (FC). As such, the project would be considered consistent with both the existing General Plan land use designation and zoning district. The project would not constitute a change in land use or zoning.

The project is estimated to create 105 new jobs. According to SCAG's 2020 Connect SoCal, the City of Baldwin Park is expected to have an employment population of 24,700 in 2016 and 26,500 in 2045, or 1,800 additional jobs in that timeframe (SCAG 2020). The project's additional 105 jobs would not exceed this forecasted growth in employment. As such, the project's designed employment would not exceed the annual growth projections for the City.

As the project would contribute to local employment growth and associated vehicle miles traveled (VMT) that are anticipated for the project site in the existing General Plan, the project is accounted for in the State Implementation Plan and the Regional Air Quality Strategy, and the project would be consistent with local air quality plans. Therefore, the impact would be less than significant.

### Summary

As described previously, the project would not result in an increase in the frequency and severity of existing air quality violations and would not conflict with Consistency Criterion No. 1. The project would be consistent with the General Plan and growth projections of the SCAG 2020 RTP/SCS. Thus, the project would not conflict with Consistency Criterion No. 2. Therefore, impacts related to the project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant.

[1] Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including CARB, Caltrans, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into their Travel Demand Model for estimating/projecting vehicle miles traveled (VMT) and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017a).

*b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

## Construction

Emissions from the construction phase of the project were estimated using California Emissions Estimator Model (CalEEMod) Version 2020.4.0. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the project applicant and CalEEMod default values when project specifics were not known.

For purposes of estimating project emissions, and based on information provided by the project applicant, it is assumed that construction of the emergency department expansion would commence in May 2023[2] and would last approximately twenty-three months, ending in April 2025. It is assumed that construction of the medical office building would commence in June 2028 and last approximately eighteen months, ending in December 2029. The analysis contained herein is based on the following assumptions (duration of phases is approximate):

Emergency Department

- Demolition: two months
- Site preparation: one week
- Grading: two weeks
- Building construction: nineteen months
- Paving: four weeks
- Architectural coating: four weeks

Medical Office Building

- Site preparation: one week
- Grading: one week
- Building construction: sixteen months
- Paving: three weeks
- Architectural coating: three weeks

There is an estimated 24,790 square feet of existing structures to be demolished and hauled off site based on existing aerial images of the site. Assuming a haul truck capacity of 20 cubic yards per truck, earth-moving activities would result in approximately 64 round trips (114 one-way truck trips) during the demolition phase. CalEEMod default trip length values were used for the distances for all construction-related trips. Construction worker, vendor, and haul truck trips are based on CalEEMod default assumptions where project specific information was not available.

[2] The analysis assumes a construction start date of May 2023, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

The construction equipment mix and vehicle trips used for estimating the project-generated construction emissions are shown in Table 3.3-3.

### Table 3.3-3. Construction Scenario Assumptions

| Construction Phase | One-Way Vehicle Trips | | | Equipment | | |
|---|---|---|---|---|---|---|
| | Average Daily Worker Trips | Average Daily Vendor Truck Trips | Total Haul Truck Trips | Equipment Type | Quantity | Usage Hours |
| **Emergency Department** | | | | | | |
| Demolition | 10 | 0 | 114 | Concrete/Industrial Saws | 1 | 8 |
| | | | | Rubber Tired Dozers | 1 | 8 |
| | | | | Tractors/Loaders/ Backhoes | 2 | 6 |
| Site Preparation | 6 | 0 | 0 | Graders | 1 | 8 |
| | | | | Tractors/Loaders/ Backhoes | 1 | 8 |
| Grading | 8 | 0 | 264 | Graders | 1 | 6 |
| | | | | Rubber Tired Dozers | 1 | 6 |
| | | | | Tractors/Loaders/ Backhoes | 1 | 7 |
| Building Construction | 8 | 4 | 0 | Cranes | 1 | 4 |
| | | | | Forklifts | 2 | 6 |
| | | | | Tractors/Loaders/ Backhoes | 2 | 8 |
| Paving | 18 | 0 | 0 | Pavers | 1 | 7 |
| | | | | Cement and Mortar Mixers | 4 | 6 |
| | | | | Tractors/Loaders/ Backhoes | 1 | 7 |
| | | | | Rollers | 1 | 7 |
| Architectural Coating | 2 | 0 | 0 | Air Compressors | 1 | 6 |
| **Medical Office Building** | | | | | | |
| Site Preparation | 8 | 0 | 0 | Graders | 1 | 8 |
| | | | | Rubber Tired Dozers | 1 | 7 |
| | | | | Tractors/Loaders/ Backhoes | 1 | 8 |
| Grading | 10 | 0 | 0 | Graders | 1 | 8 |
| | | | | Rubber Tired Dozers | 1 | 8 |

## Table 3.3-3. Construction Scenario Assumptions

| Construction Phase | One-Way Vehicle Trips | | | Equipment | | |
|---|---|---|---|---|---|---|
| | Average Daily Worker Trips | Average Daily Vendor Truck Trips | Total Haul Truck Trips | Equipment Type | Quantity | Usage Hours |
| | | | | Tractors/Loaders/ Backhoes | 2 | 7 |
| Building Construction | 24 | 12 | 0 | Cranes | 1 | 6 |
| | | | | Forklifts | 1 | 6 |
| | | | | Generator Sets | 1 | 8 |
| | | | | Welders | 3 | 8 |
| | | | | Tractors/Loaders/ Backhoes | 1 | 6 |
| Paving | 14 | 0 | 0 | Pavers | 1 | 6 |
| | | | | Cement and Mortar Mixers | 1 | 6 |
| | | | | Paving Equipment | 1 | 8 |
| | | | | Tractors/Loaders/ Backhoes | 1 | 8 |
| | | | | Rollers | 1 | 7 |
| Architectural Coating | 6 | 0 | 0 | Air Compressors | 1 | 6 |

**Notes:** See Appendix C for details.

The project would implement dust control strategies as a project design feature. To reflect implementation of proposed dust control strategies in accordance with SCAQMD Rule 403, the following was assumed in CalEEMod:

- Water exposed area twice times per day (55% reduction in $PM_{10}$ and $PM_{2.5}$).

The applicant has committed to heavy-duty diesel-powered construction equipment to be equipped with Tier 4 Interim or better diesel engines for engines 50 horsepower or greater. For engines less than 50 horsepower, the equipment shall be electrical or natural gas powered. Construction of the project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., off-road construction equipment, on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

Criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2023-2025 and 2028–2029). Construction schedule assumptions, including phase

type, duration, and sequencing, were based on information provided by the project applicant and are intended to represent a reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed project information was not available.

Implementation of the project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in $PM_{10}$ and $PM_{2.5}$ emissions. The project would implement various dust control strategies and would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Proposed construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites and unpaved roads two times per day depending on weather conditions. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, $NO_x$, CO, sulfur oxides ($SO_x$), $PM_{10}$, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 (Architectural Coatings).

Table 3.3-4 presents the estimated maximum daily construction emissions generated during construction of the project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix C.

**Table 3.3-4. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions**

| Year | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | pounds per day | | | | | |
| 2023 | 0.57 | 10.21 | 8.91 | 0.03 | 1.46 | 0.65 |
| 2024 | 0.31 | 4.70 | 8.22 | 0.01 | 0.17 | 0.08 |
| 2025 | 9.90 | 4.64 | 8.20 | 0.01 | 0.23 | 0.08 |
| 2028 | 0.39 | 6.38 | 13.26 | 0.02 | 3.13 | 1.58 |
| 2029 | 17.56 | 5.74 | 10.23 | 0.02 | 0.37 | 0.12 |
| **Maximum Daily Emissions** | **17.56** | **10.21** | **13.26** | **0.03** | **3.13** | **1.58** |
| *SCAQMD Threshold* | *75* | *100* | *550* | *150* | *150* | *55* |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

**Notes:** VOC = volatile organic compound; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix C for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with SCAQMD Rule 1113 (Architectural Coatings) and implementation of the project's fugitive dust control strategies, including watering of the project site and unpaved roads two times per day.

Maximum daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, $NO_x$, CO, $SO_x$, $PM_{10}$, or $PM_{2.5}$. As such, impacts would be less than significant.

The SCAB has been designated as a national nonattainment area for $O_3$ and $PM_{2.5}$ and a California nonattainment area for $O_3$, $PM_{10}$, and $PM_{2.5}$. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. Construction and operation of the project would generate VOC and $NO_x$ emissions (which are precursors to $O_3$) and emissions of $PM_{10}$ and $PM_{2.5}$. As indicated in Table 3.3-4, project-generated construction emissions would not exceed the SCAQMD emission-based significance thresholds.

By its nature, air pollution is largely a cumulative impact. However, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulative impact on air quality. If the emissions from the project would exceed the applied significance thresholds, it would have a cumulative contribution. Conversely, if the emissions from the project do not exceed the project-specific thresholds, it is generally not considered to result in a cumulatively significant impact (SCAQMD 2003a). Accordingly, to evaluate the potential for the project to result in a cumulative net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard, this analysis applies SCAQMD's criteria pollutants thresholds, as shown in Table 3.3-1. Additionally, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the project would exceed SCAQMD thresholds. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative $PM_{10}$ and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. In addition, cumulative VOC emissions would be subject to SCAQMD Rule 1113 (Architectural Coatings).

Based on the project-generated construction emissions, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants. Impacts would be less than significant.

## Operation

Emissions from the operational phase of the project were estimated using CalEEMod Version 2020.4.0. Operational years of 2026 (Emergency Department) and 2030 (Medical Office Building) were assumed consistent with completion of project construction for each phase.

Following the completion of construction activities, the project would generate VOC, $NO_x$, CO, $SO_x$, $PM_{10}$, and $PM_{2.5}$ emissions from mobile sources including vehicular traffic generated by patients, visitors, physicians/staff, and emergency vehicles (i.e., ambulance), area sources (space heating, water heating, landscaping), and stationary sources including diesel generators, hot water boilers, and steam boilers. Impacts would be less than significant.

### Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of non-residential buildings and on the default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were assumed.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers using during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings, and SCAQMD's Rule 1113 (Architectural Coatings) governs the VOC content for interior and exterior coatings. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2017). Similar to construction, a VOC content of 50 g/L was assumed.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. For the SCAB, the average annual number of summer days is estimated at 250 days (CAPCOA 2021).

### Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the power plant, which is typically off site.

CalEEMod default values for energy consumption for the land uses were applied for the project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end-use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the heating, ventilation, and air conditioning (HVAC) system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The current Title 24, Part 6 standards, referred to as the 2016 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2017. The Title 24 2016 standards are assumed within the CalEEMod (CAPCOA 2017). The 2019 Title 24 Building Energy Efficiency Standards, which will be effective January 1, 2020, will further reduce energy used and associated emissions compared to current standards. Title 24, Part 6, does not apply to hospitals but does apply to other buildings such as the medical office building.

### Mobile Sources

The project would impact air quality through the vehicular traffic generated by the project. Emissions associated with project-generated daily traffic were modeled using the Institute of Transportation Engineers (ITE) land use code 610 (hospital) (number of beds) and land use code 720 (medical-dental office building) rates using the number of beds in the ED expansion and the number of employees for the MOB. CalEEMod was utilized to estimate daily emissions from proposed vehicular sources. CalEEMod default data, including temperature, trip characteristics, and variable start information, were conservatively used for the model inputs.

Table 3.3-5 presents the maximum daily area, energy, off-road equipment, and mobile source emissions associated with operation (years 2026 and 2030) of the project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix C.

**Table 3.3-5. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions – Unmitigated**

| Emission Source | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| | pounds per day | | | | | |
| **Emergency Department** | | | | | | |
| Area | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy | 0.04 | 0.38 | 0.32 | 0.00 | 0.03 | 0.03 |
| Mobile | 0.71 | 0.81 | 7.38 | 0.02 | 1.96 | 0.53 |
| *Subtotal* | *1.25* | *1.20* | *7.71* | *0.02* | *1.99* | *0.56* |
| **Medical Office Building** | | | | | | |
| Area | 0.75 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| Energy | 0.01 | 0.09 | 0.08 | 0.00 | 0.01 | 0.01 |
| Mobile | 2.30 | 2.24 | 20.84 | 0.05 | 5.78 | 1.56 |
| *Subtotal* | *3.06* | *2.33* | *20.93* | *0.05* | *5.79* | *1.57* |
| **Total** | **4.31** | **3.53** | **28.64** | **0.07** | **7.78** | **2.13** |
| *SCAQMD Threshold* | *55* | *55* | *550* | *150* | *150* | *55* |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

**Notes**: VOC = volatile organic compound; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; PDF = project design feature.
See Appendix C for complete results.
Totals may not sum due to rounding.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect CalEEMod "mitigated" output and operational years of 2026 and 2030, which accounts for compliance with SCAQMD Rule 1113 (Architectural Coatings).

As shown in Table 3.3-5, the combined daily area, energy, off-road, and mobile source emissions would not exceed the SCAQMD operational thresholds for VOC, $NO_x$, CO, $SO_x$, $PM_{10}$, and $PM_{2.5}$. Therefore, the project would result in a less-than-significant impact during operation.

*c) Would the project expose sensitive receptors to substantial pollutant concentrations?*

## Localized Significance Thresholds Analysis

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). Sensitive receptors near the project site include residences adjacent to the project site on the northern and eastern boundaries.

An LST analysis has been prepared to determine potential impacts to nearby sensitive receptors during construction of the project. As indicated in the discussion of the thresholds of significance, the SCAQMD also recommends the evaluation of localized $NO_2$, CO, $PM_{10}$, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the project site. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (2008). According to the Final Localized Significance Threshold Methodology, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2008a). Hauling of soils and construction materials associated with project construction are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways. Localized emissions from the trucks would be relatively brief in nature and would cease once the trucks pass through the main streets.

Construction activities associated with the project would result in temporary sources of on-site and off-site fugitive dust and construction equipment emissions. Operational emissions include use of off-road equipment and mobile sources on site. The maximum allowable daily emissions that would satisfy the SCAQMD localized significance criteria for SRA 11 are presented in Table 3.3-6 and compared to the maximum daily on-site construction emissions generated during the project.

**Table 3.3-6. Localized Significance Thresholds Analysis for Project – Unmitigated**

| Maximum On-Site Emissions | $NO_2$ | CO | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|
| | Pounds per Day | | | |
| Construction Emissions | 6.70 | 13.07 | 2.98 | 1.38 |
| *SCAQMD LST* | *83* | *673* | *5* | *4* |
| **LST Exceeded?** | **No** | **No** | **No** | **No** |

**Source:** SCAQMD 2008a.
**Notes:** $NO_2$ = nitrogen dioxide; CO = carbon monoxide; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix C for complete results.
LSTs are shown for a 1-acre project sites corresponding to a distance to a sensitive receptor of 25 meters.
These estimates implementation of the project's fugitive dust control strategies, including watering of the project site and unpaved roads two times per day.

As shown in Table 3.3-6, construction activities would not generate emissions in excess of site-specific LSTs; therefore, localized impacts during construction of the project would be **less than significant**. Operational activities would not generate emissions in excess of site-specific LSTs.

## Health Impacts of Carbon Monoxide

Mobile source impacts occur on two scales of motion. Regionally, project-related travel would add to regional trip generation and increase the VMT within the local airshed and the SCAB. Locally, traffic generated by the project would be added to the City's roadway system near the project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing.

At the time that the SCAQMD 1993 Handbook was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. The SCAQMD conducted CO modeling for the 2003 AQMP (Appendix V, Modeling and Attainment Demonstrations, in SCAQMD 2003b) for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 parts per million (ppm) at the intersection of Wilshire Boulevard and Veteran Avenue. When added to the maximum 1-hour CO concentration from 2018 through 2020 at the Azusa monitoring station, which was 2.4 ppm in 2020, the 1-hour CO would be 6.8 ppm, while the CAAQS is 20 ppm.

The 2003 AQMP also projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO concentration was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection in 2002; the maximum 8-hour CO concentration was 3.4 ppm at the Wilshire Boulevard and Veteran Avenue in 2002. Adding the 3.8 ppm to the maximum 8-hour CO concentration from 2018 through 2020 at the Azusa monitoring station, which was 2 ppm in 2020, the 8-hour CO would be 5.8 ppm, while the CAAQS is 9.0 ppm.

Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least over 100,000 vehicles per day. Because the project would not increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day (Appendix C),[3] a CO hotspot is not anticipated to occur and associated impacts would be less than significant.

[3] For each study intersection in each scenario evaluated in the TIA, the daily volumes were estimated by assuming that the AM peak hour intersection volumes represent 8% of the daily traffic volumes and the total PM peak hour intersection volumes represent 10% of the daily traffic volumes. Using this method, all 28 study intersections were estimated to result in less than 100,000 vehicles per day in every scenario evaluated (ranging from 8,060 vehicles to 84,663 vehicles).

## Health Impacts of Toxic Air Contaminants

### Construction Health Risk

A construction HRA was performed to evaluate potential health risk associated with construction of the project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix C.

For risk assessment purposes, $PM_{10}$ in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on-road vehicle exhaust (e.g., heavy-duty diesel trucks). For the construction HRA, the CalEEMod scenario for the project was adjusted to reduce diesel truck one-way trip distances to 1,000 feet to estimate emissions from trucks on site.

The air dispersion modeling methodology was based on generally accepted modeling practices of SCAQMD (SCAQMD 2022). Air dispersion modeling was performed using the EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 21112 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 10.2.1. The HRA followed the Office of Environmental Health Hazard Assessment (OEHHA) 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at all proximate receptors as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the SCAQMD and EPA guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 3.3-7.

**Table 3.3-7. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters**

| Parameter | Details |
|---|---|
| Meteorological Data | AERMOD-specific meteorological data for the Azuza air monitoring station (AZUS) was used for the dispersion modeling. A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD. |
| Urban versus Rural Option | Urban dispersion option was selected due to the developed nature of the project area and per SCAQMD guidelines. Los Angeles County's population of 9,818,605 was used in the analysis (SCAQMD 2022). |
| Terrain Characteristics | The elevation of the site is 311 feet above sea level and the surrounding area is predominantly flat. |
| Elevation Data | Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey's National Elevation Dataset format with a resolution of 1 degree (approximately 30 meters), consistent with the SCAQMD guidance (SCAQMD 2022). |
| Source Release Characterizations | Construction was modeled as a series of line-volume sources where the emergency department and medical office buildings will be constructed. A plume height dimension of 6.8 meters, a plume width dimension of 8.6 meters, and a release height of 3.4 meters was assumed for off-road equipment and diesel trucks, consistent with the EPA guidance (EPA 2021). |

Notes: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; SCAQMD = South Coast Air Quality Management District.
See Appendix C.

Regarding receptors, the construction scenario placed two Cartesian receptor grids with 20-meter spacing over proximate residential areas to establish the impact area and evaluate locations of maximum health risk impact.

The health risk calculations were performed using the Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion and Risk Tool (ADMRT, dated 22118). AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was partitioned evenly based on the 1 gram per second emission rate. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the noncancerous chronic health indices. There is no reference exposure level for acute health impacts from DPM; thus, acute risk was not evaluated.

Cancer risk is defined as the increase in probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased chances in one million. Maximum Individual Cancer Risk is the estimated probability of a maximally exposed individual potentially contracting cancer as a result of exposure to toxic air contaminants (TACs) over a period of 30 years for residential receptor locations. In accordance with SCAQMD guidance, the RMP Derived Method was evaluated for residential cancer risk. For the construction HRA, the TAC exposure period was assumed to be from third trimester of pregnancy for 24 months for all receptor locations (i.e., the assumed duration of project construction) for the emergency department and 19 months for the medical office building. The HRA was run assuming exposure period would start in the third trimester for both phases of construction. The risk of each phase was then summed. The exposure pathway for DPM is inhalation only.

The SCAQMD has also established noncarcinogenic risk parameters for use in HRAs since some TACs increase noncancerous health risk due to long-term (chronic) exposures and some TACs increase noncancerous health risk due to short-term (acute) exposures. Chronic exposure is evaluated in the construction HRA. Noncarcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or reference exposure level, which is a concentration at or below which health effects are not likely to occur. The chronic hazard index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. A hazard index less of than 1.0 means that adverse health effects are not expected. Results of the construction HRA are presented in Table 3.3-8.

## Table 3.3-8. Construction Health Risk Assessment Results

| Impact Parameter | Units | Project Impact | CEQA Threshold | Level of Significance |
|---|---|---|---|---|
| Maximum Individual Cancer Risk – Residential | Per Million | 4.3 | 10 | Less than Significant |
| Chronic Hazard Index – Residential | Index Value | 0.003 | 1.0 | Less than Significant |

**Source**: SCAQMD 2019.
**Notes**: CEQA = California Environmental Quality Act.
See Appendix C.

As shown in Table 3.3-8, project construction activities would result in a Residential Maximum Individual Cancer Risk of 4.3 in 1 million, which is less than the significance threshold of 10 in 1 million. Project construction would

result in a Residential Chronic Hazard Index of 0.003, which is below the 1.0 significance threshold. The project construction TAC health risk impacts would be less than significant.

### Operational Health Risk

In regard to operations, the proposed project does not include potential sources of substantial TACs, such as large boilers or emergency generators. As such, the proposed project would not result in a substantial increase in TAC generation from on-site sources during long-term operations and would not result in significant health risk at nearby sensitive receptors.

## Health Effects of Other Criteria Air Pollutants

Project construction would not exceed SCAQMD thresholds for VOC, $NO_x$, CO, $SO_x$, $PM_{10,}$ or $PM_{2.5}$.

VOCs and NOx are precursors to $O_3$, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with $O_3$ are generally associated with reduced lung function. The contribution of VOCs and NOx to regional ambient $O_3$ concentrations is the result of complex photochemistry. The increases in $O_3$ concentrations in the SCAB due to $O_3$ precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive $O_3$ concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O3 CAAQS/NAAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of $O_3$ precursors is speculative due to the lack of quantitative methods to assess this impact. Because construction and operation of the project would not exceed SCAQMD thresholds for NOx or VOC, implementation of the project would minimally contribute to regional $O_3$ concentrations and the associated health effects.

Construction and operation of the project would not contribute to exceedances of the NAAQS and CAAQS for $NO_2$. Health effects that result from $NO_2$ and $NO_x$ include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. Project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. In addition, existing $NO_2$ concentrations in the area are well below the NAAQS and CAAQS standards. Operation of the project would not create substantial, localized $NO_x$ impacts.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots were discussed previously and are determined to be a less-than-significant impact. Thus, the project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of the project would also not exceed thresholds for $PM_{10}$ or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SCAB from coming into attainment for these pollutants. Additionally, the project would implement dust control strategies and be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction and operation, the project is not anticipated to result in health effects associated with $PM_{10}$ or $PM_{2.5}$, and thus the impact would be less than significant.

***d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The project would not include land uses that generate odors as discussed above during operation. Therefore, project operations would result in an odor impact that is less than significant.

## 3.4 Biological Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES** – Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☒ | ☐ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

*a)* ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

The project site is completely developed with a medical campus, which includes an emergency department, medical office buildings, surface and structured parking and landscaping. Due to the developed nature of the project site, the project does not contain habitat that would support sensitive species. No known candidate, sensitive, or special status wildlife are located on the project site.

The study area contains trees that would potentially be used by migratory birds for breeding. Direct impacts to migratory nesting birds must be avoided to comply with the Migratory Bird Treaty Act (16 USC 703–712) and California Fish and Game Code. Indirect impacts to nesting birds from short-term, construction-related noise could result in decreased reproductive success or abandonment of an area as nesting habitat if construction were conducted during the breeding/nesting season (i.e., January through August). Ff construction were conducted during the breeding/nesting season, the project would comply with Migratory Bird Treaty Act and California Fish and Game Code requirements, which would include measures such as nesting bird surveys prior to construction. Overall, a less than significant impact to candidate, sensitive, or special status species would occur as a result of project implementation.

*b)* ***Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

As stated above, the project site is completely developed and does not contain any natural vegetation communities or riparian habitat. Additionally, the project site is surrounded by existing development and is not in proximity to any sensitive natural communities. No impact to sensitive natural communities would occur as a result of project implementation.

*c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

As stated above, the project site is completely developed and does not contain any natural vegetation communities. Additionally, the project site does not contain any hydrologic features or federally protected wetlands. Therefore, no impact would occur through direct removal, filling, hydrological interruption of wetlands as a result of project implementation.

*d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

As discussed above, the project site is completely developed and does not contain any natural vegetation communities or habitat. Additionally, the project site is surrounded by existing development that do not contain any wildlife corridors or habitat linkages. Therefore, implementation of the project would have no impact to habitat linkages or corridors.

*e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The City of Baldwin Park Municipal Code Section 153.165, Tree Preservation and Protection, governs the preservation and removal of trees within the City (City of Baldwin Park 2022a). The project is expected to remove 37 trees during Phase I and no trees would be removed as part of Phase II. None of the trees that are expected to be removed are located within the public right-of-way. To comply with Baldwin Park Municipal Code Section 153.165, the project would be required to obtain a tree removal permit before the removal of any trees. A tree removal permit would only be granted if a suitable replacement would be planted within six months of the permitted removal. The project would plant trees at a 1:1 ratio to be consistent with the Baldwin Park Municipal Code Tree Preservation and Protection Ordinance; in light of the 1:1 replacement of lost trees, this impact would be less than significant.

*f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

As discussed above, the project site is developed consisting of a medical campus and retail building. The project site is also surrounded by existing development and is not located with a Habitat Conservation Plan or Natural Community Conservation Plan. Additionally, due to the project site being developed, the project would does not contain any native vegetation communities or habitat. No impact to an HCP or NCCP would occur.

# 3.5 Cultural Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES** – Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? | ☐ | ☐ | ☐ | ☒ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☒ | ☐ | ☐ |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☒ | ☐ | ☐ |

***a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?***

The project site contains an existing medical campus and an abandoned retail building known as the "Broken Horn" site. The project proposes to redevelop the Broken Horn site to include a MOB and would demolish the existing buildings on site. The Broken Horn site consists of two attached buildings: 1026 Leorita Street, constructed in 1976, and 1022-1024 Leorita Street, which was constructed in 1986. The buildings appear to have been connected circa 1995, per aerial photographs (NETR 2022). The subject property housed the same business, the Broken Horn Saddlery, from 1976 until 2021 when the business vacated the subject property and moved to a new location. The subject property is currently vacant. Although 1022-10244 Leorita Street is not over 45-years in age, the buildings were evaluated as a single property due to their shared history and physical connection.

As determined in Appendix B, the Broken Horn property appears ineligible as a historical resource at the local, state, and federal level. No historical resources were identified within the Project site as a result of extensive archival research, a SCCIC records search, field survey, and property evaluations of significance. The subject property is not currently designated or listed under any national, state, or local landmark programs. The subject property has further not been identified as eligible for local designation by any historical resource surveys.

The Broken Horn property was evaluated in accordance with Section 15064.5 (a)(2)-(3) of California Environmental Quality Act (CEQA) Guidelines and using the criteria outlined in Section 5024.1 of the California Public Resources Code and the building does not appear to be eligible for listing in the NRHP, CRHR, or for historical designation in the City of Baldwin Park due to a lack of significance. As such, the subject property does not appear to be a historical resource under CEQA. Therefore, no impact to historical resources would occur.

*b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The project site is currently developed, consisting of an active medical campus and associated parking structure, abandoned retail buildings and parking lots, and landscaped areas. As described in Appendix B, the cultural resource assessment included a California Historical Resources Information System (CHRIS) records search conducted at the South Central Coastal Information Center (SCCIC); Native American coordination with the Native American Heritage Commission (NAHC) for a Sacred Lands File (SLF) search; an in-depth review of geotechnical, archival, academic, and ethnographic information; and an archaeological pedestrian survey.

A search of the CHRIS database for the project site and 1-mile records search area did not identify any previously recorded historic-period or prehistoric archeological resources. Additionally, of the 13 previous technical studies that were conducted within 1 mile of the project site, three studies address portions of the project site; however, approximately 70% of the project site has not been subjected to any previous archaeological investigations or surveys. None of the previous studies identified archaeological resources within the project site. Additionally, review of aerial photographs showed the San Gabriel River Wash to the west of the project site was not channelized and Walnut Creek intersected the project site up until 1964, which suggests that the project site has likely been modified by the natural movement of soils in prehistoric and historic periods indicating that if cultural material does exist within the project site, it would likely have been buried, displaced (not exist within its original context), or destroyed along the historical route of Walnut Creek. A pedestrian survey for the project (conducted August 24, 2022) did not identify any surficial evidence of cultural material.

A review of a 2022 and 2015 geotechnical report and available boring logs documenting the results of subsurface exploratory investigations conducted in 1986, 1989, 1990, 2015, and 2021 for portions of the project site determined that fill soils were encountered at a variety of depths across the project site and generally extended from surface to between seven inches and 12 feet below ground surface. Current project design indicates that the maximum depth of ground disturbance for the MOB component at the Broken Horn site is 10 feet below the existing ground surface and a maximum depth of 65 feet below current grade for the drilling of caissons at the emergency department expansion component. In addition, ground disturbance associated with all other construction components, including site preparation, vegetation removal, and trenching for utility work is assumed to be no deeper than five feet below existing ground surface across the project site.

In consideration of all these factors, the potential to encounter unknown intact archaeological resources between current grade and to depths of identified fill soils is relatively unlikely. However, the potential for intact cultural deposits to exist within soils underlying fills soils to proposed depths of disturbance is unknown considering the lack of opportunity to observe native soils during the pedestrian survey and that no previous archaeological investigation has occurred prior to placement of fill soils for approximately 70% of the project site. As such, there is potential for archaeological resources within the project site to be present within the native soils that exist beneath fill soils. Since proposed depths of disturbance may extend deeper than documented fill soils, native soils with the potential for archaeological deposits to exist will be disturbed. In the event that unknown archaeological resources are encountered during project implementation, impacts to these resources are potentially significant and mitigation is required.

Mitigation Measure **MM-CUL-1** through **MM-CUL-3** would ensure that measurements are in place for the proper treatment of any inadvertently discovered archaeological resources and potential impacts to archaeological resources and human remains would be reduced to less than significant with mitigation incorporated.

MM-CUL-1 Workers Environmental Awareness Program Training. All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities. A basic presentation and handout or pamphlet shall be prepared in order to ensure proper identification and treatment of inadvertent discoveries. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources, tribal cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

MM-CUL-2 Retention of a Qualified Archaeologist. A qualified archaeologist shall be retained and on-call to respond and address any inadvertent discoveries identified for the duration of construction activities. Additionally, in consideration of the potential to encounter intact cultural deposits beneath fill soils, the qualified archaeologist shall survey the proposed Project site once fill soils have been removed to ensure no cultural deposits underly the fill layer. If it is determined, based on the survey after the removal of fill soils, that cultural resources are present or may be present that may be impacted during project construction, monitoring shall be warranted. If it is determined that monitoring is warranted, a qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor will be responsible for maintaining daily monitoring logs.

MM-CUL-3 Inadvertent Discovery Treatment and Protocol. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed Project, all construction work occurring within 50 feet of the find should immediately stop and a qualified archaeologist should be notified immediately to assess the significance of the find and determine whether or not additional study is warranted. If human remains or suspected human remains are discovered, all construction work occurring within 50 feet of the find should immediately stop. The archaeologist will provide recommendations regarding next steps based on inspection and initial assessment of the significance of the find. The preferred management strategy for cultural resources shall be preservation in place through avoidance or other methods. If the discovery proves significant under CEQA, and preservation in place infeasible, additional work such as preparation of an archaeological treatment plan, testing, data recovery, or monitoring shall be engaged to document or preserve the find.

Within 60 days following completion of ground disturbance, an archaeological monitoring report shall be prepared and submitted to the City for review. This report should document

compliance with approved mitigation, document the monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the SCCIC.

*c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?*

The cultural resources intensive pedestrian survey conducted for the project did not identify any human remains or find any indications that they would be expected to be found on the project site. However, although unlikely, there is the possibility of human remains being discovered during ground disturbing activities on the project site. If remains are discovered during project construction activities, mitigation is proposed that would require work in the vicinity of the discovery be halted and procedures set forth in the California Public Resources Code (Section 5097.98) and State Health and Safety Code (Section 7050.5) be followed. Therefore, potential discovery of undocumented human remains on the project site could result in a potentially significant impact and mitigation is required.

Mitigation Measure **MM-CUL-4** would ensure that measurements are in place for the proper treatment of any inadvertently discovered human remains and potential impacts to human remains would be reduced to less than significant with mitigation incorporated.

MM-CUL-4 Human Remains: As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the Los Angeles County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98.

If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the Qualified Archaeologist and/or the TCA Native American monitor), and consultation and treatment could occur as prescribed by law. As further defined by State law, the Medical Examiner will determine within two working days of being notified if the remains are subject to his or her authority. If the Medical Examiner recognizes the remains to be Native American, and not under his or her jurisdiction, then he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The Native American Heritage Commission will make a determination as to the Most Likely Descendent, who shall be afforded 48 hours from the time access is granted to the discovery site to make recommendations regarding culturally appropriate treatment.

If suspected Native American remains are discovered, the remains shall be kept in situ (in place) until after the Medical Examiner makes its determination and notifications, and until after the Most Likely Descendent is identified, at which time the archaeological examination of the remains shall only occur on site in the presence of the Most Likely Descendent. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and

Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the Most Likely Descendant are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with the NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98[e] and 5097.94[k]).

# 3.6 Energy

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. Energy** – Would the project: | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☒ | ☐ |

***a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

The electricity and natural gas used for construction of the project would be temporary and would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption. Although the project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy and potential reduction in VMT over time.

## Short-Term Construction

CalEEMod Version 2020.4.0 was used to estimate potential project-generated GHG emissions during construction, which were then used to estimate energy consumption. Construction of the project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 3.3, Air Quality, and Appendix C of this Draft MND are also applicable for the estimation of construction-related GHG emissions. The estimated GHGs were back-calculated based on carbon content (i.e., kilograms of carbon dioxide [$CO_2$] per gallon) in order to estimate fuel usage during project construction. The conversion factor for gasoline is 8.78 kilograms per metric ton $CO_2$ per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton $CO_2$ per gallon (The Climate Registry 2021). Energy use calculations for construction are provided in Appendix C.

### Electricity

Temporary electric power for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers would be provided by Southern California Edison (SCE). The electricity used for such activities would be temporary and would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption.

### Natural Gas

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed as a result of project construction would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption.

### Petroleum

Heavy-duty construction equipment associated with demolition and construction activities for construction would rely on diesel fuel, as would haul trucks involved in removing the materials from demolition and excavation. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel to and from the site in gasoline-powered passenger vehicles.

Heavy-duty construction equipment of various types would be used during each phase of project construction. Appendix C lists the assumed equipment usage for each phase of construction.

Fuel consumption from construction equipment was estimated by converting the total $CO_2$ emissions from each construction phase to gallons using the conversion factors for $CO_2$ to gallons of gasoline or diesel. Construction is estimated to occur in the years 2023-2025 and 2028-2029 based on the construction phasing schedule. The conversion factor for gasoline is 8.78 kilograms per metric ton $CO_2$ per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton $CO_2$ per gallon (The Climate Registry 2021). The estimated diesel fuel usage from construction equipment, haul trucks, and vendor trucks, as well as estimated gasoline fuel usage from worker vehicles, is shown in Table 3.6-1. The movement of soils on site would be accomplished with off-road equipment.

**Table 3.6-1. Total Project Construction Petroleum Demand**

| Off-Road Equipment (diesel) | Haul Trucks (diesel) | Vendor Trucks (diesel) | Worker Vehicles (gasoline) |
|---|---|---|---|
| **Gallons** | | | |
| 48,036.76 | 1,109.93 | 4,924.78 | 5,722.51 |

**Source:** See Appendix C for outputs.

In summary, construction associated with the potential future development facilitated by the Project over the construction period is conservatively anticipated to consume 5,722.51 gallons of gasoline from worker vehicles and 54,071.47 gallons of diesel from off-road equipment, haul trucks, and vendor trucks. In Los

Angeles County in 2023, it is estimated that approximately 4.2 billion gallons of petroleum would be consumed by on-road vehicles, and approximately 43 million gallons of petroleum would be consumed by off-road equipment (CARB 2021).

The Project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements. Overall, the Project would not be unusual when compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state.

Additionally, any future development facilitated by the Project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the latest Title 24 standards. Considering these requirements, the Project would not result in the inefficient, wasteful, or unnecessary consumption of construction energy. Therefore, short-term construction energy impacts would be less than significant.

## Long-Term Operational Impacts

During project operations, activities that would consume energy would include electricity and natural gas use for building operations, electricity for water and wastewater conveyance, and petroleum consumption from employees, customers, and delivery vehicle trips. Additional assumptions for these sources are described below and energy use calculations for operations are provided in Appendix C.

### Electricity

The operation of the project buildout would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. Electricity consumption associated with project operation is based on the CalEEMod outputs presented in Appendix C.

CalEEMod default values for energy consumption for each land use were applied for the project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. According to these estimations, the project would consume approximately 908,573 kilowatt-hours (kWh) per year during operation (Appendix C). The project would consume

approximately 105,019.11 kWh per year from water and wastewater sources, resulting in a total use of 1,013,592.11 kWh per year. The non-residential electricity demand in 2020 was 42,736,774,915 kWh (42,737 gigawatt-hours) for Los Angeles County (CEC 2020). As such, the project would have a negligible impact on demand for Los Angeles County and SCE.

### Natural Gas

The operation would require natural gas for various purposes, including water heating and natural gas appliances and forklifts. Natural gas consumption associated with operation is based on the CalEEMod outputs in Appendix C.

CalEEMod default values for energy consumption for each land use were applied for the project analysis. According to these estimations, the project would consume approximately 1,771,660 kilo-British thermal units per year. The non-residential natural gas consumption in 2020 was 1,698,687,468 kilo-British thermal units for Los Angeles County (CEC 2020).

### Petroleum

During operations, the majority of fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site, off-road equipment (yard trucks), and emergency generator testing.

Petroleum fuel consumption associated with motor vehicles traveling to and from the project site is a function of the VMT as a result of project operation. As shown in Appendix C and as discussed in Section 3.3, Air Quality, and Section 3.8, Greenhouse Gas Emissions, the annual net new VMT attributable to the project is expected to be 3,566,844 VMT. Similar to the construction worker and vendor trips, fuel consumption from worker and truck trips is estimated by converting the total $CO_2$ emissions from operation of the project to gallons using the conversion factors for $CO_2$ to gallons of gasoline or diesel. Mobile source emissions were estimated using the CalEEMod.

Calculations for annual mobile source fuel consumption are provided in Table 3.6-2.

**Table 3.6-2. Annual Mobile Source Petroleum Demand**

| Fuel | Vehicle MT CO2 | kg/CO2/Gallon | Gallons |
|---|---|---|---|
| Gasoline | 819.61 | 8.78 | 93,350.20 |
| Diesel | 200.20 | 10.21 | 19,608.26 |
| | | **Total** | **112,958.46** |

**Sources:** Trips and vehicle $CO_2$ (Appendix C); kg/$CO_2$/Gallon (The Climate Registry 2021).
**Notes:** MT = metric ton; $CO_2$ = carbon dioxide; kg = kilogram.

By comparison, California as a whole consumes approximately 28.6 billion gallons of petroleum per year (EIA 2017). Countywide total petroleum use by vehicles is expected to be 4.0 billion gallons per year by 2026 (CARB 2021).

### Summary

Statewide emission reduction measures proposed in the CARB-adopted amendments to the Pavley regulations include measures aimed at reducing GHG emissions associated with transportation. These amendments are part of California's commitment to a nationwide program to reduce new passenger vehicle GHGs from 2012 through 2016. Pavley regulations reduced GHG emissions from California passenger vehicles by about 22% in 2012 and by about 30% in 2016, all the while improving fuel efficiency and reducing motorists' costs. As such, vehicle trips associated with the project are expected to use less petroleum due to advances in fuel economy over time.

CARB has adopted a new approach to passenger vehicles—cars and light trucks—by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California (CARB 2017).

The project would create additional electricity and natural gas demand by adding recreational and commercial facilities. New facilities associated with the project would be subject to the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of nonresidential buildings and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting.

In summary, although natural gas and electricity usage would increase due to the implementation of the project, the project's energy efficiency would go beyond code compliance. Although the project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy and potential reduction in VMT over time. Therefore, impacts to energy resources during operation would be less than significant.

***b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

The project would be subject to and would comply with, at a minimum, the 2019 California Building Code Title 24 (24 CCR Part 6). The project would not conflict with existing energy standards and regulations. The electricity and natural gas used for construction of the project would be temporary and would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption.

### Construction

The electricity and natural gas used for construction of the project would be temporary and would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption. Construction is anticipated to consume 5,722.51 gallons of gasoline and 54,071.47 gallons of diesel. This would be a fraction of petroleum that would be consumed in California and countywide over the course of the construction period. Therefore, construction would have a less-than-significant impact with regards to regional energy supplies.

### Operation

As discussed under the previous thresholds, the project would result in an increased demand for electricity, natural gas, and petroleum. Design features would reduce the project's energy consumption by what is required by the 2019 California Building Code Title 24 standards. The efficiency standards apply to new construction of both residential and nonresidential buildings and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting.

In addition, Pavley regulations reduced GHG emissions from California passenger vehicles by about 22% in 2012 and by about 30% in 2016, all while improving fuel efficiency. By 2025, when the Advanced Clean Cars rules are fully implemented, one in seven new cars sold in California (1.4 million) will be non-polluting or nearly so, including plug-in hybrids, fully electric battery-powered cars, and hydrogen-powered fuel cell vehicles (CARB 2012). Meanwhile, gasoline- and diesel-powered passenger vehicles would grow ever cleaner and more efficient. A variety of new technologies, from direct fuel injection to lower rolling resistance tires, will also cut pollution and create more energy-efficient vehicles (CARB 2012). As such, petroleum usage associated with operation of the project is anticipated to decrease over time due to a reduction in VMT in the region and advances in fuel economy. Therefore, impacts related to regional energy supplies and capacity during project operation would be less than significant.

## 3.7 Geology and Soils

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. GEOLOGY AND SOILS** – Would the project: | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☐ | ☒ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |

A geotechnical report was prepared to analyze the geology of the project site and surrounding area. The Geotechnical Investigation Report is included as Appendix A to this MND.

***a)*** ***Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

***i)*** ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

The project site currently consists of a medical campus and retail building. The project proposes the expansion of an existing emergency department and the development of a MOB, introducing additional people to the project site. Faults that are located closest to the project site include the Whittier Earthquake Fault Zone and Raymond Hills Fault Zone. The Whittier Earthquake Fault Zone is approximately 6.0 miles southwest of the project site and the Raymond Hills Fault Zone is approximately 6.3 miles the north-northeast. As concluded in Appendix A, the project site is not located within an earthquake fault zone and is not located in proximity to a fault zone. Impacts related to risks from rupture of a known earthquake fault as part of project implementation would be less than significant.

***ii)*** ***Strong seismic ground shaking?***

As stated above, the project site is not located in or in proximity to a fault zone. Additionally, the design of the project would conform to all applicable federal, state, and local building codes, which would ensure

structural integrity. Impacts related to risks from strong seismic ground shaking as part of project implementation would be less than significant.

*iii) Seismic-related ground failure, including liquefaction?*

The project site is located in an area that is subject to liquefaction (DOC 2016b). As concluded in Appendix A, the project site is susceptible to liquefaction 15 feet below the existing grade (Appendix A). To support the structure, a deep foundation will be used to secure the project from experiencing impacts related to liquefaction and shrinking. Additionally, the design of the project would conform to all applicable federal, state, and local building codes. Impacts related to risks from seismic-related ground failure, including liquefaction as part of project implementation would be less than significant.

*iv) Landslides?*

The project site is relatively flat and is not located at the base of any hillsides, ridgeline, or slopes. Additionally, the project site has not been mapped as a landslide hazards area. No impact would occur.

*b) Would the project result in substantial soil erosion or the loss of topsoil?*

The project site consists of a previously developed medical campus and retail space. Potential erosion and sedimentation impacts would be temporarily increased during proposed construction, through activities such as grading, and removal of surface stabilizing features (e.g., vegetation and pavement). Developed areas would be most susceptible to erosion between the beginning of grading or construction and the installation of pavement or establishment of permanent cover in landscaped areas. However, short-term erosion and sedimentation impacts would be addressed through conformance with the National Pollutant Discharge Elimination System (NPDES) standards. Additionally, the project would be required to draft and implement an approved Stormwater Pollution Prevention Plan (SWPPP) and best management practices (BMPs), including appropriate measures to address erosion and sedimentation during construction. Implementation of the BMPs required pursuant to these permitting processes will ensure that erosion and sedimentation is managed to achieve regulatory water discharge standards. Once the project is in operation, the project site will be developed and would not result in the substantial erosion of topsoil. Impacts would be less than significant.

*c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

As stated above, the project site is relatively flat and is not located at the base of any hillsides, ridgeline, or slopes, and is not located in any known fault zones. Lateral spreading is unlikely to occur at the project site because the project site is relatedly flat and is not located near water. Human or natural activities have the potential to cause subsidence; however, Appendix A concluded that the likelihood of subsidence occurring at the project site is low. As described above, the project site is in an area that is subject to liquefaction; however, a deep foundation will be used to secure the project from experiencing impacts related to liquefaction and shrinkage. Additionally, the design of the project would conform to all applicable federal, state, and local building codes, which would ensure structural integrity regardless of the characteristic of

the underlying soils. Therefore, impacts related to on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse would be less than significant.

*d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

The subsoil conditions of the project site include loose soils overlying medium dense to dense poorly graded sand, above more dense layers of sand with occasional gravel layers. Soils on the project site are considered to have very low expansion potential (Appendix A). The project site is not underlain by expansive soils and therefore impacts relating to risks to life or property from expansive soils would be less than significant.

*e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

The project would connect to existing wastewater infrastructure provided by the City of Baldwin Park. The project would not include the use of septic tanks or alternative wastewater disposal systems. **No impact** would occur.

*f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

According to surficial geological mapping at a 1:24,000 scale and the most current international stratigraphic chart, the project site is underlain by Holocene (<11,700 years ago) alluvial gravel deposits (map unit Qg) with finer-grained Holocene alluvial deposits (map unit Qa) mapped just to the south (Cohen et al. 2022; Dibblee and Ehrenspeck 1999). The gravel deposits are products of major streams transporting and depositing sediments derived from the San Gabriel Mountains and associated alluvial fans while the finer-grained alluvial deposits were deposited on floodplains and within valleys (Dibblee and Ehrenspeck 1999). Geotechnical borings indicated the project site is underlain by artificial fill varying in thickness from 5 to 12 feet, which in turn is underlain by alluvial deposits consisting of variable amounts of silts, sands, and gravels (Geobase 2015).

As identified in the City of Baldwin Park General Plan Initial study, no known paleontological resources are within the City. LSA Associates, Inc. (2015) requested and received a paleontological records search from the Natural History Museum of Los Angeles County (LACM) for a previously planned project within the current project site. The LACM records search results revealed no paleontological resource localities from within the project site; however, nearby localities (LACM 7701–7702) were reported from deposits similar to those underlying the project site at depth. These localities yielded fossil specimens including fish, salamander, snake, rabbit, and rodent from 11 to 34 feet below the ground surface.

As described above, current project design indicates that the maximum depth of ground disturbance for the MOB component at the Broken Horn site is 10 feet below the existing ground surface and a maximum depth of 65 feet below current grade for the drilling of caissons at the emergency department expansion component. In addition, ground disturbance associated with all other construction components, including site preparation, vegetation removal, and trenching for utility work is assumed to be no deeper than five feet below existing ground surface across the project site. While there are no known paleontological resources on the project site, due to the required grading and drilling for the project, the geologic units on

site that have the potential to contain paleontological resources at depth, and the moderate potential for the discovery of paleontological resources, mitigation measure **MM-GEO-1** is provided in the event excavation results in the unanticipated discovery of paleontological resources, and impacts would be reduced to less than significant with mitigation incorporated.

### Mitigation Measures

MM GEO-1 Paleontological Resources Impact Mitigation Program and Paleontological Monitoring. Prior to commencement of any grading activity on site, the applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the project. The PRIMP shall be consistent with the SVP (2010) guidelines and shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the proposed Project site at depths below 15 feet below the ground surface based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the preconstruction meeting and a qualified paleontological monitor shall be on site during all rough grading and other significant ground-disturbing activities (including augering). In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources, which if determined to be significant, will be curated into an accredited fossil repository, such as the Natural History Museum of Los Angeles County at the project proponent's expense. Upon completion of project excavations requiring paleontological monitoring, the qualified paleontologist shall submit a final paleontological monitoring report to the project proponent and fossil repository (if fossils are discovered). The report shall detail the monitoring program's results, analyses, and conclusions.

## 3.8 Greenhouse Gas Emissions

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. GREENHOUSE GAS EMISSIONS** – Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as the project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated at a project level under CEQA.

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research's Technical Advisory, titled Discussion Draft CEQA and Climate Change Advisory, states (OPR 2018):

> Neither the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for perming an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. Even in the absence of clearly defined thresholds for GHG emissions, such emissions must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact.

Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2018). Section 15064.7(c) of the CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008). This guidance document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 metric tons (MT) of carbon dioxide equivalent ($CO_2e$) per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (see SCAQMD Resolution No. 08-35, December 5, 2008).

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and

revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

**Tier 1** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

**Tier 2** Consider whether or not the project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

**Tier 3** Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT $CO_2e$ per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT $CO_2e$ per year), commercial projects (1,400 MT $CO_2e$ per year), and mixed-use projects (3,000 MT $CO_2e$ per year). Under option 2, a single numerical screening threshold of 3,000 MT $CO_2e$ per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

**Tier 4** Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT $CO_2e$ per service population per year (MT $CO_2e$/SP/year) for project level analyses and 6.6 MT $CO_2e$/SP/year for plan level analyses. The 2035 efficiency targets are 3.0 MT $CO_2e$/SP/year for project level analyses and 4.1 MT $CO_2e$/SP/year for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

**Tier 5** Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

To determine the project's potential to generate GHG emissions that would have a significant impact on the environment, the project's GHG emissions were compared to the non-industrial land project quantitative threshold of 3,000 MT $CO_2e$ per year. Per the SCAQMD guidance, construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008). In addition, the project is evaluated for its potential to conflict with various GHG emission reduction plans including local GHG reduction plans, CARB's Scoping Plan, SCAG's RTP/SCS, and statewide 2030 and 2050 GHG reduction targets identified in Senate Bill (SB) 32 and Executive Order (EO) S-3-05.

*a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

### Short-Term Construction Emissions

CalEEMod Version 2020.4.0 was used to estimate potential project-generated GHG emissions during construction. Construction of the project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 3.3 are also applicable for the estimation of construction-related GHG emissions. As such, see Section 3.3 for a discussion of construction emissions calculation methodology and assumptions used in the GHG emissions analysis.

The SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (2008) recommends that, "construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies." Thus, the total construction GHG emissions were calculated, amortized over 30 years, and added to the total operational emissions for comparison with the GHG significance threshold of 3,000 MT $CO_2e$ per year. Therefore, the determination of significance is addressed in the operational emissions discussion following the estimated construction emissions.

Construction of the project is assumed to last a total of approximately 41 months. Table 3.8-1 presents construction emissions for the project from on-site and off-site emission sources.

**Table 3.8-1. Estimated Annual Construction GHG Emissions**

| Year | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
|---|---|---|---|---|
| | Metric Tons per Year | | | |
| 2023 | 110.62 | 0.03 | <0.01 | 112.04 |
| 2024 | 149.24 | 0.04 | <0.01 | 150.78 |
| 2025 | 29.01 | 0.01 | <0.01 | 29.25 |
| 2028 | 124.22 | 0.02 | <0.01 | 125.43 |
| 2029 | 183.08 | 0.03 | <0.01 | 184.82 |
| | | | Total | 602.32 |
| | | | Amortized emissions over 30 years | 20.08 |

**Notes:** GHG = greenhouse gas; $CO_2$ = carbon dioxide; $CH_4$ = methane; $N_2O$ = nitrous oxide; $CO_2e$ = carbon dioxide equivalent. See Appendix C for complete results.

As shown in Table 3.8-1, the estimated total GHG emissions during construction would be approximately 602 MT $CO_2e$ over the assumed construction period. Estimated project-generated construction emissions amortized over 30 years would be approximately 20 MT $CO_2e$ per year. Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis in the following text.

## Long-Term Operational Emissions

Emissions from the operational phase of the project were estimated using CalEEMod Version 2020.4.0. Operational years of 2026 (Emergency Department) and 2030 (Medical Office Building) were assumed consistent with completion of project construction. Potential project-generated operational GHG emissions were estimated for area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, water supply and wastewater treatment, and other sources of emissions (off-road equipment and yard trucks). Emissions from each category are discussed in the following text with respect to the project. For additional details, see Section 3.3 for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources.

### Area Sources

CalEEMod was used to estimate GHG emissions from the project's area sources, which include operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions. See Section 3.3 for a discussion of landscaping equipment emissions calculations. Consumer product use and architectural coatings result in VOC emissions, which are analyzed in air quality analysis only, and little to no GHG emissions.

### Energy

The estimation of operational energy emissions was based on CalEEMod land use defaults and units or total area (i.e., square footage) of the project's land uses. The energy use (electricity or natural gas usage per square foot per year) from nonresidential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Emissions are calculated by multiplying the energy use by the utility carbon intensity (pounds of GHGs per kilowatt-hour for electricity or 1,000 British thermal units for natural gas) for $CO_2$ and other GHGs. Annual natural gas and electricity emissions were estimated in CalEEMod using the emissions factors for SCE, which would be the energy provider for the project site.

The current version of CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards (CAPCOA 2021); however, the project would be required to comply with the 2022 Title 24 Standards at a minimum.

CalEEMod default energy intensity factors ($CO_2$, methane, and nitrous oxide mass emissions per kilowatt-hour) for SCE is based on the value for SCE's energy mix in 2021. SB X1 2 established a target of 33% of energy from renewable energy sources for all electricity providers in California by 2020 and SB 100 calls for further development of renewable energy, with a target of 44% by 2024, 52% by 2027, and 60% by 2030.

### Mobile Sources

All details for criteria air pollutants discussed in Section 3.3 are also applicable for the estimation of operational mobile source GHG emissions. In summary, emissions associated with passenger vehicles and heavy-duty trucks traveling to and from the project site were estimated for the project using CARB EMFAC2017 vehicle emissions factors within the CalEEMod.

Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other

vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the National Highway Traffic Safety Administration and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the project's motor vehicles. The effectiveness of fuel economy improvements was evaluated by using the EMFAC2017 emission factors in CalEEMod to the extent it was captured for motor vehicles in 2026 and 2030 for the project.

### Solid Waste

The project would generate solid waste, and therefore, result in $CO_2e$ emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste for the project.

### Water and Wastewater Treatment

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. The indoor and outdoor water use and electricity consumption from water use and wastewater generation were estimated using CalEEMod default values for the project.

Operation of the project would generate GHG emissions through motor vehicle trips; landscape maintenance equipment operation (area source); energy use (natural gas and electricity); solid waste disposal; water supply, treatment, and distribution and wastewater treatment; and other sources of emissions (off-road equipment). CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 3.3. The estimated operational project-generated GHG emissions are shown in Table 3.8-2.

**Table 3.8-2. Estimated Annual Operational GHG Emissions**

| Emission Source | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
|---|---|---|---|---|
| | Metric Tons per Year | | | |
| **Emergency Department** | | | | |
| Area | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy | 162.38 | 0.01 | 0.00 | 163.27 |
| Mobile | 256.78 | 0.02 | 0.01 | 260.49 |
| Solid waste | 48.87 | 2.89 | 0.00 | 121.06 |
| Water supply and wastewater | 8.40 | 0.09 | 0.00 | 11.35 |
| | | | *Subtotal* | *556.18* |
| **Medical Office Building** | | | | |
| Area | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy | 93.30 | 0.01 | 0.00 | 93.79 |
| Mobile | 763.03 | 0.05 | 0.04 | 774.87 |
| Solid waste | 72.35 | 4.28 | 0.00 | 179.23 |

## Table 3.8-2. Estimated Annual Operational GHG Emissions

| Emission Source | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
|---|---|---|---|---|
| | Metric Tons per Year | | | |
| Water supply and wastewater | 12.43 | 0.14 | 0.00 | 16.81 |
| | | | *Subtotal* | *1,064.71* |
| | | | **Total** | **1,620.89** |
| | | | *Amortized construction emissions* | *20.08* |
| | | | **Total operational + amortized construction GHGs** | **1,640.97** |

**Notes:** GHG = greenhouse gas; $CO_2$ = carbon dioxide; $CH_4$ = methane; $N_2O$ = nitrous oxide; $CO_2e$ = carbon dioxide equivalent.
See Appendix C for complete results.
Totals may not sum due to rounding.

As shown in Table 3.8-2, estimated annual project-generated GHG emissions would be approximately 1,621 MT $CO_2e$ per year as a result of project operations only. After accounting for amortized project construction emissions, total GHGs generated by the project would be approximately 1,642 MT $CO_2e$ per year. As such, annual operational GHG emissions with amortized construction emissions would not exceed the SCAQMD threshold of 3,000 MT $CO_2e$ per year. Impacts would be less than significant.

*b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy) for federal transportation conformity purposes only. The Regional Council approved the Connect SoCal in its entirety on September 3, 2020.

Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. Because the project is not growth inducing, this type of consistency analysis does not apply. However, the major goals of the Connect SoCal are outlined in Table 3.8-3, along with the project's consistency with them.

## Table 3.8-3. Project Consistency with the SCAG Connect SoCal RTP/SCS

| RTP/SCS Measure | Project Consistency |
|---|---|
| Encourage regional economic prosperity and global competitiveness. | *Consistent.* The project would bring up to 105 jobs to the City. |
| Improve mobility, accessibility, reliability, and travel safety for people and goods. | *Does not apply.* The project involves a medical facility and does not concern the movement of people or goods. |
| Enhance the preservation, security, and resilience of the regional transportation system. | *Does not apply.* The project would not inhibit SCAG from enhancing the resilience of the regional transportation system. |
| Increase person and goods movement and travel choices within the transportation system. | *Does not apply.* The project involves a medical facility and does not concern the movement of people or goods. |
| Reduce greenhouse gas emissions and improve air quality. | *Inconsistent*. The project would result in criteria air pollutant and GHG emissions during construction and operation. |

**Table 3.8-3. Project Consistency with the SCAG Connect SoCal RTP/SCS**

| RTP/SCS Measure | Project Consistency |
|---|---|
| Support healthy and equitable communities. | *Consistent.* The project involves the expansion of a medical facility, thus contributing to community health. |
| Adapt to a changing climate and support an integrated regional development pattern and transportation network. | *Does not apply*. The project would not inhibit SCAG from adapting to a changing climate and supporting an integrated regional development pattern and transportation network. |
| Leverage new transportation technologies and data-driven solutions that result in more efficient travel. | *Does not apply.* The project would not inhibit SCAG from leveraging technology for the transportation system. |
| Encourage development of diverse housing types in areas that are supported by multiple transportation options. | *Does not apply.* The project would not inhibit SCAG from encouraging development of diverse housing types. |
| Promote conservation of natural and agricultural lands and restoration of habitats. | *Consistent*. The project would not impact natural lands during construction or operation. |

**Source:** SCAG 2020.
**Note:** SCAG = Southern California Association of Governments; RTP/SCS = Regional Transportation Plan and Sustainable Communities Strategy; GHG = greenhouse gas.

As shown in Table 3.8-3, the project would be consistent with most applicable measures within the SCAG Connect SoCal RTP/SCS.

### Consistency with the California Air Resources Board's Scoping Plan

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.[4] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-global warming potential GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 3.8-4 highlights measures that have been, or will be, developed under the 2008 Scoping Plan and presents the project's consistency with Scoping Plan measures. The project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law and to the extent that they are applicable to the project.

[4] The Final Statement of Reasons for the amendments to the State CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

## Table 3.8-4. Project Consistency with 2008 Scoping Plan GHG Emission Reduction Strategies

| Scoping Plan Measure | Measure Number | Project Potential to Conflict |
|---|---|---|
| **Transportation Sector** | | |
| Advanced Clean Cars | T-1 | *No conflict.* The project's employees and visitors would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. |
| Low Carbon Fuel Standard | T-2 | *Not applicable.* This is a statewide measure that cannot be implemented by a project applicant or lead agency. Nonetheless, this standard would be applicable to the fuel used by vehicles that would access the project site (i.e., motor vehicles driven by the project's employees and visitors and heavy-duty trucks would use compliant fuels). |
| Regional Transportation-Related GHG Targets | T-3 | *Not applicable.* The project is not related to developing GHG emission reduction targets. To meet the goals of SB 375, the 2016-2040 RTP/SCS is applicable to the project. The project would not preclude the implementation of this strategy. |
| Advanced Clean Transit | N/A | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Last-Mile Delivery | N/A | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Reduction in VMT | N/A | *No conflict.* The project would not prevent CARB from implementing this measure. |
| Vehicle Efficiency Measures<br>1. Tire Pressure<br>2. Fuel Efficiency Tire Program<br>3. Low-Friction Oil<br>4. Solar-Reflective Automotive Paint and Window Glazing | T-4 | *No conflict.* These standards would be applicable to the light-duty vehicles that would access the project site. Motor vehicles driven by the project's employees and visitors would maintain proper tire pressure when their vehicles are serviced. The project's employees and visitors would replace tires in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. Motor vehicles driven by the project's employees and visitors would use low-friction oils when their vehicles are serviced. The project's employees and visitors would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. In addition, the project would not prevent CARB from implementing this measure. |
| Ship Electrification at Ports (Shore Power) | T-5 | *Not applicable.* The project is not within a Port District and the project would not prevent CARB from implementing this measure. |
| Goods Movement Efficiency Measures<br>1. Port Drayage Trucks<br>2. Transport Refrigeration Units Cold Storage Prohibition | T-6 | *Not applicable.* The project involves a medical facility and does not concern ports, TRUs, cargo, ships, or the movement of goods. |

## Table 3.8-4. Project Consistency with 2008 Scoping Plan GHG Emission Reduction Strategies

| Scoping Plan Measure | Measure Number | Project Potential to Conflict |
|---|---|---|
| 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification<br>4. Goods Movement Systemwide Efficiency Improvements<br>5. Commercial Harbor Craft Maintenance and Design Efficiency<br>6. Clean Ships<br>7. Vessel Speed Reduction | | |
| Heavy-Duty Vehicle GHG Emission Reduction<br>▪ Tractor-Trailer GHG Regulation<br>▪ Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I) | T-7 | *No conflict.* Heavy-duty vehicles would be required to comply with CARB GHG reduction measures. In addition, the project would not prevent CARB from implementing this measure. |
| Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive project | T-8 | *No conflict.* The project medium- and heavy-duty vehicles (e.g., delivery trucks) could take advantage of the vehicle hybridization action, which would reduce GHG emissions through increased fuel efficiency. In addition, the project would not prevent CARB from implementing this measure. |
| Medium and Heavy-Duty GHG Phase II | N/A | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| High-Speed Rail | T-9 | *Not applicable.* The project does not include rail and would not prevent CARB from implementing this measure. |
| **Electricity and Natural Gas Sector** | | |
| Energy Efficiency Measures (Electricity) | E-1 | *No conflict.* The project would comply with the current Title 24 Building Energy Efficiency Standards. In addition, the project would not prevent CARB from implementing this measure. |
| Energy Efficiency (Natural Gas) | CR-1 | *No conflict.* The project would comply with the current Title 24 Building Energy Efficiency Standards. In addition, the project would not prevent CARB from implementing this measure. |
| Solar Water Heating (California Solar Initiative Thermal Program) | CR-2 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Combined Heat and Power | E-2 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Renewables Portfolio Standard (33% by 2020) | E-3 | *No conflict*. The electricity used by the project would benefit from reduced GHG emissions resulting from increased use of renewable energy sources. |
| Renewables Portfolio Standard (50% by 2050) | N/A | *No conflict*. The electricity used by the project would benefit from reduced GHG emissions resulting from increased use of renewable energy sources. |

## Table 3.8-4. Project Consistency with 2008 Scoping Plan GHG Emission Reduction Strategies

| Scoping Plan Measure | Measure Number | Project Potential to Conflict |
|---|---|---|
| SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs | E-4 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| **Water Sector** | | |
| Water Use Efficiency | W-1 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Water Recycling | W-2 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Water System Energy Efficiency | W-3 | *Not applicable.* This is applicable for the transmission and treatment of water, but it is not applicable for the project. The project would not prevent CARB from implementing this measure. |
| Reuse Urban Runoff | W-4 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Renewable Energy Production | W-5 | *Not applicable.* Applicable for wastewater treatment systems. In addition, the project would not prevent CARB from implementing this measure. |
| **Green Buildings** | | |
| State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings) | GB-1 | *No conflict.* The project would be required to be constructed in compliance with state or local green building standards in effect at the time of building construction. |
| Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings) | GB-1 | *No conflict*. The project's buildings would meet green building standards that are in effect at the time of design and construction. |
| Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings) | GB-1 | *No conflict*. The project's buildings would meet green building standards that are in effect at the time of design and construction. |
| Greening Existing Buildings (Greening Existing Homes and Commercial Buildings) | GB-1 | *No conflict.* This is applicable for existing buildings only; it is not applicable for portions of the project except as future standards may become applicable to existing buildings. |
| **Industry Sector** | | |
| Energy Efficiency and Co-Benefits Audits for Large Industrial Sources | I-1 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Oil and Gas Extraction GHG Emission Reduction | I-2 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Reduce GHG Emissions by 20% in Oil Refinery Sector | N/A | *Not applicable.* The project would not prevent CARB from implementing this measure. |

## Table 3.8-4. Project Consistency with 2008 Scoping Plan GHG Emission Reduction Strategies

| Scoping Plan Measure | Measure Number | Project Potential to Conflict |
|---|---|---|
| GHG Emissions Reduction from Natural Gas Transmission and Distribution | I-3 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Refinery Flare Recovery Process Improvements | I-4 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Work with the Local Air Districts to Evaluate Amendments to Their Existing Leak Detection and Repair Rules for Industrial Facilities to Include Methane Leaks | I-5 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| **Recycling and Waste Management Sector** | | |
| Landfill Methane Control Measure | RW-1 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Increasing the Efficiency of Landfill Methane Capture | RW-2 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Mandatory Commercial Recycling | RW-3 | *No conflict.* During both construction and operation of the project, the project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. |
| Increase Production and Markets for Compost and Other Organics | RW-3 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Anaerobic/Aerobic Digestion | RW-3 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Extended Producer Responsibility | RW-3 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Environmentally Preferable Purchasing | RW-3 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| **Forests Sector** | | |
| Sustainable Forest Target | F-1 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| **High GWP Gases Sector** | | |
| Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing | H-1 | *No conflict.* The project's employees and visitors would be prohibited from performing air conditioning repairs and would be required to use professional servicing. |
| $SF_6$ Limits in Non-Utility and Non-Semiconductor Applications | H-2 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Reduction of Perfluorocarbons (PFCs) in Semiconductor Manufacturing | H-3 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Limit High GWP Use in Consumer Products | H-4 | *No conflict.* The project's employees and visitors would use consumer products that would comply with the regulations that are in effect at the time of manufacture. |

## Table 3.8-4. Project Consistency with 2008 Scoping Plan GHG Emission Reduction Strategies

| Scoping Plan Measure | Measure Number | Project Potential to Conflict |
|---|---|---|
| Air Conditioning Refrigerant Leak Test During Vehicle Smog Check | H-5 | *No conflict*. Motor vehicles driven by the project's employees and visitors would comply with the leak test requirements during smog checks. |
| Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program | H-6 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration | H-6 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| $SF_6$ Leak Reduction Gas Insulated Switchgear | H-6 | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| 40% Reduction in Methane and Hydrofluorocarbon (HFC) Emissions | N/A | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| 50% Reduction in Black Carbon Emissions | N/A | *Not applicable.* The project would not prevent CARB from implementing this measure. |
| **Agriculture Sector** | | |
| Methane Capture at Large Dairies | A-1 | *Not applicable.* The project would not prevent CARB from implementing this measure. |

**Notes:** GHG = greenhouse gas; CARB = California Air Resources Board; SB = Senate Bill; RTP/SCS = Regional Transportation Plan and Sustainable Communities Strategy; VMT = vehicle miles traveled; N/A = not applicable; $SF_6$ = sulfur hexafluoride.

Based on the analysis in Table 3.8-4, the project would not conflict with the applicable strategies and measures in the 2008 Scoping Plan.

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels codified by SB 32. Table 3.8-5 evaluates the project's potential to conflict with the 2017 Scoping Plan recommended actions.

## Table 3.8-5. Project Consistency with 2017 Scoping Plan Climate Change Policies and Measures

| Recommend Action Summary | Lead Agencies | Project Potential to Conflict |
|---|---|---|
| Implement SB 350 by 2030<br>▪ Increase Renewable Portfolio Standard<br>▪ Establish annual targets for statewide energy efficiency<br>▪ Reduce GHG emissions in the electricity sector | CPUC, CEC, CARB | *No conflict.* This action is directed towards policymakers and would not be directly applicable to the project. Nonetheless, the project would improve energy efficiency and reduce electricity-related GHG emissions when replacing older buildings and systems with newer, more efficient buildings and systems. |
| Implement Mobile Source Strategy (Cleaner Technology and Fuels)<br>▪ Increase zero emission and plug-in hybrid electric vehicles | CARB, CalSTA, SGC, Caltrans CEC, OPR, Local agencies | *No conflict.* The project's employees and visitors would operate vehicles that comply with applicable CARB regulations for cleaner technology and fuels. |

## Table 3.8-5. Project Consistency with 2017 Scoping Plan Climate Change Policies and Measures

| Recommend Action Summary | Lead Agencies | Project Potential to Conflict |
|---|---|---|
| ▪ Increase GHG stringency on light-duty vehicles beyond Advanced Clean Cars<br>▪ Medium- and heavy-duty GHG Phase II<br>▪ Innovative Clean Transit<br>▪ Last Mile Delivery<br>▪ Further reduce VMT through SB 375 and regional Sustainable Communities Strategy | | |
| Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets) | CARB | *No conflict.* This action is directed towards policymakers and would not be directly applicable to the project. |
| Adjust performance measures used to select and design transportation facilities by 2019 | CalSTA and SGC, OPR, CARB, GoBiz, IBank, DOF, CTC, Caltrans | *No conflict.* The action is directed towards CARB and Caltrans. |
| Develop pricing policies to support low-GHG transportation (e.g., low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts) by 2019 | CalSTA, Caltrans, CTC, OPR/SGC, CARB | *No conflict.* This action is directed towards policymakers and would not be directly applicable to the project. |
| Implement California Sustainable Freight Action Plan | CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GoBiz | *No conflict.* The project would provide a regional hub for goods movement connecting the ports with the arterial goods distribution system. |
| Adopt a Low Carbon Fuel Standard with a carbon intensity reduction of 18% | CARB | *No conflict.* This action is directed towards CARB and would not be directly applicable to the project. In addition, the project would not result in an increase in operational vehicle trips. |
| Implement the Short-Lived Climate Pollutant Strategy by 2030 | CARB, CalRecycle, CDFA, SWRCB, Local air districts | *No conflict.* The project would be required to comply with the Short-Lived Climate Pollutant Strategy to the extent it is applicable. |
| Develop regulations and programs to support organic waste landfill reduction goals in the Short-Lived Climate Pollutant Strategy and SB 1383 by 2019 | CARB, CalRecycle, CDFA, SWRCB, Local air districts | *No conflict.* This action is not within the purview of this project. |
| Implement the post-2020 Cap-and-Trade Program with declining annual caps | CARB | *No conflict.* The project is not subject to the California Cap-and-Trade Program. |
| Develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink by 2018 | CNRA and departments within, CDFA, CalEPA, CARB | *No conflict.* This action is not within the purview of this project. In addition, the project would not result in land use conversion that would reduce carbon storage. |
| Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018 | CARB | *No conflict.* This action is not within the purview of this project. |

**Table 3.8-5. Project Consistency with 2017 Scoping Plan Climate Change Policies and Measures**

| Recommend Action Summary | Lead Agencies | Project Potential to Conflict |
|---|---|---|
| Implement Forest Carbon Plan | CNRA, CAL FIRE, CalEPA and departments within | *No conflict.* This action is not within the purview of this project. In addition, the project components are located within developed urban areas and would not affect forested areas. |
| Identify and expand funding and financing mechanisms to support GHG reductions across all sectors. | State Agencies and Local Agencies | *No conflict.* This action is not within the purview of this project. |

**Source:** CARB 2017a.
**Notes:** SB = Senate Bill; GHG = greenhouse gas; CPUC = California Public Utilities Commission; CEC = California Energy Commission; CARB = California Air Resources Board; VMT = vehicle miles traveled; CalSTA = California State Transportation Agency; SGC = Strategic Growth Council; Caltrans = California Department of Transportation; OPR = Governor's Office of Planning and Research; GoBiz = Governor's Office of Business and Economic Development; IBank = California Infrastructure Economic Development Bank; DOF = Department of Finance; CTC = California Transportation Commission; CalEPA = California Environmental Protection Agency; CNRA = California Natural Resources Agency; CalRecycle = California Department of Resources Recycling and Recovery; CDFA = California Department of Food and Agriculture; SWRCB = State Water Resources Control Board; CAL FIRE = California Department of Forestry and Fire Protection.

Based on the analysis in Table 3.8-5, the project would not conflict with the applicable climate change policies and measures in the 2017 Scoping Plan.

### Consistency with EO S-3-05 and SB 32

Less-than-Significant Impact. This section evaluates whether the GHG emissions trajectory after project completion would impede the attainment of the 2030 and 2050 GHG reduction goals identified in EOs B-30-15 and S-3-05.

**EO S-3-05.** This EO establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

**SB 32.** This bill establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030.

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014):

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those

> needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, EO B-30-15, and EO S-3-05. This is confirmed in the 2017 Scoping Plan, which states (CARB 2017a):

> The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

As previously discussed, total project emissions, including operation and amortized construction, would not exceed the SCAQMD significance threshold of 3,000 MT $CO_2e$ per year. As such, the project (without mitigation) would not generate GHG emissions that may interfere with the implementation of GHG reduction goals for 2030 and 2050. Impacts would be less than significant.

# 3.9 Hazards and Hazardous Materials

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. HAZARDS AND HAZARDOUS MATERIALS** – Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☒ | ☐ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☒ | ☐ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☒ | ☐ | ☐ |

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |

***a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

### Historical Project Site Uses

Prior to construction of the hospital, the project site was partially developed with apparent residential housing. Walnut Creek flowed through land where the hospital is now located. The surrounding areas were a mix of agricultural land and mixed-use development. Beginning in the 1960s, the main hospital site was a drive-in theater surrounded by a mix of residential and commercial properties. At this time, Walnut Creek was channelized to flow south of the project site, and the surrounding roadways were developed. The proposed MOB site was developed with the former Broken Horn Saddlery building in the 1970s, which remains to present day. The Broken Horn Saddlery operated until 2021; the building is now empty and the property unused. The proposed emergency department expansion area was a parking lot for a commercial site which adjoined the drive-in theater to the east until hospital development began in the early 1990s. The hospital was completed in the mid-1990s. The proposed emergency department expansion area is currently a concrete-paved sidewalk and landscaping on the southern side of the existing emergency department.

### Hazardous Material Sites

#### Cortese List Databases

Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop a Cortese List that is updated at least annually. While the CalEPA no longer maintains a single Cortese List, CalEPA uses the following databases and lists to meet the requirements of Government Code Section 65962.5.

1. List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database.
2. List of Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker database.
3. List of solid waste disposal sites identified by State or Regional Water Board with waste constituents above hazardous waste levels outside the waste management unit.

4. List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from State Water Board.
5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.

A search of the above-listed online databases was conducted to identify Cortese List sites on or adjoining the project site, or those which could potentially impact the project site based on level of contamination, proximity to the project site, and other environmental conditions. The project site was not identified in any of the Cortese List databases. One State Response Site was identified in the vicinity of the project site, the impacts of which overlap the project site. Area 2 of the San Gabriel Valley Superfund Site, known as "Baldwin Park Operating Unit (OU)" is an area of groundwater contamination that is more than 8 miles long and 1 mile wide, covering portions of the cities of Azusa, Irwindale, Baldwin Park, and West Covina. The contamination plume has been caused by multiple, commingled groundwater contamination plumes from multiple sources. Generally, groundwater depths are between 150 and 350 feet below ground surface within the plume area. Contaminants of concern (COCs) are trichloroethene (TCE), tetrachloroethene (PCE), carbon tetrachloride, perchlorate, n-nitrosodimethylamine (NDMA), and 1,4-dioxane. The Baldwin Park OU is undergoing large-scale groundwater extraction and treatment (pump-and-treat) operated by local water utilities to provide clean water to local users. The project site lies within the boundaries of Baldwin Park OU, and therefore groundwater beneath the site contains the COCs discussed above.

While clean water is provided to the project site by the City of Baldwin Park, the underlying groundwater contamination plume contains volatile organic compounds (VOCs) which can volatilize and have the potential to impact soil gas beneath the project site. This can also cause vapor intrusion into buildings constructed on the project site.

### Non-Cortese List Databases

In addition to Cortese List sites, there are hazardous material sites that do not meet the definition of a Cortese List site but still have hazardous material impacts such that they could be impacted by construction or operation of the proposed project. These may include voluntary cleanup sites or military cleanup sites. These are referred to herein as "non-Cortese List hazardous material sites". A search was conducted to identify non-Cortese List hazardous material sites on or adjoining the project site, or those which could potentially impact the project site, based on level of contamination, proximity to the project site, and other environmental conditions.

Multiple sites were identified and reviewed within approximately one mile of the project site. Based on the type of contamination, regulatory status, and/or distance from the project site, none of these sites were determined likely to have impacted the environmental condition of the project site, and as such, the project would not impact contamination related to these sites.

### Oil and Gas

The California Department of Conservation's Geologic Energy Management Division well finder database (CalGEM 2022) and the National Pipeline Mapping System (NPMS 2022) petroleum and hazardous material pipeline database were reviewed to identify oil and gas production and transportation features on or adjoining the project site. There are no oil and gas wells on or within one mile of the project site, nor is

the project site located within an active oil and gas field. There are no hazardous material or gas transmission pipelines located within one mile of the project site.

## Previous Environmental Investigations

### Medical Office Building

A Phase I Environmental Site Assessment (ESA) and Phase II ESA were completed on the proposed MOB portion of the project site in 2021 (Appendix D, Phases I and II Environmental Site Assessment). The Phase I ESA identified the Baldwin Park OU as a recognized environmental condition (REC) and potential vapor encroachment condition (VEC) and recommended an evaluation of subsurface conditions, which led to completion of the Phase II ESA. During the Phase II ESA, samples were collected from on-site soils, soil gas, sub-slab soil gas, indoor air, and groundwater. The samples were analyzed for the COCs identified in the Baldwin Park OU (VOCs) and the sample results were compared to regulatory screening levels. The following findings were reported:

- Soil samples did not contain concentrations of COCs above residential Environmental Screening Levels (ESLs),[5] nor did they contain arsenic above naturally occurring background levels.
- Groundwater, which was encountered at a depth of approximately 120 feet below ground surface and had a west-northwest flow direction, contained concentrations of perchlorate and 1,4-dioxane above regulatory screening levels for drinking water (California's Public Health Goal [PHG] and US EPA Maximum Contaminant Level [MCL]) in at least one of the collected samples.
- Soil gas samples collected from the parking lot contained concentrations of multiple VOCs above ESLs for residential land use, but below ESLs for commercial land use.
- Sub-slab soil gas samples collected from beneath the buildings identified PCE and TCE concentrations above residential and commercial ESLs at one sample location.
- Indoor air samples collected from inside the buildings identified multiple VOCs, including TCE, above residential and/or commercial ESLs.

### Emergency Department Expansion

A soil gas investigation was also conducted on the proposed emergency department expansion portion of the project site (Appendix E, Soil Vapor Sampling Report). During this investigation, soil gas samples were collected at two depths (five -feet and 20 feet below ground surface) from eight separate soil boring locations within the footprint of the proposed emergency department expansion. Multiple VOCs were identified in soil gas at both depths. The COCs identified were similar to those identified at the MOB site. Detected concentrations of VOCs were compared to current regulatory screening levels, as follows:

- DTSC-SLs[6] for Commercial/Industrial Indoor Air with an attenuation factor (AF)[7] of 0.0005 for new commercial construction.[8]

5 San Francisco Regional Water Quality Control Board Environmental Screening Levels (ESLs), 2019.
6 Department of Toxic Substances Control Screening Levels, 2020. (DTSC 2020).
7 Attenuation factor is the assumed ratio of the indoor air concentration to the soil gas concentration.
8 This attenuation factor is published in the Department of Toxic Substances Control Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance), published October 2011.(DTSC and CalEPA 2011b).

- EPA Regional Screening Levels (RSLs)[9] for Commercial/Industrial Indoor Air with an AF of 0.0005 for new commercial construction[5]. EPA RSLs were used where DTSC-SLs were not available.
- Dudek also evaluated DTSC-SLs for Commercial/Industrial Indoor Air with an AF of 0.03. The 2022 DTSC Vapor Intrusion Advisory (DTSC 2022) states that an "AF of 0.03 can be used for the initial evaluation of the potential for vapors to enter a building." These screening levels are similar to ESLs (used by Terracon at the MOB site and developed using an AF of 0.03). The AF of 0.03, originally published by the US EPA, is based on several conditions that do not generally apply to new commercial construction in southern California. The San Francisco Regional Water Quality Control Board (RWQCB), who published the ESLs, also states ESLs are not intended to establish policy or regulation but are intended to help expedite and evaluate potential environmental concerns at contaminated sites.

None of the VOCs detected in soil gas at the proposed emergency department expansion were above commercial DTSC-SLs or EPA RSLs (AF 0.0005). Four VOCs, benzene, bromodichloromethane, chloroform, and vinyl chloride, were detected at concentrations above DTSC-SLs (AF 0.03) and ESLs.

As part of the soil gas investigation, Dudek also conducted a brief evaluation of human health risk using the highest detected concentration of each COC beneath the proposed emergency department expansion. Dudek evaluated both the current regulatory screening levels (DTSC-SLs and RSLs with AF 0.0005) and guidance screening levels (DTSC-SLs with AF 0.03 and ESLs).

- Using current commercial screening levels (DTSC-SLs and RSLs with AF 0.0005), the total estimated cancer risk is less than $1x10^{-6}$, or one in one million, and the hazard index (for non-cancer risks) is less than 1. This is considered an acceptable risk for unrestricted land use.
- Using the guidance levels (DTSC-SLs with AF 0.03 and ESLs), the total estimated cancer risk is between $1x10^{6}$ and $1x10^{4}$, and the hazard index is less than 1. This is within the risk management range, where potential responses can be evaluated on a case-by-case basis and may include no response (DTSC and RWQCB, 2020).

### Summary of Previous Environmental Investigations

In summary, VOCs were identified in soil gas in both the proposed MOB and proposed emergency department expansion portions of the project site. Concentrations of VOCs were identified at the proposed MOB above residential ESLs (regulatory guidance levels), but below commercial ESLs (except for PCE and TCE in sub-slab soil gas in one location). Concentrations of VOCs were identified at the proposed emergency department expansion above commercial ESLs, which are inherently above residential ESLs. As the proposed project includes a medical care center, residential ESLs will be used to evaluate vapor intrusion risk to protect potential sensitive receptors.

### On-Site Hazardous Materials

The hospital has permitted storage and use of hazardous materials on site associated with hospital operations, including a diesel underground storage tank (UST). Other hazardous materials include compressed gases, propane, acids, bases, and antibacterials (CalEPA 2022). These chemicals are not used

9 U.S. Environmental Protection Agency Regional Screening Levels, 2015. (USEPA 2015).

or stored on the project site areas proposed for development. The Los Angeles County Fire Department is the local Certified Unified Program Agency (CUPA) responsible for permitting, inspecting, and regulating hazardous material use and storage on the project site.

The Broken Horn buildings were constructed in the 1970s, prior to bans on hazardous building materials such as asbestos and lead-based paints. The EPA released a partial ban on asbestos-containing materials in 1989, but a full ban on the use and marketing of asbestos-containing materials did not occur until April 2019. The United States also banned lead-based paint for use in housing in 1978; however, lead-based paint use in commercial structures was not included in this ban. Based on the age of the Broken Horn buildings, there is a potential for asbestos-containing materials (ACMs) and lead-based paints (LBP) to be present in site structures. In addition, universal waste items containing hazardous materials (e.g., polychlorinated biphenyls and mercury) may also be present.

**Construction.** Construction of the Project would include demolition of the existing buildings and hardscape at the MOB. Based on the age of the structures, there is a potential for asbestos-containing materials, lead-based paints, and other hazardous building materials to be present in the existing buildings. This is further discussed in the Phase I ESA prepared for the Broken Horn Property (Appendix D). Hazardous building materials could include mercury thermometers and switches, fluorescent bulbs, and polychlorinated biphenyl (PCB)-containing ballasts. Demolition of the buildings and transportation and disposal of the building materials could cause a release to the environment if they are present in the existing buildings, resulting in a potentially significant impact absent mitigation. All projects that involve commercial or industrial building renovations are required to comply with applicable federal, state, and local requirements, as summarized below.

1. For asbestos: South Coast Air Quality Management District (SCAQMD) Rule 1403; Cal/OSHA Asbestos and Carcinogen Unit; California Department of Public Health; California Department of Resources, Recycling, and Recovery (CalRecycle); and EPA National Emission Standards for Hazardous Air Pollutants (NESHAP).
2. For lead: California Labor Code Sections 6716 to 6717; CCR, Title 8, Section 1532.1 et seq.; CCR, Title 17, Section 35001 et seq.; Los Angeles County Environmental Health Lead Program; and EPA Lead Renovation, Repair, and Painting Rule
3. For universal wastes: DTSC universal waste rules; CalRecycle; and EPA Solid Waste Rules (40 CFR Part 273)

Because lead and hazardous building materials surveys are not explicitly required by law prior to demolition of a building, a survey will be required in accordance with **MM-HAZ-1** as stated below. Hazardous building materials identified in the survey will be managed in accordance with the rules and regulations outlined above. Demolition debris that contains hazardous materials would be segregated and disposed of or recycled off site. Transportation and disposal of these materials would be done in accordance with federal, state, and local laws and regulations. Material disposal and recycling would be completed at the closest available facilities to reduce travel times and distances.

Hazardous materials that may be used during construction and demolition activities of the proposed project include gasoline, diesel fuel, oil, lubricants, grease, welding gases (e.g., acetylene, oxygen, and argon), solvents, and paints. These materials would be used and stored in designated construction staging areas

within the boundaries of the Project site and would be transported, handled, and disposed of in accordance with all applicable federal, state, and local laws and regulations. The use of these materials for their intended purpose would not pose a significant risk to the public or environment. Hazardous wastes accumulated during Project construction may include unused or off-specification paint and primer, paint thinner, solvents, and vehicle- and equipment-maintenance-related materials, many of which can be recycled. Empty containers for such materials (e.g., drums and totes) may also be returned to vendors, if possible. Hazardous waste that cannot be recycled would be transported by a licensed hazardous waste hauler using a Uniform Hazardous Waste Manifest and disposed of at an appropriately permitted facility. The use of these substances is subject to applicable federal, state, and local health and safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials.

During construction, if hazardous materials and/or petroleum products are stored on the Project site above applicable regulatory thresholds, the applicable documents and plans will be submitted accordingly. These thresholds include those outlined in the Hazardous Material Business Plan rules (California Health and Safety Code, Division 20, Chapter 6.95, Article 1; 19 CCR, Division 2, Chapter 4) and Spill Prevention, Control, and Countermeasure Plan rules (SPCC; 40 CFR, Chapter 1, Subchapter D, Part 112). Appropriate plans would be prepared as required by regulation and submitted as required to the local Certified Unified Program Agency, which for the Project site is the LACoFD and kept on site through construction of the Project (SPCC Plans are not submitted to a regulatory agency). BMPs and spill prevention and response procedures required by these rules would be implemented.

**Operation.** Operation of the Project would not significantly increase or change existing operations that include the use of hazardous materials. The MOB would be an office building; hazardous material use would be limited to household and commercially available cleaning and maintenance products. The emergency department expansion would not increase the number of beds, and therefore would not likely significantly increase the use of existing hazardous materials, such as antibacterial products and compressed gasses, as discussed in the On-Site Hazardous Materials section above. Any additional hazardous materials would be added to existing permits and plans, in accordance with state and local rules and regulations (California Health and Safety Code, Division 20, Chapter 6.95, Sections 25500-25520; California Health and Safety Code, Division 20, Chapter 6.11, Sections 25404-25404.9).

MM-HAZ-1 Pre-Demolition Hazardous Materials Abatement. Demolition or renovation plans and contract specifications shall incorporate abatement procedures for the survey and removal of materials containing asbestos, lead, polychlorinated biphenyls, hazardous materials, hazardous wastes, and universal waste items. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.

With MM-HAZ-1 implemented, potential impacts would be reduced to less than significant with mitigation incorporated.

*b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**Construction.** As discussed in subsection (a) above, demolition of the buildings could cause a release of hazardous materials to the environment, including asbestos, lead, and other hazardous building materials. **MM-HAZ-1** requires a survey for hazardous building materials and lead-based paints, and state and local regulations require the survey for and abatement of asbestos and abatement of lead-based paints and other hazardous building materials. These hazardous building materials would be identified, removed, and disposed of in a matter that no longer creates a risk of potential upset or accident condition.

As discussed under Previous Environmental Investigations in subsection (a) above, two investigations have been conducted on the project site, a Phase II ESA on the MOB and a soil gas investigation on the emergency department expansion area. Both investigations identified COCs in soil gas, which could be released into the environment during earthmoving activities such as trenching, excavation, or grading, resulting in a potentially significant impact absent mitigation. This contaminated soil gas could impact the breathing zone for construction, excavation, and utility workers within the project area. **MM-HAZ-2** below requires a health and safety plan be prepared and implemented during earthwork activities which will include breathing zone monitoring and action levels to protect workers.

In addition, as discussed in subsection (a), hazardous materials handled during construction in reportable quantities would be reported, permitted, and handled in accordance with applicable local and state laws and regulations. These permits and associated material handling, control, and spill countermeasure plans are designed to prevent releases of hazardous materials, and how to immediately respond to and contain a hazardous material release, should it occur. Hazardous materials required for construction would not be handled on site in such quantities that a reasonably foreseeable upset or accident condition would likely occur.

**Operation.** The VOC-impacted soil gas has the potential to cause vapor intrusion into buildings, which could impact on-site hospital workers, visitors, and patients. The applicant has included in the project design the installation of sub-slab barriers, as presented in Section 2.3, Project Characteristics. As such, any risk of vapor intrusion from sub-slab soil gas would remain less than significant.

As discussed in the *Previous Environmental Investigations* section, identified concentrations are above current published guidance levels (DTSC-SLs with AF of 0.03 and ESLs). Further, indoor air sampling conducted in the proposed MOB portion of the project site in 2021 indicated that VOCs, including TCE, were present in the indoor air at concentrations above regulatory screening levels and guidance levels.

MM-HAZ-2 Health and Safety Plan. Any work conducted on the project site that includes excavation, grading, trenching, or other subsurface work shall implement a health and safety plan to protect on-site workers from potential exposure to VOC-contaminated subsurface soil gas. The health and safety plan shall include periodic work breathing zone monitoring for VOCs at least once every 15 to 30 minutes during active soil disturbing activities using an organic vapor analyzer (photoionization detector or similar). The health and safety plan shall include air monitoring action levels and actions to be taken if vapor concentrations approach or exceed action levels. The contractor or their designee shall implement the health and safety plan during any soil disturbing activities, to the satisfaction of the City of Baldwin Park Community Development Department.

With implementation of **MM-HAZ-2**, impacts associated with foreseeable upset or accident conditions causing release of hazardous materials would be reduced to less than significant with mitigation incorporated.

*c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

There are no existing or proposed schools located within 0.25 miles of the project site. As such, the project would not emit hazardous emissions or handle hazardous materials near a school, and **no impact** would occur.

*d) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

While the project site is not located on a Cortese List site, it is located within the boundaries of the groundwater contamination plume associated with the Baldwin Park OU of the San Gabriel Valley Superfund Site. As discussed under *Cortese List Databases* in subsection (a), the underlying groundwater contamination plume has the potential to impact soil gas beneath the project site. As the COCs associated with this plume are VOCs, this can cause vapor intrusion into excavations during construction, and into buildings operated on the project site.

As discussed under Threshold (b), **MM-HAZ-2** and the installation of sub-slab barriers would protect on-site construction workers and occupants of future structures, respectively. As such, impacts related to a Cortese List site would be reduced to less than significant with mitigation incorporated.

*e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The project site is not located within two miles of a public use airport, nor is it located within an airport land use planning area. The San Gabriel Valley Airport is located approximately 2.8 miles west-northwest of the project site in the City of El Monte. Based on the Airport Layout Plan Drawing Set (AECOM 2016), the airport influence areas, including conical surfaces and noise contours, do not overlap the project site. However, based on the project site location and an assumed building height of 30 feet above ground surface, the project site "is in proximity to a navigation facility and may impact the assurance of navigation signal reception." As such, FAA requests filing the "Notice of Proposed Construction" under 14 CFR 77.9, "Construction or alteration requiring notice." In accordance with 14 CFR 77.7, FAA Form 7460-1 shall be completed and submitted at least 45 days before start of proposed construction, or the date the construction permit application is filed, whichever is earlier. Construction would proceed once a "Determination of No Hazard to Air Navigation" is received from the FAA. With adherence to federal rules and regulations, **no impact** would occur.

*f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Construction and operation would occur entirely within the project site footprint, with the exception of off-site improvements (Figure 3, Off-Site Improvements). Off-site improvements include new ADA compliant

driveways and ramps along the north side of Baldwin Park Boulevard, new sidewalks and replacement of damaged trees along Baldwin Park Boulevard and Leorita Street, and refurbishment of truncated domes along Dalewood Street. While road closures are not anticipated, any road closures or traffic reductions would require a permit through the City of Baldwin Park and/or Caltrans, depending on the jurisdictional authority of the road. As such, emergency evacuation needs would be evaluated and proper traffic control measures would be permitted to ensure no significant impacts with potential emergency needs.

The project would include the expansion of the existing emergency department. The existing emergency department would remain open during project construction and project construction would not be expected to substantially change the overall capacity of the emergency department in the case of an emergency. Once the project is operational the emergency department would increase the capacity to service the City during an emergency. Additionally, the project would comply with all applicable policies that are identified in the City's General Plan Safety Element. The project would be consistent with all Safety Element policies and would not impair the implementation of any emergency response procedures, therefore impacts to an adopted emergency response or emergency evacuation plan would be less than significant.

***g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?***

California Department of Forestry and Fire Protection (CAL FIRE) has developed maps of wildfire severity zones, which are organized by county. Within each county, CAL FIRE identifies wildfire severity zones as well as responsibility areas, either state responsibility areas, within which CAL FIRE would respond, or local responsibility areas, within which the local fire department would respond. The project site is located within a local responsibility area and is also located within a non-Very High Fire Hazard Severity Zone (non-VHFHSZ). The local fire response agency at the project site would be the Los Angeles County Fire Department (LACoFD). The nearest station is Station 29, located at 14334 Los Angeles Street, approximately 2.2 miles northeast of the project site.

LACoFD is also the local CUPA for the project site and would be the permitting agency for hazardous materials and hazardous wastes used, stored, and generated at the project site. In addition, LACoFD would be first emergency responder for the project site, including hazardous material incidents. The nearest 24-hour hazardous materials unit would be Haz Mat 43, 921 South Stimson Avenue, La Puente.

As outlined in the Public Safety Element of the City of Baldwin Park 2020 General Plan (City of Baldwin Park 2020), major evacuation routes established near the project site are eastbound and westbound along San Bernardino Road, southbound along Baldwin Park Boulevard to Amar Road, and southbound Frazier Street to I-10.

Overall, the project is not anticipated to expose people or structures to wildfires, and a less than significant impact would occur.

# 3.10 Hydrology and Water Quality

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **X. HYDROLOGY AND WATER QUALITY** – Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| i) result in substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☒ | ☐ |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site; | ☐ | ☐ | ☒ | ☐ |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☒ | ☐ |
| iv) impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☐ | ☒ |

The following analysis is based on the Hydrology and Hydraulics Report prepared for the proposed project by Psomas and is included as Appendix F, Hydrology and Hydraulics Report.

*a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The project site is currently developed and consists of an existing medical campus and retail building. The project would include the demolition of the existing retail site, construction of a MOB, and emergency department expansion. Sources of polluted runoff could include, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, pesticides, sediments, and nutrients could occur as a result of project uses. The proposed demolition, grading, and construction associated with the project could create additional sources of pollution which could potentially cause short term impacts to water quality. Impacts related to pollution form sedimentation would occur when soil would be exposed during project grading and construction. Once construction is complete, runoff would be conveyed to the City's storm drainage system.

Project construction activities would be subject to RWQCB requirements related to erosion control, sedimentation, and runoff prevention. Implementation of a SWPPP along with site-specific BMPs would ensure that the project achieves water quality standards with regard to its stormwater discharges off the site. Therefore, impacts would be less than significant.

*b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The proposed project would include the expansion of an existing emergency department and the construction of a MOB. The project site currently consists of a medical campus and abandoned retail building. The project would not introduce new impervious surfaces to the project site and would not interfere with groundwater recharge. The project site is located within the San Gabriel Valley groundwater basin, which is designated as a very low priority (DWR 2022). As discussed in Section 3.19, Utilities and Service Systems, the San Gabriel Valley Water District is expected to adequately supply water for the project. The project would not require any additional groundwater extraction and would not deplete groundwater supplies. The project would not impede sustainable groundwater management and impacts would be less than significant.

*c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

*i) result in substantial erosion or siltation on or off site;*

The project site is currently developed. During the demolition of the abandoned retail space and project construction, there would be increased potential for erosion on site from exposed soils. Once the project site is in operation, the project site would be covered by impervious surfaces. As described in Appendix F, runoff from the project site would converge into existing storm drains along Baldwin Park Boulevard. and would not result in alteration to drainages off site. Therefore, the project would not result in substantial erosion or siltation due to changes in drainage patterns. Impacts would be less than significant.

*ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;*

As discussed above, the project site is developed and primarily consists of impervious surface. Project implementation would not substantially increase the impervious area on the project site because it is currently developed (Appendix F). Additionally, the project site is relatively flat and does not currently result in flooding. On-site drainage facilities and off-site drainage connections would be designed to collect and convey runoff from 100-year storm events. Implementation of the proposed project is not expected to impede or redirect flood flows and would be less than significant.

*iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*

As discussed above, the proposed project would not drastically change the amount of surface runoff that is leaving the project site. The project site would be designed for runoff to be conveyed to storm drains located along Baldwin Park Boulevard. Additionally, runoff resulting from project implementation would not substantially increase (Appendix F). As discussed in Section 3.19, the project would not exceed the existing capacity of the City's stormwater drainage systems. Because the project would not substantially change the runoff contributing to the drainage systems, impacts would be less than significant.

*iv) impede or redirect flood flows?*

The project would not increase the impervious surface area on site in comparison to existing conditions, which would keep runoff flow rates or volumes similar to existing conditions (Appendix F). Additionally, the project site and the immediate area is relatively flat and does not currently result in flooding during storms. On-site drainage facilities and off-site drainage connections would be designed to collect and convey runoff from 100-year storm events. Implementation of the proposed project is not expected to impede or redirect flood flows and impacts to stormwater drainage would be less than significant.

*d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project site is approximately 30 miles inland from the Pacific Ocean and would not be subject to inundation by tsunami. Additionally, the project site is not located in a flood hazard zone (FEMA 2008). Given that the project site is not located near a large standing body of water, inundation by seiche (or standing wave) is considered negligible. No impact would occur.

*e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project site is located within the San Gabriel Valley groundwater basin. This basin is considered a very low priority basin and therefore not required to prepare a sustainable groundwater management plan. Additionally, the City of Baldwin Park does not have a water quality control plan. Therefore, the project would not conflict with the implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

# 3.11 Land Use and Planning

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. LAND USE AND PLANNING** – Would the project: | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☒ | ☐ |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |

***a) Would the project physically divide an established community?***

The proposed project site is located on a medical campus that is bound by Dalewood Street (north), Baldwin Park Boulevard (southeast), Bess Ave (southwest), and Leorita Street (east). The emergency department expansion component would be located within the boundary of the existing medical campus. The MOB component would be located at acquired a retail space adjacent to the existing medical campus boundary, that would expand the northeast corner of the medical campus. Implementation of the project would not physically divide an established community because both project components would redevelop in an area that has already been developed; impacts would be less than significant.

***b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

The City of Baldwin Park's General Plan and Municipal Code regulate planning and development within the city. The project site is currently zoned as Freeway Commercial (FC) and has a land use designation of General Commercial (GC) (Figure 4, Land Use Designation). The project's consistency with the City of Baldwin Park's General Plan and Municipal Code is discussed below.

## Baldwin Park Municipal Code

Baldwin Park Municipal Code Section 153.050 ensures compatibility of commercial and industrial uses with adjacent land uses. As described above, the project is zoned as freeway commercial (Figure 5, Zoning). Per Table 153.050.020 in the Baldwin Park Municipal Code, Offices are a permitted use, and Hospitals are permitted with a conditional use permit (CUP) within the Freeway Commercial zone. The freeway commercial designation permits a maximum Floor Area Ration (FAR) of 1.0 for commercial and industrial land uses and the proposed project would have a FAR ratio of 0.71. The project would require a variance from the development standards set forth in Table 153.050.030 for Commercial and Industrial Zones to allow for an overhead projection from the building façade to encroach 2 feet, 10 inches within the required 10-foot front yard setback along Baldwin Park Blvd. This projection would provide shade for the patients of

the hospital. With the exception of the variance from development standards, the project would be compatible with all zoning regulations for the freeway commercial zone. The requested variance from the Municipal Code has been analyzed as part of this MND and would not yield an effect on the environment. Therefore, impacts related to consistency with the Baldwin Park Municipal Code would be less than significant.

## City of Baldwin Park General Plan

Applicable land use goals and policies within the City's Land Use Element consist of encouraging revitalization of underutilized development and commercial development, (Goal 3 and Policy 1.4); compatibility between new and existing development (Goal 2), reduction of impacts from noise, traffic, parking, light and glare, and difference in scale (Policies 2.5, 2.6, and 2.7); and compliance with NPDES and water quality requirements (Goal 18 and Policy 18.1). As described above, the project would include the redevelopment of an abandoned retail site into a MOB that would serve the existing medical campus. As discussed in Sections 3.1, Aesthetics; 3.13, Noise; and 3.17, Transportation, the project would not result in significant impacts related to visual incompatibility, noise, and traffic. Additionally, the project would comply with NPDES and water quality requirements, as described in Section 3.10, Hydrology and Water Quality.

The project site has been identified as being located within the Bess/Garvey/I-10 Freeway General Plan Focus Area. The goal for this area is to encourage low intensity commercial and industrial uses that do not require easy freeway access and is oriented to serve the local resident and business population. Applicable policies for this focus area include Policy 17.1 (relocate uses, consolidate lots to create sites for cohesive development). The project would be consistent with this use as it would expand the existing emergency department and construct a MOB. The emergency department and MOB would help provide healthcare to the community of Baldwin Park. Additionally, the project would replace an abandoned retail store and replace it with a MOB that would serve as part of the existing medical campus. This would consolidate healthcare services and provided cohesive development with the existing medical campus.

The project would be consistent with the General Plan Health and Safety Element by replacing removed trees removed along Baldwin Park Boulevard (Action HS-3.17 and Baldwin Park Municipal Code Section 153.165.090), providing LID features (Action HS-4.4), providing recycling and trash enclosures on site (Action HS-6.8); would include drought tolerant landscaping (Policy 8.01); and would not substantially increase impervious surfaces on site (Policy 8.03).

The project would be consistent with the General Plan Economic Development Element by redeveloping an abandoned retail site along the I-10 corridor (Policy 5.1). As concluded in Section 3.17, Transportation, the project would be consistent with the Circulation Element goals and policies. As discussed in Section 3.13, Noise, the project would conform with the standards within the General Plan Noise Element. The General Plan Open Space and Conservation and Public Safety Element did not include goals or policies that were applicable to this project or were previously addressed in other elements.

While the project would request a variance from the development standards set forth in Table 153.050.030, the variance would not result in an effect on the environment. Additionally, the project would be consistent with the General Plan and remainder of municipal code and impact would be less than significant.

# 3.12 Mineral Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. MINERAL RESOURCES** – Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☐ | ☒ |

***a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

The entire City of Baldwin Park is designated as a Mineral Resource Zone 2 (MRZ-2) by the state Geologist since 1982. The MRZ-2 designation is an area where "adequate information indicated that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists" (City of Baldwin Park 2020). Given that the project site and the majority of the City is already developed, mineral extraction or mining would be incompatible with the existing zoning of the project site due to the site being previously developed. No impact would occur.

***b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?***

As stated above, the City of Baldwin Park General Plan has identified the entire city as being within MRZ-2 but has not identified a locally important mineral resource recovery site. Additionally, because the project site has been previously developed, mineral extraction and mining would be an incompatible use. No impact would occur.

# 3.13 Noise

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. NOISE** – Would the project result in: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☒ | ☐ | ☐ |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

***a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

## Construction Noise

Construction noise is considered a short-term impact and would be considered significant if construction activities exceed the allowable hours of operation as permitted by the FTA's advisory threshold of 80 dBA $L_{eq}$ over an 8-hour daytime period at a residential land use. Noise-sensitive land uses in the vicinity of the project include residences to the southwest of the EDE (approximately 800 feet from the construction boundary), and to the west of the new MOB (approximately 90 feet from the construction boundary). Two calculation scenarios were analyzed and are described as follows:

- Usage of the shortest activity-to-receptor distance for the loudest equipment type and quantity associated with the studied construction phase, with less noisy equipment types at successive distance increments of 50 feet; and
- An "acoustic centroid" approach, akin to the FTA general assessment technique for estimating construction noise, whereby all listed equipment for a construction phase is represented by a common location at the geographic center of the studied construction zone or area.

Project-generated construction noise will vary depending on the construction process, the type of equipment involved, the location of the construction site with respect to sensitive receptors, the schedule

proposed to carry out each task (e.g., hours and days of the week), and the duration of the construction work. Project construction noise for each of the six distinct phases was calculated using a spreadsheet-based model emulating the Federal Highway Administration (FHWA) Roadway Construction Noise Model (FHWA 2008). Table 3.13-1 shows that prediction results of both scenarios yield predicted 8-hour daytime $L_{eq}$ values exceed the aforesaid FTA guidance threshold of 80 dBA.

## Table 3.13-1. Construction Noise Modeling Results

| Receiver Location (distance [ft] to loudest construction equipment) | Construction Noise Level (8-hour dBA Leq) by Construction Phase | | | | | | |
|---|---|---|---|---|---|---|---|
| | Land Use | Demolition | Site Preparation | Grading | Building Construction | Paving | Architectural Coating |
| *Closest Distance* from EDE to Southwest Receptor (~725 feet) | Residential | 58 | 56 | 57 | 53 | 55 | 44 |
| *Closest Distance* from MOB to West Receptor (~60 feet) | Residential | 82 | 80 | 80 | 77 | 78 | 71 |
| *Acoustic Center* from EDE to Southwest Receptor (~935 feet) | Residential | 56 | 54 | 55 | 52 | 53 | 42 |
| *Acoustic Center* from MOB to West Receptor (~210 feet) | Residential | 71 | 68 | 69 | 66 | 68 | 56 |

**Source:** Attachment B of Appendix G.

As previously discussed, the City's Noise Ordinance does not establish quantitative construction noise standards; however, Section 130.37 Special Noise Sources (E) of the City's Municipal Code restricts noise-generating construction activities to the hours from 7:00 a.m. to 7:00 p.m. The construction contractor would thus be required to comply with these noise regulations prescribing the hours allowed for construction activity. Were the FTA guidance limit of 80 dBA $L_{eq}$ to be applied as a standard, Table 3.13-1 informs that the predicted noise level exposure at the off-site receptor closest to the MOB construction boundary (i.e., a distance of only 60 feet) is 82 dBA and exceed this standard by 2 dB. Hence, despite construction activity hours complying with City regulations, project construction noise impacts would be potentially significant and would require mitigation.

### On-Site Operational Noise

Implementation of the project would result in changes to existing noise levels on and around the project site by developing new stationary sources of noise, including introduction of additional outdoor HVAC equipment. These sources may affect noise-sensitive vicinity land uses off the project site.

### Rooftop HVAC

#### EDE Sound Sources

Based on the available architectural and mechanical roof plans and other design information for the proposed EDE, there is a 7-foot barrier raised 18 inches off the roof deck surrounding a single custom air-handling unit (AHU) and four exhaust fans. Rooftop AHU fan and exhaust fan reference sound levels were available from the EDE design plans and "product data" information submittals.

#### MOB Sound Sources

For the analysis of noise emission from outdoor-exposed HVAC equipment operating on the roof of the proposed MOB, net building cooling load and minimum air infiltration was calculated with an estimation technique (Storm 2018) using the gross square footage (GSF) and expected functions or usage of the interior building spaces. With these inputs, net refrigeration tonnage and minimum outside air volume was calculated and then used to size and quantify a number of air handling unit return air fans and air-cooled chillers, for which online manufacturer data was consulted to quantify reference sound emission levels for this anticipated MOB rooftop equipment.

#### Sound Propagation Prediction

The aggregate noise emission from these EDE and MOB outdoor-exposed HVAC sound sources has been predicted with the Datakustik CadnaA sound propagation program. Table 3.13-2 presents the predicted aggregate noise level exposures from these operating EDE and MOB HVAC systems at each of four nearby off-site noise-sensitive receptors (i.e., existing residences). Predicted levels shown in Table 3.13-2 range between 9 to 40 dBA hourly $L_{eq}$, which is below the City's noise standard of 45 dBA $L_{eq}$ for single-family residential properties. Figure 6, Noise Measurement Locations and Contours, displays the location of the studied noise-sensitive receptors and noise contours.

**Table 3.13-2. Stationary Operations Noise Modeling Results**

| Studied Noise-Sensitive Receptor (approximate address) | Predicted Project-Attributed Noise Exposure Level at Nearby Noise-Sensitive Receptors |
|---|---|
| | Project HVAC (dBA hourly Leq) |
| R1 (13226 Bess Avenue) | 18.3 |
| R2 (13101 Bess Avenue) | 9.4 |
| R3 (1019 Leorita Street) | 30.8 |
| R4 (Proposed EDE Façade) | 39.8 |

**Notes:** $L_{eq}$ = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; HVAC = heating, ventilating, and air-conditioning. See Figure 2 of Appendix G for locations of studied noise-sensitive receptors.

#### Parking Lot Activity

A comprehensive study of noise levels associated with surface parking lots was published in the Journal of Environmental Engineering and Landscape Management (Baltrënas et al. 2004). The study found that average noise levels during the peak period of use of the parking lot (generally in the morning with arrival of commuters, and in the evening with the departure of commuters), was 47 dBA at 1 meter (3.3 feet) from

the outside boundary of the parking lot. The project employee parking spaces for the proposed EDE would be within the existing parking garage for the hospital. The project employee parking spaces for the proposed MOB are proposed surrounding the new building.

Accounting for sound attenuation due to additional distance travelled, the MOB parking lot noise contribution logarithmically combined with the project's HVAC-only predicted noise levels appearing in Table 3.13-3 would still be below the City's noise standard of 45 dBA $L_{eq}$ at the studied nearest noise-sensitive residential properties (R3). It is also well below the ambient noise level range of 63 to 70 dBA $L_{eq}$ measured adjacent to the project as exhibited in Table 6 of Appendix G, Noise Technical Memorandum.

### Project-Generated Off-Site Traffic Noise

The project is expected to generate a total of -340 trips to the roadway system, primarily due to the removal of the apparel store that currently exists where the proposed MOB would be constructed. As shown in Table 2-1 of the project's Transportation Technical Memorandum, during the PM peak hour, approximately nine passenger vehicles are estimated to enter or exit the project site. Utilizing this information, as well as additional traffic data shown in Attachment C of Appendix G, an emulator based on the FHWA's Highway Traffic Noise Prediction Model RD-77-108 was used to estimate potential noise impacts at adjacent noise-sensitive uses. Information used in the model included posted traffic speeds, truck mix percentage (for urban streets, found in the U.S. Environmental Protection Agency's Background Document for Medium and Heavy Truck Noise Emission Regulations, 1976), and expected level-of-service C traffic volumes (for urban streets, found in the Transportation Research Board's Highway Capacity Manual, 2000). Consistent with Caltrans guidance (Caltrans 2013), this analysis assumes 80% of the ADT occurs during daytime hours (7:00 a.m. to 7:00 p.m.), 5% during the evening (7:00 p.m. to 10:00 p.m.), and 15% during the nighttime (10:00 p.m. to 7:00 a.m.).

The change in roadway noise levels was predicted for two conditions: existing and existing plus project. Traffic noise levels found in Table 3.13-3 are calculated for roadway segments bounded by intersections within the project area and are listed as follows:

- Baldwin Park Boulevard – From Amar Road to Dalewood Street,
- Bess Avenue – From Frazier Street to Baldwin Park Boulevard,
- Leorita Street – From Bess Avenue to Dalewood Street, and
- Dalewood Street – From Frazier Street to Baldwin Park Boulevard.

**Table 3.13-3. Predicted Roadway Noise Change – Existing plus Project**

| Modeled Roadway Segment | Existing Noise Level (dBA CNEL) | Existing Plus Project Noise Level (dBA CNEL) | Project-Related Noise Level Increase (dBA) |
|---|---|---|---|
| Baldwin Park Blvd.: Amar Rd. – Dalewood St. | 71.9 | 71.9 | 0.0 |
| Bess Ave.: Frazier St. – Baldwin Park Blvd. | 63.8 | 63.8 | 0.0 |
| Leorita St.: Bess Ave. – Dalewood St. | 63.0 | 63.0 | 0.0 |
| Dalewood St.: Frazier St. – Baldwin Park Blvd. | 67.5 | 67.5 | 0.0 |

**Source:** Attachment C of Appendix G.

As shown in Table 3.13-3, none of the roadways is predicted to receive an increase in noise levels as a result of the additional project traffic. In the context of community noise (i.e., outside of a controlled environment) a change in noise levels of less than 3 dBA is not perceptible to the average human listener. Additionally, based upon the FICON thresholds (FICON 1992), an increase of less than 5 dBA when the ambient sound level is less than 60 dBA $L_{dn}$/CNEL, less than 3 dBA when the ambient sound level is less than between 60 and 65 dBA $L_{dn}$/CNEL, or less than 2 dBA when the ambient sound level is greater than 65 dBA $L_{dn}$/CNEL would not be substantial.

### Conclusion

As described above, the project would exceed the City's threshold related to short term construction noise would be potentially significant. Implementation of Mitigation Measure **MM-NOI-1** would reduce construction noise to be within the City's adopted daytime threshold for construction to reduce impacts to be less than significant with mitigation incorporated. Additionally, all operational noises from the project were determined to be less than significant with mitigation incorporated.

## Mitigation Measure

The following mitigation measure shall be implemented as part of project implementation:

MM-NOI-1 The following recommendations from Appendix G shall be implemented by the construction contractor to reduce construction noise on site, to the satisfaction of the City of Baldwin Park Community Development Department:

- All construction equipment must have appropriate sound muffling devices, which shall be properly maintained and used at all times such equipment is in operation.
- The project contractor shall place stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the Project site during the construction period.
- All noise producing construction activities, including warming-up or servicing equipment and any preparation for construction, shall be limited to the hours between 7:00 a.m. and 7:00 p.m.

***b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?***

The primary source of ground-borne vibration occurring as part of the project is construction activity. The primary concern associated with ground-borne vibration is annoyance; however, in extreme cases, vibration can cause damage to buildings, particularly those that are old or otherwise fragile. Some common sources of ground-borne vibration are trains, and construction activities such as blasting, pile-driving, and heavy earth-moving equipment.

Ground-borne vibration information related to construction/heavy equipment activities has been collected by Caltrans. Information from Caltrans indicates that transient vibrations (such as from construction activity) with approximately 0.035 inches per second PPV may be characterized as barely perceptible, and vibration levels of 0.24 inches per second PPV may be characterized as distinctly perceptible (Caltrans

2020). According to Caltrans, D-8 and D-9 Caterpillars, earthmovers, and trucks have not exceeded 0.10 inches/second PPV at 10 feet (Caltrans 2020). Since the closest off-site residence is located approximately 90 feet away from likely heavy construction equipment, vibration from construction activities at the closest sensitive receiver would not exceed the significance threshold of 0.20 inches/second PPV. Moreover, because the off-site residential homes feature wood-frame construction on foundation pads or footings, FTA guidance indicates that a "coupling loss" of -5 VdB can be applied to the groundborne vibration received by the structure and thus result in an attenuated VdB level of 65 that is compatible with the afore-mentioned interpretation of the City's vibration standards (i.e., perception unaided by instruments).

As for existing on-site Kaiser Baldwin Park structures, vibration impacts attributed to project construction are not anticipated to be significant for the following reasons:

- Vibration-sensitive instruments and operations (e.g., operation rooms and medical imaging [i.e., MRI] facilities) are sufficiently distant from expected project construction areas, so that propagated groundborne vibration will attenuate with distance—or be impeded or dissipated by intervening masses such as existing structural foundations and multi-story building masses. Distance sufficiency in this context would be a minimum of 36 feet between—for purposes of illustration—an operating large bulldozer or comparable engine-driven heavy construction equipment and a potentially sensitive receptor, assuming a threshold of 72 VdB (for operating rooms, per FTA guidance [FTA 2018]) and applying a coupling loss of -10 VdB due to existing on-site structures being representative of multi-story "large masonry" buildings. The construction area of the new MOB to be implemented by the project meets this criterion and is physically separated from the campus vibration-sensitive buildings by the extensive pre-existing parking structures.
- Where the project involves renovation and new construction within this 36-foot distance, such as the vicinity of the EDE, the architectural plans indicate that the project will implement careful "phasing" of construction that involves temporary relocation of existing potentially vibration-sensitive activities, processes, and receptors to other on-site campus areas that are more distant from or would otherwise be protected from the adverse effects of excessive vibration attributed to the project.

Based on these predictive calculations and findings, impacts associated with ground-borne vibration resulting from project construction would be less than significant.

*c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The San Gabriel Valley Airport (SGVA) is located approximately 2.85 miles northwest of the project site. The project site is located outside of the Airport Influence Area as shown in the Los Angeles County Airport Influence Area map. Therefore, no impact would occur.

# 3.14 Population and Housing

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. POPULATION AND HOUSING** – Would the project: | | | | |
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

*a)* ***Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

The proposed project includes the expansion of an existing emergency department, and the redevelopment of an existing retail space into a MOB. The project would not introduce any new housing as part of the project but would expand the capacity of the medical campus with the MOB and expanded emergency department. The project is expected to result in the number of employees at the project site by 105.

The Southern California Association of Governments forecasts population growth at a local and regional level for six counties in southern California including Los Angeles County and Baldwin Park. As Shown in Table 3.14-1, Employment within Baldwin Park is expected to increase by 3,000 jobs by 2040. The increase of 105 jobs from the project would represent 3.5% of the total expected increase in jobs for the City. Therefore, the addition of 105 jobs would be within the forecasted growth of jobs within the area.

### Table 3.14-1. City of Baldwin Park Population and Employment Forecast

| | Actual 2012 | Forecasted 2020 | Forecasted 2035 | Forecasted 2040 | % Change (2012-2040) |
|---|---|---|---|---|---|
| Population | 76,100 | 77,700 | 81,500 | 83,600 | 9.9% |
| Employment | 16,500 | 17,900 | 18,900 | 19,500 | 18.2% |

**Source:** SCAG 2016.

The current emergency department expansion is intended to eliminate the existing and projected treatment bay deficits in the emergency department through 2027. The project would not expand any other existing utilities or infrastructure as part of either project component. As addressed under Section 3.19 the project

would connect to existing utilities (water, power, sewer, etc.) and would not require any expansion that could indirectly lead to population growth.

In conclusion, the project is expected to introduce 105 jobs to the City, which is within the forecasted growth of employment for the City and the project would not require the expansion of infrastructure from the introduction of these jobs. Direct or indirect impacts from unplanned population growth would be less than significant.

*b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed emergency department expansion and MOB would occur within the medical campus and would replace an existing retail building. The project would not displace any existing people or residences through project implementation. No impact would occur.

# 3.15 Public Services

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. PUBLIC SERVICES** | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | | | | |
| Fire protection? | ☐ | ☐ | ☒ | ☐ |
| Police protection? | ☐ | ☐ | ☒ | ☐ |
| Schools? | ☐ | ☐ | ☒ | ☐ |
| Parks? | ☐ | ☐ | ☒ | ☐ |
| Other public facilities? | ☐ | ☐ | ☒ | ☐. |

*a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

*Fire protection?*

The City of Baldwin Park contracts out their fire protection services to the County of Los Angeles Fire Department (LACFD 2021). The closest fire station to the project site is Los Angeles County Fire Department Station 168, located approximately 1.3 miles away at 3207 Cogswell Rd, El Monte, California 91732. As concluded in Section 3.14, Population and Housing, the project would not result in a substantial increase in population to the area, and therefore would not result in the increased demand for fire protection services to the project site. Additionally, as concluded below in Section 3.20, Wildfire, the project would not result

in an increase of risk of fire hazards to the project site, which also would not result in an increased demand for fire protection services. Physical impacts associated with the addition of new fire protection facilities resulting from the project would be less than significant.

*Police protection?*

The City of Baldwin Park has its own police department that provides police protection to the City. The only Baldwin Park Police Station is located approximately 2.0 miles away from the project site at 14403 Pacific Avenue, Baldwin Park, California 91706. The project would include the expansion of the emergency department and construction of a MOB. As concluded in Section 3.14, the project would not result in a substantial increase in population to the area, and therefore would not result in the increased demand for police protection services to the project site. Additionally, the project would be required to pay a development impact fee for law enforcement facilities, vehicles, and equipment infrastructure, as required by Baldwin Park Municipal Code Section 154.060. Physical impacts associated with the addition of new police protection facilities resulting from the project would be less than significant.

*Schools?*

The project does not have a residential component and as concluded in Section 3.14, the project would not result in a substantial increase in population to the area, and therefore would not result in the increased demand for schools servicing the project site. Physical impacts associated with the addition of new schools resulting from the project would be less than significant.

*Parks?*

The project does not have a residential component and as concluded in Section 3.14, the project would not result in a substantial increase in population to the area, and therefore would not result in the increased demand for schools servicing the project site. Physical impacts associated with the addition of new parks resulting from the project would be less than significant.

*Other public facilities?*

The project does not have a residential component and as concluded in Section 3.14, the project would not result in a substantial increase in population to the area, and therefore would not result in the increased demand for any other public facilities servicing the project site. Physical impacts associated with the addition of new public facilities resulting from the project would be less than significant.

# 3.16 Recreation

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. RECREATION** | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

***a)*** ***Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

As stated above, the project consists of the expansion of an existing emergency department and the redevelopment of an existing retail building to a MOB and will not include a residential component. As concluded in Section 3.14 the project is not expected to substantially increase population growth in the area and therefore would not substantially increase the uses of the recreational facilities in proximity to the project site. No impact would occur.

***b)*** ***Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?***

The project consists of the expansion of an existing emergency department and the redevelopment of an existing retail building to a MOB. The project would not include any recreational facilities. No impact would occur.

# 3.17 Transportation

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. TRANSPORTATION** – Would the project: | | | | |
| a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? | ☐ | ☐ | ☒ | ☐ |

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |

The following analysis is based on the Transportation Assessment Report prepared for the proposed project by LLG Engineers and is included as Appendix H, Transportation Assessment Report.

*a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

The project proposes the expansion of an existing emergency department and the construction of a MOB. The Circulation Element of the General Plan outlines goals and policies that ensure adequate traffic capacity and parking; and encourages the use of alternative modes of transportation and the use of public transportation. As discussed in Appendix H, the project site would accommodate pedestrian and bicycle access via on-site walkways that connect to existing sidewalks off site and providing bicycle parking facilities on site. Additionally, the project would not generate a significant number of trips and is not expected to reduce the level of service (LOS) surrounding the project site (Appendix H). Therefore, due to the project's consistency with the Circulation Element, impacts from conflicts with transportation policies would be less than significant.

*b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The City adopted VMT metric is included within the *City of Baldwin Park Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.* As described in Appendix H, the City's Guidelines state that: projects that generates less than 110 daily trips may be screened from conducting a formal VMT analysis and presumed to have a less than significant VMT impact. The project would generate 44 trips during the weekday AM peak hour and would result in a decrease of 48 trips in the weekday PM peak hour. The number of trips that would be generated by the project would be less than 110 daily trips and the project would screen out of further VMT analysis . Therefore, due to the small nature of the project, the project screens out of the need for VMT analysis and impacts would be less than significant.

*c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

The project site currently functions as a medical campus with the Internal circulation on the medical campus would remain the same. The addition of the MOB component campus would provide an entrance to the MOB via Leorita Street, which is a 2- lane local street. This new entrance would be designed to meet

the design requirements codified in the California Fire Code and would not include any hazardous design features. Additionally, the project is consistent with the zoning designation and would not introduce any incompatible uses to the area. Therefore, the project would not introduce hazards due to a geometric design feature and impacts would be less than significant.

*d) Would the project result in inadequate emergency access?*

The project site has multiple access points along Baldwin Park Boulevard, Dalewood Street, Bess Avenue, and Leorita Street. All driveways provide access to parking facilities, the hospital, and medical office buildings. The project would not change any of the key access and driveways within the medical campus (Appendix H). As described above, the driveway for the MOB would be designed to meet the design requirements codified in the California Fire Code. The project would not result in inadequate emergency access to the project site and impacts would be less than significant.

# 3.18 Tribal Cultural Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVIII. TRIBAL CULTURAL RESOURCES** | | | | |
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☒ | ☐ | ☐ |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☒ | ☐ | ☐ |

*a,b) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? Or, A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

As described in Section 3.4, Biological Resources, a CHRIS records search was completed by staff at the South Central Coastal Information Center (SCCIC) on July 11, 2022. No cultural resources were identified within the project site (Appendix I, Draft Archaeological Resources Assessment). In addition to a CHRIS records search, a SLF records search was requested on July 22, 2022, to determine the presence of any Native American cultural resources within the project site. The NAHC SLF records search results were positive for known Native American heritage resources within the proposed Project site. Results of the SLF provided relate to the general regional area within and surrounding the study area and do not necessarily equate to the existence of resources within the specific area occupied by the current proposed Project site. The NAHC identified the Gabrieleno Band of Mission Indians – Kizh Nation, as well as eight additional Native American individuals who would potentially have specific knowledge as to whether or not Native American cultural resources are identified within the Project site that could be at-risk. Outreach letters were mailed on September 28, 2022, to all NAHC-listed traditionally geographically affiliated tribal representatives that have requested project notification. To date, one tribe (Gabrieleno Band of Mission Indians- Kizh Nation) have responded. City AB 52 consultation is carried out by the City as the lead agency and is currently ongoing.

Following a consultation call between the City and the tribe on December 6th, 2022, the Gabrieleno Band of Mission Indians- Kizh Nation (Tribe) provided an email follow up that included a number of attachments on December 7, 2022. Attachments included ethnohistoric and historical archival research pertaining to traditional use of the area, letters form technical experts and the NAHC, and recommended mitigation measures. The Tribe further indicated that the project falls within the traditional village location of Awinga. At the request of the tribe, this information will be maintained as confidential and appended to this document (Confidential Appendix J). Among other specific details pertaining to these management strategies, recommended mitigation includes inclusion of a Native American monitor that is designated or approved by the Tribe during ground disturbing activities and actions to be taken in the event of an unanticipated discovery of human remains and/or funerary objects.

While strong evidence of traditional Native American use of this broader area has been provided through review of archival documentation, a specific known TCR, meeting definitions applied in CEQA, does not appear to have been identified through consultation. However, despite the current disturbed state of the project site, there remains the potential for the project to encounter previously unknown and unanticipated TCRs during construction of the project. The City, having considered these factors, including information and recommended management strategies provided by the Tribe, has determined that additional management strategies will be required. In the event that unknown tribal cultural resources are encountered during Project implementation, impacts to these resources are potentially significant and mitigation is required.

Tribal cultural resources are most commonly cultural resources and/or human remains of Native American origin. As such, implementation of previously identified mitigation measures **MM-CR-1** through **MM-CR-4**) are appropriate management strategies to be applied to tribal cultural resources. This observed, tribal cultural

resources also constitute a separate resource category under CEQA; tribes, through the government-to-government consultation process are provided the opportunity to identify tribal cultural resources that may be affected by the project and interpret the significance of such resources. Having reviewed and considered all information provided through this process, the ultimate responsibility to determine the appropriate management approach is the lead agency for compliance with CEQA. In order to appropriately reflect this process and provide for the inadvertent discovery of tribal cultural resources during project activities, a separate mitigation measure is provided below. Specific mitigation requirements, as developed by the Tribe and agreed to by the applicant, are provided in Confidential Appendix J. Implementation of **MM-TCR-1** would include the requirement for a Native American monitor to be invited to be present in order to ensure potential impacts to tribal cultural resources as a result of ground-disturbing activities on the project site would remain be reduced to less than significant with mitigation incorporated.

Mitigation Measure **MM-CUL-1** through **MM-CUL-4** would ensure that measurements are in place for the proper treatment of any inadvertently discovered archaeological resources and potential impacts to archaeological resources and human remains would be reduced to less than significant with mitigation incorporated.

MM-TCR-1 Inadvertent Discovery of Tribal Cultural Resources. Management strategies stipulated in MM-CUL-1 through MM-CUL-4 shall be implemented in the event that project activities encounter cultural resources or human remains. In addition, a Native American representative, compensated by and contracted directly with the applicant, shall be provided the opportunity to monitor during earth disturbing activities. This monitor shall be provided by the consulting tribe(s). Should an inadvertent discovery be Native American in origin and have potential to meet the definition of a tribal cultural resource (as defined by PRC Section 21074) the city, or other designated representative, shall notify consulting Native American tribes. Designated representatives from these tribes shall be provided a reasonable period of time to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered tribal cultural resources. Implementation of proposed recommendations shall proceed in compliance with CEQA and other regulatory requirements and be made based on the determination of the City that the approach is reasonable and feasible.

# 3.19 Utilities and Service Systems

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIX. UTILITIES AND SERVICE SYSTEMS** – Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? | ☐ | ☐ | ☒ | ☐ |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

***a)*** ***Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

The project would include the expansion of an existing emergency department and the construction of a MOB.

## Water

San Gabriel Valley Water Company currently services the project site. The San Gabriel Valley 2020 Urban Water Management Plan (UWMP) analyzes the water demand and water supply for 2020 to 2045. The 2020 UWMP analysis is based off of projected growth rates from the 2020-2045 SCAG Regional Transportation Plan/ Sustainable Communities Strategy of the SCAG which incorporates existing land use and general plan land use policies to help project growth for the region. Total water use in 2020 was

estimated to be 33,632 and is projected to increase to 38,700 MG by 2045. The projected water supplies for the district are expected to match the projected demand (San Gabriel Valley Water Company 2021).

The project would increase the number of treatment bays to the existing emergency department and would include the construction of a MOB. Water use during construction is expected to be temporary and minimal. The expansion of the emergency department would increase the number of treatment bays from 38 to 60. While the project would increase the water use on the project site, the project would be consistent with the land use designation for the site which was factored into the UWMP projections. Additionally, the project would implement new building code which will include water conservation standards compared to older buildings.

In conclusion, the increase in water usage from the project is expected to be met by the San Gabriel Valley Water Company during normal, and dry years, and would not require the construction of new facilities to supply water to the area and impacts would be less than significant.

### Wastewater Treatment

The City's sewer system includes 106 miles of sewers, three pump stations and is managed through the Department of Public Works (City of Baldwin Park 2021b). Operational and maintenance serves are provided through the County of Los Angeles Consolidated Sewer Maintenance District (CSMD). Wastewater from the City is treated at the San Jose Creek Water Reclamation Plant. The San Jose Creek Reclamation Plant has a capacity to treat 100 million gallons of wastewater per day (MGD) (LACSD 2022). The project proposes the expansion of an existing emergency department and the construction of a MOB. Wastewater during construction is expected to be temporary and minimal. The project applicant would be required to obtain a will serve letter from the CSMD. This increase in wastewater from the project represents a small portion of the available capacity for the San Jose Creek Water Reclamation Plant. The will serve letter would ensure that CSMD would be able to adequately serve the project site and not require the construction of new facilities to provided services to the project site. Therefore, impacts to wastewater facilities would be less than significant.

### Stormwater Drainages

As discussed in Section 3.10, Hydrology and Water Quality, the project would not substantially increase the volume or rate of runoff from the project site. As concluded in Appendix F, runoff from the project site would remain relatively the same as current conditions. Project implementation would not result in the need to expand or create new stormwater facilities, and therefore impacts would be less than significant.

### Electric Power

As discussed in Section 3.6, Energy, the project would consume approximately 1,013,592.11 kWh per year and the non-residential electricity demand in 2020 was 42,736,774,915 kWh (42,737 gigawatt-hours) for Los Angeles County (CEC 2020). Electricity use during project construction would be temporary and negligible. As such, the project would have a negligible impact on demand for Los Angeles County and SCE. The project would not significantly increase demand for electricity and would not require the expansion of or construction of electric power facilities, therefore impacts would be less than significant.

### Natural Gas

As discussed in Section 3.6, Energy, natural gas is not anticipated to be required during construction of the project, and the project operation is estimated to consume approximately 1,771,660 kilo-British thermal units per year. The non-residential natural gas consumption in 2020 was 1,698,687,468 kilo-British thermal units for Los Angeles County (CEC 2020). As such, the project would have a negligible impact on demand for Los Angeles County and SCE. The project would not significantly increase demand for natural gas and would not require the expansion of or construction of natural gas facilities, therefore impacts would be less than significant.

### Telecommunication Facilities

The project site is currently served by various telecommunication service distributors. Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Spectrum, Viasat, and other independent cable companies. The project would introduce additional demand for telecommunication services as it would introduce a new MOB and an expanded emergency department; however, no specific systems upgrades are proposed or anticipated for the proposed project. Due to the existing infrastructure served in the surrounding project area, the proposed project would not result in impacts associated with the construction or expansion of telecommunications, and impacts are determined to be less than significant

*b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

As described above, the San Gabriel Valley Water Company services the project site. Water is supplied through multiple sources including groundwater and recycled water. The San Gabriel Valley 2020 Urban Water Management Plan (UWMP) analyzes the water demand and water supply for 2020 to 2045. The 2020 UWMP analysis is based off projected growth rates from the 2020-2045 SCAG Regional Transportation Plan/ Sustainable Communities Strategy of the SCAG which incorporates existing land use and general plan land use policies to help project growth for the region. The projected water supplies for the district are expected to match the projected demand during normal, dry, and multiple dry years (San Gabriel Valley Water Company 2021). While the project would increase the water use on the project site, the project would be consistent with the land use designation for the site which was factored into the UWMP projections. The increase in water usage from the project is expected to be met by the San Gabriel Valley Water Company during normal, and dry years, and would not require the construction of new facilities to supply water to the area and impacts would be less than significant.

*c) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

As described above, wastewater from the City is treated at the San Jose Creek Water Reclamation Plant. The San Jose Creek Reclamation Plant has a capacity to treat 100 million gallons of wastewater per day (MGD) (LACSD 2022). The project proposes the expansion of an existing emergency department and the construction of a MOB. Wastewater during construction is expected to be temporary and minimal. This increase in wastewater from the project represents a small portion of the available capacity for the San

Jose Creek Water Reclamation Plant. Additionally, the project applicant would be required to obtain a will serve letter from the CSMD. The project would not substantially increase the wastewater from the project site and therefore impacts to wastewater facilities would be less than significant.

*d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

### Construction

As described in Section 2, the project would occur in two phases. During construction of Phase I of the project, the existing retail building on the broken horn site would be demolished in addition to the expansion of the emergency department. Construction of Phase II would include the construction of the proposed MOB. Construction of the project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, plastics, and demolition material from the demolition of the abandoned retail building. Municipal Code Chapter 53 requires the submittal of a Construction and Demolition Waste Materials Management Plan for the construction and demolition waste generated by the project (City of Baldwin Park 2022c).

### Operation

Once the project is operational, the project would increase the intensity of uses at the project site and generate more solid waste compared to the existing emergency department and abandoned retail site. Solid waste generated by the project would be serviced by WM, and solid waste would then be transferred to Azusa Landfill. According to CalRecycle, the facility has a daily permitted capacity of 8,000 tons per day for solid waste. (CalRecycle 2019a)

The anticipated operational solid waste generation from the project was estimated using CalRecycle's Estimated Solid Waste Generation Rates (CalRecycle 2019b). It is estimated that the emergency department expansion (increase of 22 treatment bays) would generate approximately 352 pounds of solid waste per day (16 pounds per bed) and the MOB component (33,000 sq ft) would generate approximately 198 pounds of solid waste per day (0.006 pounds per square foot) for a total of 550 pounds per day of waste (CalRecycle 2019b). This total does not consider any waste diversion through recycling which is required by Baldwin Park Municipal Code Chapter 50.

The project would be required to comply with applicable state and local regulations related to solid waste, waste diversion and recycling at the time of development. Implementation of the project is not expected to generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and impacts related to solid waste is determined to be less than significant.

*e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

As described above, the project would be required to comply with all federal, state, and local statues and regulations related to solid waste, diversion of waste, and recycling. All solid waste facilities, including landfills, require solid waste facility permits to operate. In Los Angeles County, Public Resources Code

(Sections 44001–44018) and California Code of Regulations Title 27, Division 2, Subdivision 1, Chapter 4 (Section 21440 et seq.) authorizes the County Department of Environmental Health, Local Enforcement Agency to issue solid waste facility permits. Azusa Land Reclamation Landfill is a permitted facility and Waste Management is a licensed hauler. For these reasons, and the reasons stated above, impacts related to solid waste as a result of project implementation would be less than significant.

# 3.20 Wildfire

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XX. WILDFIRE** – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☒ | ☐ |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☒ | ☐ |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☒. | ☐ |

***a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

As described above in Section 3.9, the City of Baldwin Park Emergency Operations Plan is used to prepare the city for a variety of types of emergencies that the City. As identified in the EOP, risk of wildfire is low given the geographic location of the City; however, other threats have the potential to impact the City (City of Baldwin Park 2017). The project would include the expansion of an existing emergency department and the construction of a MOB. The existing emergency department would remain open during project construction and would not be expected to substantially change the overall capacity of the emergency department in the case of an emergency. Once the project is operational the emergency department would increase the capacity to service the City during an emergency. Additionally, the project would comply with all applicable policies that are identified in the City's General Plan Safety Element, such as implementing

the Uniform Building Code's seismic safety standards. The project would be consistent with all Safety Element policies and would not impair the implementation of the EOP, therefore impacts to an adopted emergency response or emergency evacuation plan would be less than significant.

*b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

The project site is located in a heavily urbanized area and is not located within a high fire hazard severity zone (HFHSZ) (CAL FIRE 2022). The project site is located in the City of Baldwin Park in the valley floor of the heavily urbanized San Gabriel Valley. The region is susceptible to heatwaves, droughts, and prevailing winds, all which increase the risk of wildfires (City of Baldwin Park 2021), but due to the heavily developed nature of the project site and the surrounding area, the wildfire risk at the site is considered low. Additionally, the project components would be built to the most recent fire code standards. Impacts would be less than significant.

*c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

As described above, the project site is located within a heavily urbanized area and represents a low wildfire risk. The project would expand an existing emergency department and introduce a MOB to the project site. As described above in Section 3.18, Tribal Cultural Resources, both project components would not require the installation of new utility infrastructure. Maintenance of associated infrastructure surrounding the site would be similar to maintenance of the current medical campus. Additionally, as described above, the project is located within a highly developed area with low fire risk. The project would not introduce any new infrastructure or require maintenance of infrastructure that would exacerbate fire risk and impacts would be less than significant.

*d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

As stated above, the project would have a low risk for wildfire due to the developed nature of the project site and the surrounding area. Additionally, the project site consists of relatively flat terrain due to the previous development in the area and the location of the project at the valley floor in the San Gabriel Valley and would not expose people or structures to slope instability. As discussed in Section 3.10, drainage on the project site would be similar to that of existing conditions. Due to the low fire risk and the flat terrain at the project site, the project would not expose people or structures to risks as a result of runoff, post-fire slope instability, or drainage changes and impacts would be less than significant.

# 3.21 Mandatory Findings of Significance

*a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

As described in Section 3.4, Biological Resources, the project site consists of urban/developed area, Due to the developed nature of the project site, the project site does not include habitat that would support fish or wildlife species. Furthermore, no federally or state-listed as endangered plant or wildlife species have potential to occur on the project site. As concluded in Section 3.4, the project would result in less than significant impacts related to biological resources.

Additionally, as discussed in Section 3.5, Cultural Resources, and Section 3.18, Tribal Cultural Resources, there is potential for unanticipated discovery of Cultural or Tribal Cultural Resources. Impacts to archaeological and tribal cultural resources would be **less than significant** with the incorporation of MM-CUL-1 (refer to Section 3.5, Cultural Resources).

*b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As addressed throughout this document, the project would have either no impact, a less-than-significant impact, or a less-than-significant impact with mitigation incorporated with respect to all environmental impact areas. Cumulative impacts of several resource areas have been addressed in individual resource sections, including Section 3.3, Air Quality, and Section 3.8, Greenhouse Gas Emissions, and concluded that cumulative impacts would be less than significant.

Given the nature of the project, potential cumulative impacts could occur during the temporary construction work if other nearby projects occur in the same timeframe. However, given the small scale of the proposed project, the potential for the project to contribute to a cumulative impact when combined with another past, present, and reasonably foreseeable construction projects is unlikely.

As described under Section 3.17, project operation would generate a minimal number of trips during operations, and in turn, would generate minimal criteria air pollutant emissions, greenhouse gas emissions, and noise. The analysis of these impacts is inherently cumulative in nature, and thus the conclusions that they are less than significant (either with or without mitigation) apply to both project-specific and cumulative impacts. Other resource areas including Aesthetics; Agricultural and Forestry Resources; Biological Resources, Energy; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise, Population and Housing; Public Services; Recreation; Transportation; Utilities and Services Systems; and Wildfire, were determined to have a less than significant or no impact relative to existing conditions; thus, the project would not contribute to cumulative impacts related to these environmental topics. Other issue areas (Cultural Resources, Hazards and Hazardous Materials; Geology and Soils, and Tribal Cultural

Resources) are, by their nature, project- and/or site-specific, and impacts at one location do not add to impacts at other locations or create additive impacts.

Moreover, no other resource area impacts analyzed as part of this MND, would substantially increase when operation of the proposed project is considered in combination with cumulative projects identified in the vicinity. Therefore, operational impacts associated with these combined projects would be negligible. Furthermore, the proposed project, as with potential cumulative projects, would incorporate mitigation measures to reduce impacts and would be required to comply with applicable City and state plans and policies.

For all resource areas analyzed, project impacts would be reduced to less-than-significant or less- than significant with mitigation included levels, which would, in turn, reduce the potential for these impacts to be considered an additive to an existing cumulative impact. For these reasons, impacts would less than significant.

*c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

As evaluated throughout this document, with the incorporation of mitigation, potential environmental impacts associated with the project would be reduced to less-than-significant levels. Therefore, with mitigation incorporated, the project would not directly or indirectly cause substantial adverse effects on human beings, and impacts would be less than significant.

# 4 References and Preparers

## 4.1 References Cited


14 CCR 15000–15387 and Appendices A through L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

AECOM. 2016. *Airport Layout Plan Drawing Set, San Gabriel Valley Airport.* May 2015.

AirNav, LLC. 2022. Online airport database. Accessed August 8, 2022. http://www.airnav.com/cgi-bin/airport-search.

Baltrënas, P., D. Kazlauskas, & E. Petraitis. 2004. Testing on noise level prevailing at motor vehicle parking lots and numeral simulation of its dispersion, Journal of Environmental Engineering and Landscape Management, 12:2, 63-70

BPPD. N.d.a. Baldwin Park Police Department. Accessed October 14, 2022. https://www.baldwinparkpolice.com/.

CAL FIRE (California Department of Forestry and Fire Protection). 2022. FRAP FHSZ Viewer. Accessed April 26, 2022. https://egis.fire.ca.gov/FHSZ/.

CalEPA (California Environmental Protection Agency). 2022. Regulated Site Portal. Accessed August 3, 2022. https://siteportal.calepa.ca.gov/nsite/map.

CalGEM (California Geologic Energy Management Division). 2022. Well Finder database. Accessed August 3, 2022. https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx.

California Public Resources Code, Section 21000–21177. California Environmental Quality Act, as amended.

CalRecycle. 2019a. SWIS Facility/ Site Activity Details- Azusa Land Reclamation CO. Landfill (19-AA-0013). Accessed October 13.2022. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3533?siteID=1001.

CalRecycle. 2019b. Estimated Waster Generation Rates. Accessed October 13, 2022. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.

Caltrans. 2013. Technical Noise Supplement. September 2013. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf

Caltrans. 2019. “California State Scenic Highway System Map” [mapping database]. Accessed October 2022. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

Caltrans. 2020. Transportation and Construction Vibration Guidance Manual. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. Sacramento, California. April.

CAPCOA (California Air Pollution Control Officers Association). 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. January. Available: http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

CAPCOA. 2017. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2016.3.2* Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. October 2017. http://www.caleemod.com.

CAPCOA. 2021. *California Emissions Estimator Model (CalEEMod) User's Guide Version 2020.4.0.* Accessed July 2022.

CARB. 2012. California Air Resources Board Approves Advanced Clean Car Rules. January 27, 2012. https://ww2.arb.ca.gov/news/california-air-resources-board-approves-advanced-clean-car-rules.

CARB. 2014. *First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006*. May 2014. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

CARB. 2017. California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley). Accessed September 2022. https://www.arb.ca.gov/cc/ccms/ccms.htm.

CARB. 2017a. *California's 2017 Climate Change Scoping Plan*. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed July 2022.

CARB. 2021. *EMFAC: Emissions Inventory.* https://arb.ca.gov/emfac/emissions-inventory/f5e3822e1c38143774bf9b01ddde4af08df4546b. Accessed July 2022.

CDE (California Department of Education). 2022. Online School Directory. Accessed August 3, 2022. https://www.cde.ca.gov/SchoolDirectory.

CEC (California Energy Comission). 2020. *California Energy Consumption Database.* Accessed August 2022. http://www.ecdms.energy.ca.gov/Default.aspx.

City of Baldwin Park. 2013. Kaiser Permanente Baldwin Park Medical Center- Master Sign Program. February 7, 2013. Accessed August 11, 2022. https://www.baldwinpark.com/online-documents/community-development/planning/master-sign-program/2829-kaiser-1/file.

City of Baldwin Park. 2017. City of Baldwin Park Emergency Operations Plan. 2017.

City of Baldwin Park. 2020. *City of Baldwin Park 2020 General Plan, Public Safety Element.* November 2002.

City of Baldwin Park. 2020. General Plan FEIR. Accessed October 13, 2022. https://www.baldwinpark.com/online-documents/community-development/planning/environmental-documents/2030-feir-general-plan-2020/file.

City of Baldwin Park. 2021a. City of Baldwin Park General Plan Draft Safety Element. October 2021.

City of Baldwin Park. 2021b.City of Baldwin Park- Public Works. Accessed October 14, 2022. https://www.baldwinpark.com/public-works.

City of Baldwin Park. 2022a. City of Baldwin Park Municipal Code Section 153.165.090. Accessed October 12, 2022. https://codelibrary.amlegal.com/codes/baldwinpark/latest/baldwinpark_ca/0-0-0-11072.

City of Baldwin Park. 2022b. City of Baldwin Park Municipal Code Section 153.130. Accessed October 13, 2022. https://codelibrary.amlegal.com/codes/baldwinpark/latest/baldwinpark_ca/0-0-0-10354.

City of Baldwin Park. 2022c. Chapter 53: Construction and Demolition Materials Management. Accessed October 13, 2022. https://codelibrary.amlegal.com/codes/baldwinpark/latest/baldwinpark_ca/0-0-0-2131#JD_Chapter53.

Climate Registry, The. 2021. *The Climate Registry's 2021 Default Emission Factors.* May. https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf.

CNRA (California Natural Resources Agency). 2009.

Cohen, K.M., S.C. Finney, P.L. Gibbard, and J.-X. Fan. 2022. "The ICS International Chronostratigraphic Chart." Episodes 36: 199––204. 2013; updated. https://stratigraphy.org/ICSchart/ChronostratChart2022-02.pdf.

Dibblee, T.W. and (Ehrenspeck, H.E., ed.). 1999. Geologic map of the El Monte and Baldwin Park quadrangles, Los Angeles County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-69, scale 1:24,000.

DOC (Department of Conservation). 2016a. California Important Farmland Finder. Accessed October 13, 2022. https://maps.conservation.ca.gov/DLRP/CIFF/

DOC. 2016b. Earthquake Zones of Required Investigation. Accessed October 13, 2022.

DTSC (Department of Toxic Substance Control). DTSC (Department of Toxic Substance Control). 2020. *Human Health Risk Assessment (HHRA) Note 3, DTSC-modified Screening Levels (SLs).* June 2020, Revised May 2022.

DTSC. 2022. Envirostar. Accessed October 14, 2022. https://www.envirostor.dtsc.ca.gov/public/map/?global_id=38330005.

DTSC. 2022. *Vapor Intrusion Update, DTSC Vapor Intrusion Advisory.* August 2022.

DTSC and CalEPA. 2011a. Vapor Intrusion Mitigation Advisory. October 2011. https://dtsc.ca.gov/wp-content/uploads/sites/31/2022/06/VIMA_Final_Oct_2011.pdf

DTSC and CalEPA. 2011b. *Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance).* October 2011.

DTSC and RWQCB (California Department of Toxic Substances Control and Regional Water Quality Control Board). 2020. Supplemental Guidance: Screening and Evaluating Vapor Intrusion (DRAFT Vapor Intrusion Guidance). February 2020.

DWR (California Department of Water Resources). 2022. SGMA Basin Prioritization Dashboard. Accessed October 14, 2022. https://gis.water.ca.gov/app/bp-dashboard/final/.

EIA (U.S. Energy Information Administration). 2017. "Table F15: Total Petroleum Consumption Estimates, 2015." https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA. Accessed August 2022.

EPA. 2021. Transportation Conformity Guidance for Quantitative Hotspot Analyses of PM2.5 and PM10 Nonattainment and Maintenance Areas. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013C6A.pdf

FAA (Federal Aviation Administration). 2022. Obstruction Evaluation/Airports Airspace Analysis Notice Criteria Tool. Accessed August 8, 2022. https://oeaaa.faa.gov/oeaaa/oe3a/public/#/tools/notice.

FEMA (Federal Emergency Management Agency). 2008. FEMA's National Flood Hazard Layer Viewer. Map Effective September 25, 2008. Accessed June 23, 2022. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd.

FHWA. 2008. Roadway Construction Noise Model (RCNM), Software Version 1.1. U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division.

FICON. 1992. Federal Agency Review of Selected Airport Noise Analysis Issues. Federal Interagency Committee on Noise. August 1992.

Geobase. 2015. Geotechnical Report, Kaiser Permanente Scoping for Additional Parking, 1011 Baldwin Park Boulevard, Baldwin Park, California. Unpublished geotechnical report prepared for Kaiser Foundation Hospitals. Dated October 26, 2015.

GreenInfo Network. 2021. California School Campus Database. Updated 2021. Accessed August 3, 2022. https://www.californiaschoolcampusdatabase.org/.

LACFD (Los Angeles County Fire Department). 2021. August 2021. https://fire.lacounty.gov/wp-content/uploads/2021/09/Department-Overview-Booklet_single-pages_9.09.21-A.pdf.

LACSD (Los Angeles County Sanitation Districts). 2022. San Jose Creek Water Reclamation Plant. Accessed October 14, 2022. https://www.lacsd.org/services/wastewater-sewage/facilities/san-jose-creek-water-reclamation-plant.

LSA Associates, Inc. 2015. Kaiser Permanente Baldwin Park Medical Center Parking Structure Expansion and Medical Office Building Project Paleontology Memorandum (KSP 1501). Unpublished technical memorandum Prepared for Nicole Dubois. Dated June 22, 2015.

NETR (Nationwide Environmental Title Research LLC). 2022. Historic Aerial Photographs of 1022-1026 Leorita Street, Baldwin Park dating from 1948, 1952, 1964, 1972, 1980, 187, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2003, 2004, 2005, 2009, 2010, 2012, 2014, 2016, and 2018. Accessed July 2022. https://www.historicaerials.com/viewer.

NPMS (National Pipeline Mapping System). 2022. Public pipeline mapping viewer. Accessed August 3, 2022. https://pvnpms.phmsa.dot.gov/PublicViewer/.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*. Accessed March 2022. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

OPR. 2018. *Discussion Draft CEQA and Climate Change Advisory.* http://opr.ca.gov/docs/20181228-Discussion_Draft_Climate_Change_Adivsory.pdf.

San Gabriel Valley Water Company. 2021.

SCAG. Southern California Association of Governments. 2016. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Adopted April 2016. Last Accessed October 2022. https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557.

SCAG (Southern California Association of Governments). 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments*. September 3, 2020. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.

SCAQMD (South Coast Air Quality Management District). 1993. *CEQA Air Quality Handbook*.

SCAQMD. 2003a. "White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution". August 2003. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf.

SCAQMD. 2003b. Final 2003 AQMP Appendix V Modeling and Attainment Demonstrations. August 2003. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2003-air-quality-management-plan/2003-aqmp-appendix-v.pdf?sfvrsn=2.

SCAQMD. 2008. "Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold." October 2008.

SCAQMD. 2008a. Final Localized Significance Threshold Methodology. Last revised July 2008. Last accessed September 2022. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2.

SCAQMD. 2010. *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15*. September 28. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2.

SCAQMD. 2014. SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf.

SCAQMD. 2015. Brief of Amicus Curiae in Support of Neither Party, *Sierra Club v. County of Fresno*, Case No. S219783 (filed Apr. 13, 2015). https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf.

SCAQMD. 2017a. Final 2016 Air Quality Management Plan. March 2017. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf.

SCAQMD. 2019. "SCAQMD Air Quality Significance Thresholds." Originally published in CEQA Air Quality Handbook, Table A9-11-A. Revised April 2019. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

SCAQMD. 2022. "SCAQMD Modeling Guidance for AERMOD." http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance

Storm, M. 2018. Screening Noise Analysis with Preliminary Building Project Information. Inter-noise Conference 2018. August 2018.

Society of Vertebrate Paleontology. 2010. "Standard Procedures for the assessment and mitigation of adverse impacts to paleontological resources." https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf.

SWRCB (State Water Resource Control Board). 2022a. Geo Tracker. Accessed September 7, 2022. https://geotracker.waterboards.ca.gov/search?CMD=search&case_number=&business_name=&main_street_name=&city=&zip=&county=&SITE_TYPE=LUFT&oilfield=&STATUS=&BRANCH=&MASTER_BASE=&Search=Search.

SWRCB. 2022b. List of "active" CDO and CAO from Water Board. Accessed September 7, 2022.

Terracon. 2021. *Phase II Environmental Site Assessment, SBPK 2021 MFL 1022-1026 Leorita Street Broken Horn Land.* April 29, 2021.

US EPA (United State Environmental Protection Agency). 2015. *Regional Screening Levels – Generic Tables.* Updated May 2022.

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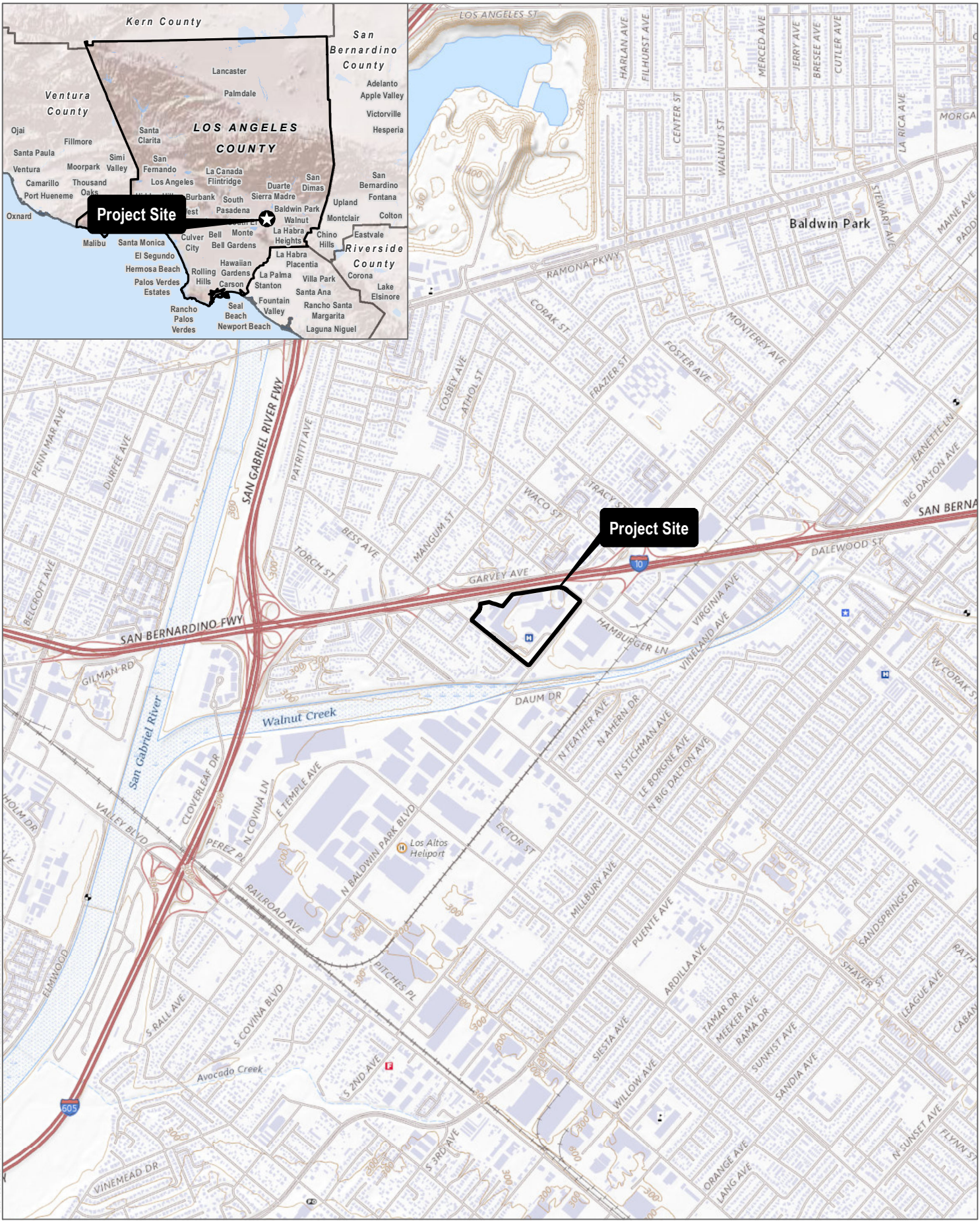


SOURCE: USGS National Map 2022

DUDEK

0 1,000 2,000 Feet

**FIGURE 1**

Project Location

Kaiser Baldwin Park Emergency Department Expansion and Medical Office Building Project

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SOURCE: Bing Maps 2020; HMC Architects 2021

DUDEK

0 80 160 Feet

**FIGURE 2**

Site Plan

Kaiser Baldwin Park Emergency Department Expansion and Medical Office Building Project

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SOURCE: Bing Maps 2020; HMC Architects 2021

DUDEK 0 80 160 Feet

**FIGURE 3**

Off-site Improvements

Kaiser Baldwin Park Emergency Department Expansion and Medical Office Building Project

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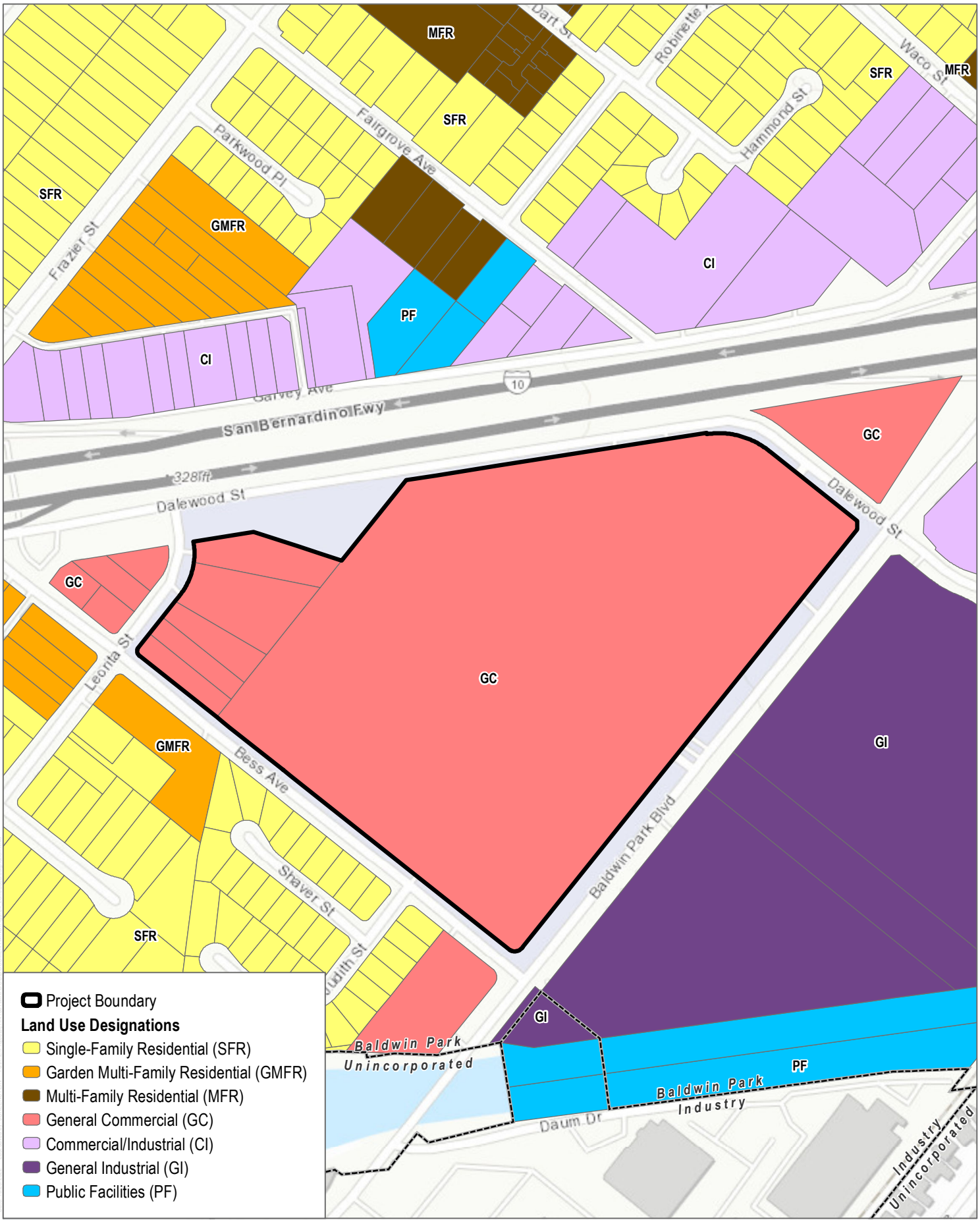


SOURCE: Esri 2022; Baldwin Park 2018

DUDEK

0 100 200 Feet

**FIGURE 4**

Land Use Designation

Kaiser Baldwin Park Emergency Department Expansion and Medical Office Building Project

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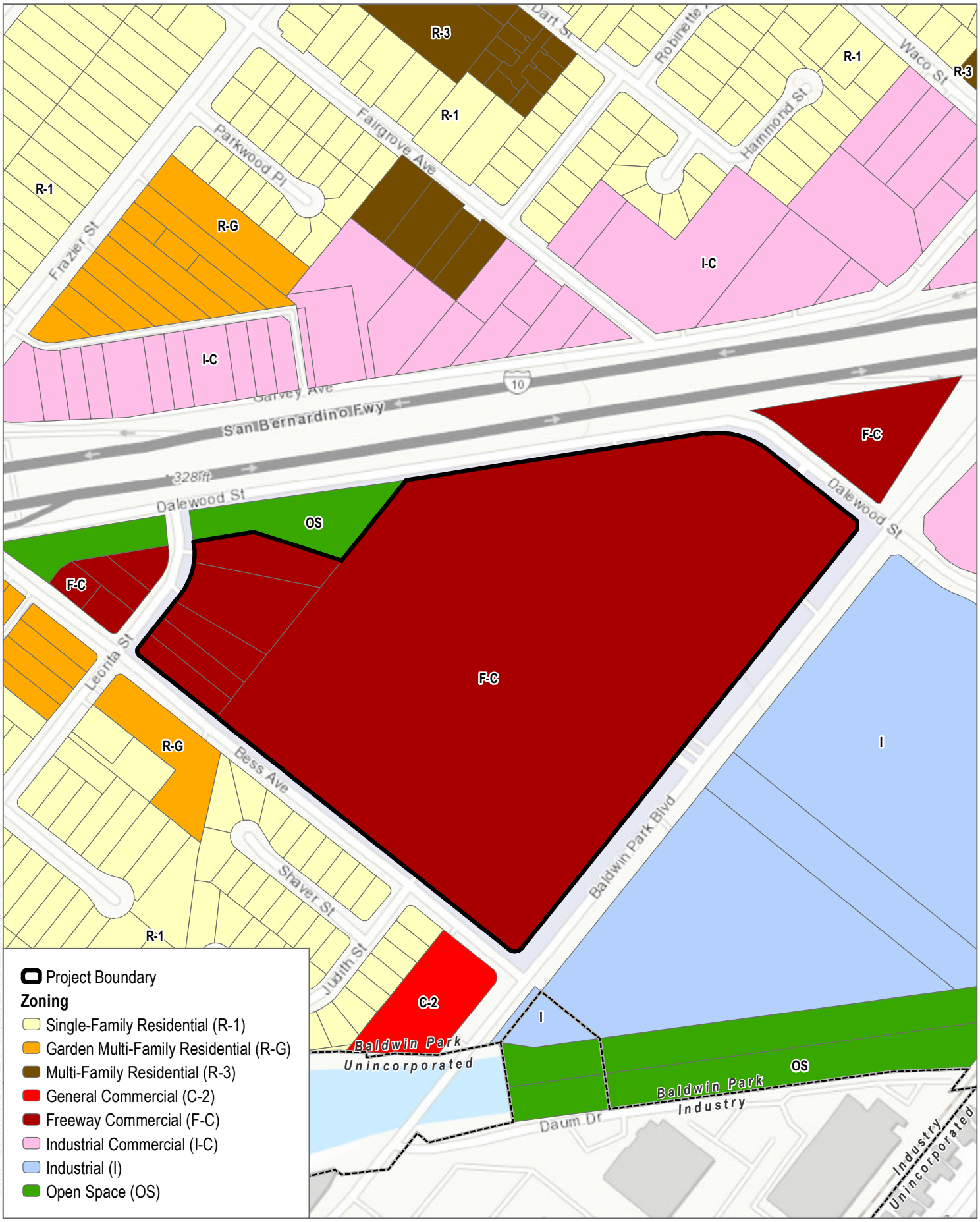


SOURCE: Esri 2022; Baldwin Park 2018

DUDEK

0 100 200 Feet

**FIGURE 5**

Zoning

Kaiser Baldwin Park Emergency Department Expansion and Medical Office Building Project

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SOURCE: Microsoft 2022; Sandpiper BESS LLC 2022

**FIGURE 6**

Noise Measurement Locations and Contours

Kaiser Baldwin Park Emergency Department Expansion and Medical Office Building Project

DUDEK

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# Appendix A

Geotechnical Investigation Report

# GEOTECHNICAL INVESTIGATION REPORT

KAISER PERMANENTE — Baldwin Park Medical Center

Emergency Department Expansion

1011 Baldwin Park Boulevard

Baldwin Park, California

KP # CAP-015077 / HMC #: 1120180

HCAI Facility No. 17207
HCAI BLDG-02521 - CLINIC WING - BLDG 02
HCAI BLDG-06883 - ED EXPANSION - BLDG 06

**HCAI #: G220359-19-00**

Prepared for:

HMC Architects

3546 Concours Street

Ontario, California

Prepared By:

HDNGEO

February 23, 2022

Project No. C21-0415

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GeoVision Geophysical Services, Inc. (November 9, 2021)

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# I. INTRODUCTION

## I.1. General

The Kaiser Foundation Hospitals is planning the construction of Emergency Department Expansion, located at 1011 Baldwin Park Boulevard, City of Baldwin Park, California. The site location is shown on Site Location Map, Figure A-1, Appendix A. HDNGEO was retained by Kaiser Foundation Hospitals to complete the geotechnical investigation for the proposed project.

For this geotechnical investigation, we were provided with the following:

- A site plan, prepared by HMC Architects, showing the existing Hospital, Emergency Department and proposed expansion. This plan is reproduced herein as Site and Exploration Locations Plan, Figure A-2.
- A civil plan prepared by Psomas that outlined the proposed expansion and finish floor elevations
- Previous geotechnical reports for medical campus are outlined in Section II of this report.

This geotechnical report incorporates both field and laboratory testing results, and the geologic-seismic study are prepared according to Note 48 of Department of Conservation, California Geological Survey (CGS) and Department of Health Care Assess and Information (HCAI). Both general and specific recommendations pertinent to suitable site development and foundation design, respectively, are provided. Construction guidelines, related to geotechnical aspects of the project are also addressed.

## I.2. Objective of Geotechnical Investigation

The objective of geotechnical investigation was to obtain soil parameters in order to characterize the subsurface soil and underlying formation that may have a bearing on the proposed development. These recommendations will assist with the final design and construction of the project as planned.

## I.3. Scope of Services

The geotechnical investigation for this project involved drilling, laboratory testing, and geotechnical design. This investigation outlines the following tasks:

- Review of available published and unpublished geotechnical, geological, and seismological reports and maps pertinent to the site;
- Field exploration program consisting of advancing of two (2) borings and two (2) Cone Penetration Tests (CPT)
- Logging of borings during the field exploration
- Field testing consisting of Standard Penetration Tests (SPT), CPT, and shear wave velocity measurements
- Laboratory testing of representative soil samples obtained from the exploratory borings;
- Evaluation of data obtained from the above and perform engineering analyses; and,
- Preparation of this report describing the field investigation, summarizing the results of

laboratory testing and engineering analyses, and providing appropriate specific recommendations for site development and foundation design.

## II. REVIEW OF RELEVANT GEOTECHNICAL REPORTS

The following relevant geotechnical investigation reports completed for the Baldwin Park Medical Center were reviewed:

- HDNGEO, Project No. 1904.1, dated November 20, 2020, “Campus-wide Site Classification and Ground-Motion Studies, Kaiser Permanente Baldwin Park Campus, Baldwin Park, California, for HMC Architects”.
- HDNGEO, Project No. 1904, dated October 3, 2019, “Limited Geotechnical Investigation Report, KPB SBPK IMP BPCP Standby Emergency Power (SEP) Utility Power Upgrade L00850205, Baldwin Park, California, for HMC Architects”.
- LeRoy Crandall and Associates, Project No. AE-86183, dated September 4, 1986, “Report of Geotechnical Investigation, Proposed Medical Center Development, Baldwin Park Boulevard between Dalewood Street and Bess Avenue, Baldwin Park, California, for Kaiser Permanente".
- LeRoy Crandall and Associates, Project No: LCA L89027.AB, dated Feb 16, 1989,“Report of Supplementary Foundation Investigation, Proposed Medical Center Development, Baldwin Park Boulevard Between Dalewood Street and Bess Avenue”.
- LeRoy Crandall and Associates, Project No: LCA L89027.AE, dated May 13, 1992, “Supplement Exploration Borings, Proposed Parking Structure, Dalewood Street and Bess Avenue”.

These report indicate that the existing structures are founded on footings bearing on either native soils or compacted fill. Although the project site is mapped within a potentially liquefiable area, it was concluded that the subsoils were not liquefiable.

## III. SITE AND PROJECT DESCRIPTION

### III.1. Site Description

The Kaiser Permanente - Baldwin Park Medical Center campus is currently occupied by a five (5) story parking structure, hospital building with full basement, medical office buildings (MOB), CUP and other supporting structures. This facility is bounded by the I-10 Freeway and Dalewood Street to the North, Baldwin Park Boulevard to the Southeast, Bess Avenue to the Southwest and Leorita Street to the Northwest. The facility is neighbored by residential developments along Bess Avenue, and commercial developments along Baldwin Park Boulevard.

The site is relatively flat and occupied by the structures, noted above, paved parking, driveways and walkways that consist of asphaltic concrete and concrete pavements. The property sheets flow toward the street and nearby drainage system.

### III.2. Project Description

Based on the layout plan provided, the expansion of existing Emergency Department is at-grade and planned to have a footprint of approximately 22,500 square foot including new ambulance canopy and supporting facilities.

Column dead and live loads are approximately between 66 and 360 kips that was provided by structural engineer.

## IV. SITE INVESTIGATION

### IV.1. Subsurface Exploration Program

The field investigation consisted of advancing CPTs, borings and geophysical surveys, at the approximate locations shown on the Site and Exploration Locations Plan, Figure A-2, Appendix A. The borings and CPTs were located in the field using a Trumeter 550SE measuring wheel; therefore, these locations should be considered accurate only to the degree implied by the method used.

Two (2) CPT's were advanced on October 15, 2021, to a maximum depth of thirty-nine (39) feet and refusal was obtained at all CPT locations. The CPT Plots are presented in Appendix B, Figures B-4 thru B-5, inclusive.

Two (2) borings were also advanced on October 25, 2021, to a maximum penetration depth of fifty-six and one-half (56.5) feet below existing ground surface. The borings were advanced with a truck-mounted CME-75 drill rig fitted with hollow-stem augers. All borings were hand-augured in the upper four (4) feet. The Log of Borings, together with Key To Boring Logs are given in Appendix B, Figures B-1 thru B-3, inclusive.

The geophysical survey consisted of one array line that utilized multi-channel array surface wave (MASW) methods. The geophysical survey lines were carried out to obtain the shear wave velocity profile of the subsoils and were completed on October 25, 2021.

Relevant boring from the previous investigation (LeRoy Crandall and Associates) are presented herein as Figure B-6, inclusive, Appendix B.

In-situ testing consisted of the Standard Penetration Test (SPT) at boring location, Cone Penetration Test (CPT), and geophysical method are described below:

- The SPT test (ASTM D 1586) involves failure of the soil around the tip of a split spoon sampler for a condition of constant energy transmittal. The split spoon, two (2) inches outside diameter and one and three-eighths (3/8) inches inside diameter, is driven eighteen (18) inches and the number of blows required to drive the sampler the last foot is recorded as the "N" value, or SPT blow count. The driving energy is provided by a 140 pound weight dropping thirty (30) inches.
- The Cone Penetration Tests (CPT's) were performed in accordance with ASTM D 3441. The CPT equipment consists of a cone assembly mounted at the end of a series of hollow sounding rods. A set of hydraulic rams is used to push the cone and rods into the soil, and a continuous record of cone tip resistance, friction resistance and pore water pressures versus depth is obtained in digital form at the ground surface. A specially designed truck is used to transport and house the test equipment and to provide a ten (10) ton reaction to the

thrust of the hydraulic rams. Near-continuous CPT records provide: approximate correlations with soil classification; relatively accurate definition of the thickness of various soil layers; subsoils data for liquefaction and seismic settlement analyses; and, engineering properties of the subsoils for static settlement analyses

- A geophysical survey line utilizing multi-channel array surface wave (MASW) methods were completed to obtain the shear wave velocity profile of the subsoils. Discussion of field procedures, geophysical techniques, data processing and interpretation, and the results of the geophysical survey are given in Appendix B.

Soil sampling consisted of:

- Collection of bulk samples at retrieved from auger spoils;
- Collection of split spoon samples from Standard Penetration Test (SPT), and;
- Collection of soil samples at selected locations using a Modified California Sampler (MCS). The soil samples were retained in a series of brass rings, each having an inside diameter of 2.41 inches and a height of one (1) inch. These ring samples were placed in close-fitting, moisture-tight containers for shipment to the laboratory.

## IV.2. Laboratory Testing Program

The samples obtained during the field program were returned to the laboratory for visual examination and testing. Laboratory tests were performed on selected samples obtained from the borings in order to aid in the soil classification and to evaluate pertinent engineering properties of the foundation soils. The soils were examined and classified in accordance with ASTM D 2487 and D 2488. The laboratory testing program consisted of the following:

- In-situ Moisture Content and Dry Density (ASTM D 2216 and 2937);
- Material passing No. 200 (ASTM D 422);
- Particle sieve analysis of soils (ASTM D 4318);
- Direct shear test of soils (ASTM D 3080);
- Consolidation Tests (ASTM D 2435);
- Expansion Potential (ASTM D 4829);
- Maximum Dry Density and Optimum Moisture Content (ASTM D 1557);
- Resistance “R”-Value (CT 301); and,
- Water soluble sulfates (ASTM D4327), pH (ASTM D4972), electrical resistivity (ASTM G187) and water soluble chlorides (ASTM D4327).

The laboratory test results from this investigation and previous investigations (LeRoy Crandall and Associates) are presented on Appendix C and appropriate results are also presented on Logs of Boring, Appendix B, where applicable.

# V. GEOLOGIC SETTING

## V.1. Regional Geology

The subject site is located within the Southwest portion of the Central Basin of the Los Angeles Coastal Plain, within the Peninsular Ranges Geomorphic Province of California. The Los Angeles Coastal Plain is situated between the Santa Monica Mountains to the Northwest, the San Gabriel Mountains to the Northeast, the Santa Ana Mountains to the Southeast, and the Pacific Ocean to the West and south. The Los Angeles Basin is dominated by northwest-trending faults and adjacent anticlinal uplifts. The intervening deep synclinal troughs are filled with poorly consolidated Upper Pleistocene and unconsolidated Holocene sediments. Tectonism of the region is dominated by the interaction of the East Pacific Plate and the North American Plate along a transform boundary.

The near-surface deposits in the vicinity of the subject site are indicated to be composed of recent alluvium consisting of unconsolidated sands and silt derived from erosion of local mountain ranges. Deposits encountered on the subject site during exploratory drilling are discussed in detail in this report. Figure A-3, Appendix A, presents the Regional Geologic Map.

Numerous moderate to large earthquakes have affected the area of the subject site within historic time. Based on the proximity of several dominant active faults and seismogenic structures, as well as the historic seismic record, the area of the subject site is considered subject to relatively high seismicity.

The seismic hazard most likely to impact the site is ground shaking due to a large earthquake on one of the major active regional faults, including the San Andreas Fault Zone (35 miles to the East); or a minor fault that is closer. Review of the Fault Map of California (CGS, 2010), indicates the Raymond Fault Zone is located approximately 10.2 km (6.3 miles) north and the Whittier Fault Zone is located approximately 9.6 km (6 miles) to the south of the subject site.

## V.2. Site Geology

According to LCA (1989), the geotechnical field investigation, was conducted at the Baldwin Park Medical Center, consisted of advancing twenty-three (23) bucket auger borings to maximum depth of fifty and a half (50-1/2) feet. Based on LCA's findings, shallow fill, where encountered, were between one (1) to fourteen (14) feet as a result of flood control measures and past grading.

Native subsurface soils below the fill to consisted of silty sand to poorly-graded sand from ground surface to approximately twelve (12) feet below ground surface (bgs). Below this layer, sand is in dense state with varying amounts of gravels and cobbles at some locations. Thin silt lenses were encountered at approximate depth of 15 feet and 31 feet and have up to one foot thickness at few locations. The silty sand layers were fine- to medium-grained and medium dense to dense. The poorly graded sand was fine to medium-grained and dense to very dense.

The interpreted surface distribution of geologic materials encountered during the site investigations are illustrated in Figure A-2, Appendix A. Geologic Sections A-A’ and B-B' across the ED Expansion site are given on Figure A-4, Appendix A.

# VI. SUBSURFACE CONDITIONS

## VI.1. Subsoil Conditions

Surface cover consisted of approximately 8-inch thick of concrete was encountered at boring and/or CPT locations. Based on the observations at exploration locations, the generalized stratigraphic profile of up to eight (8) feet of fill/loose soils overlying medium dense to dense, poorly graded sand to approximate depth of twenty (25) feet. Below this depth, it is underlain by dense sands to maximum depth of exploration, fifty-six (56) feet. Occasionally, gravelly layer was observed B-1 and B-2 at depth of ten (10) and forty-five (45) feet, respectively, to have thickness of about five (5) foot. Also, loose seams that may contain siltier materials were noted in the boring and CPT logs.

Laboratory test results indicate that the subsoils at the site possess a “very low” expansion potential based on soil index properties and visual classification. It should be noted that the native silty sands and sands can be friable, which may require formwork to construct footings and measures to maintain temporary cut slope stability.

## VI.2. Regional Groundwater Conditions

According to Figure F-4 of Appendix F, South Coast Hydrologic Region, depicting the location and extent of the different groundwater basins and sub-basins identified by the Bulletin 118 issued by the California Department of Water Resources (CADWR, 2020 and 2004), the general vicinity is located within the San Gabriel Valley Groundwater Basin (Basin Number 4-013) of eastern Los Angeles County of Section 24 of Township 1 south, Range 11. This basin is one of the more important sources of ground water in Southern California.

According to CADWR (1966) and DWR (2016), the two main geologic units underlying the Medical Center have been grouped in Holocene and Pleistocene Alluvial Deposits and the underlying Pleistocene San Pedro Formation. The Holocene Alluvium generally forms alluvial fans along the San Gabriel Mountains and stream deposits that follow the course of the major streams and rivers across the valley. This young alluvium reaches 100 feet in thickness and although is typically above the water table, allows effective percolation of surface water in the basin. Upper Pleistocene alluvium deposits form most of the productive water-bearing deposits in this basin. They consist of unsorted, angular to sub-rounded sedimentary deposits ranging from boulder-bearing gravels near the San Gabriel Mountains to sands and silts in the central and western parts of the basin. The lower Pleistocene San Pedro Formation consists of interbedded marine sand, gravel, and silt (DWR 1966). This formation bears fresh water and reaches a maximum thickness of about 2,000 feet and may grade eastward into continental deposits indistinguishable from the overlying Pleistocene age alluvium (DWR 1966).

## VI.3. Site Groundwater Conditions

Groundwater was not encountered during this investigation and previous (LCA) at the borehole locations, to maximum drilled depth of fifty-six (56) and forty (40) feet, respectively, at the time of the exploration. Notwithstanding the above, it is not uncommon for groundwater or seepage conditions to develop where none previously existed. In this respect, groundwater conditions may be altered by geologic detail between borings, by seasonal and meteorological variations, and by construction activity.

According to information obtained from California Department of Water Resources, groundwater was reported at an elevation of 185 ft. MSL (+/- 130 feet below ground surface on

1-1-2021), Station 340659N1179899W001, located approximately 0.1 miles west (near Bess Ave. and Frasier St.) of the subject site (DWR, 2021).

Historic highest groundwater level contours, shown on the Baldwin Park Quadrangle, Plate 1.2 of the Seismic Hazard Zone Report 022 prepared by the California Geological Survey published in 1998, indicates a historic high groundwater level of fifteen (15) feet below existing grade at the site location. This plate is reproduced herein as Figure A-5 and this groundwater level is used to evaluate the liquefaction potential and seismic settlements.

## VII. EARTHQUAKE AND SEISMIC DESIGN CONSIDERATIONS

### VII.1. Regional Faulting

The Alquist-Priolo Geologic Hazards Zones Act went into effect in March, 1973. Since that time, the act has been amended 10 times (Hart, 1994). The purpose of the Act, as provided in DMG Special Publication 42 (SP 42), is to prohibit the location of most structures for human occupancy across the traces of active faults and to mitigate thereby the hazard of fault-rupture." An earthquake fault zone is defined by the CGS as an area that requires a “special study” and is generally one-quarter mile wide and inclusive of the active traces of an earthquake fault. The act was renamed the Alquist-Priolo Earthquake Fault Zoning Act in 1994, and at that time, the originally designated "Special Studies Zones" was renamed the "Earthquake Fault Zones." The subject site is not located within an Earthquake Fault Zone.

An active earthquake fault is defined by the CGS as a "sufficiently active and well-defined fault" that has exhibited surface (crustal) displacement within the Holocene-age, approximately the last 11,700 years before present (YBP). Further, a sub-category of active faulting is defined as Historic-age (displacement within the last 200 YBP). A potentially active fault is defined by the CGS as an earthquake fault with a history of displacement within the Pleistocene-age (between 11,700 and 1.6 million YBP). Any geologic fault without surface displacement within the last 1.6 million YBP is considered inactive.

The closest known active faults to the site are the Whittier Earthquake Fault Zone and Raymond Hills Fault Zone. The San Andreas Earthquake Fault Zone is further away but poses a significant seismic risk to be mentioned. A California Fault Map (CGS 2010), showing the geographic relationship of these faults to the subject site is presented in the attached Appendix A as Figures A-6, Regional Fault Map and Figure A-7, Vicinity Fault Map; a brief description of these faults are provided below.

#### VII.1. Raymond Fault Zone

The Raymond Earthquake Fault Zone (Raymond Fault) is located approximately 10.2 km (6.3 miles) to the north-northwest of the Medical Center (USGS, 2008). The Raymond Fault extends southwesterly from the Sierra Madre Fault at the base of the San Gabriel Mountains. The length of the Raymond Fault is approximately 22 km long (Treiman, 2000c and USGS, 2008). The Raymond Fault is a left-lateral reverse-oblique fault that dips steeply (approximately 75 degrees) to the North (CGS, 2016a and Treiman, 2000c). The fault forms a gentle arc, convex toward the South across the alluvial deposits of the San Gabriel Valley. The Raymond Fault is best expressed in the San Marino to South Pasadena area, where it forms a prominent escarpment up to 100 to 150 feet high.

The most recent major surface rupture on the Raymond Fault occurred in Holocene

time, sometime about 1,000 to 2,000 years ago (Crook et al., 1987; Weaver and Dolan, 2000). The recurrence interval for surface rupture may be about 3,300 years (Dolan et al., 2000b and Weaver and Dolan, 2000). A large earthquake occurred north of the subject site (1988 Pasadena Earthquake) with a magnitude of 5.0. This earthquake was a strike-slip event interpreted by Jones et al. (1990) to have occurred on the Raymond Fault.

Currently, there is little consensus on the rate of slip. Geological trenching studies across the fault scarp indicate average slip rates between 0.1 and 0.4 mm/year (Dolan et al., 2000b). More recently, the rate of slip has been estimated to be about 1.5 mm/year, based on regional tectonics (Treiman, 2000c; CGS, 2016a; and USGS, 2008).

The maximum earthquake estimated by the CGS (2016a) and the USGS (2008) is in the range of MW 6.5 to 7.0. Weaver and Dolan (2000) estimated a maximum earthquake of MW 6.7. Assuming rupture of the entire fault (approximately 22 km), from the San Gabriel Mountains to the Santa Monica Mountains, an MW 6.7 event is estimated to be a worst-case scenario.

Fault trench studies across the Raymond Fault indicate average slip rates between 0.1 and 0.4 mm/year (Dolan et al., 2000b). More recently, the rate of slip has been estimated to be about 1.5 mm/year, based on regional tectonics (Treiman, 2000c; CGS, 2016a; and USGS, 2008). The maximum earthquake estimated by the CGS (2016a) and the USGS (2008) is in the range of magnitude 6.5 to 7.0. Weaver and Dolan (2000) estimated a maximum earthquake magnitude of 6.7.

**VII.2.** Whittier Fault Zone

The Whittier Fault Zone is located approximately 9.6 km (6 miles) to the south of the Medical Center. The Whittier Fault Zone is a right- lateral strike slip feature with some reverse slip; this northwest-trending fault projects into the eastern margin of the Los Angeles Basin and to the east-southeast it intersects the Glen Ivy segment of the Elsinore Fault Zone near the Santa Ana River (Treiman, 1998a). The Whittier Fault Zone averages one thousand (1,000) to two thousand (2,000) feet in width and is made up of many sub-parallel and en-echelon fault splays, which merge and branch along their course. Northwest of Horseshoe bend (Santa Ana River), the trace of the Whittier Fault Zone separates strata of the Puente Formation exposed on the North side from younger strata of the Puente and Fernando formations on the south side (Durham and Yerkes, 1964). In addition, this fault zone apparently cuts Holocene deposits as far north as Brea Canyon (Ziony and Jones, 1989). The Whittier Fault Zone is approximately thirty-eight (36) km long (USGS, 2008).

Although the recurrence interval between major ruptures is not well known for the Holocene-age Whittier Fault Zone, the SCEC (1995) indicates that the most recent events occurred at Olinda Oil field; and is estimated at between 1,400 - 2,200 years before present (YBP) and 3,000 - 3,100 YBP, respectively. Additionally, it was estimated that at least 1.9 m of dextral slip was produced in the most recent event from direct measurements of a laterally displaced channel. Based on this preliminary paleoseismic data, the SCEC (1995) estimated a slip rate of 2.5 ± 1.0 mm/yr and indicated that a minimum recurrence interval of 1,400 years for the Whittier Fault Zone. However, the USGS (2016a) assigns a slip rate of 3.2 mm/yr to The Whittier Fault Zone for calculation of the seismic hazard in Southern California.

### VII.3. San Andrea Fault Zone

The San Andrea Fault Zone is located approximately 43 kilometers north-northeast of the site. The San Andrea Fault trends over 600 miles northwest from the Gulf of California in Baja, Mexico to Bodega Bay, California. It's the largest and most active earthquake fault in California and identified locally by individual (contiguous segments) fault traces along which movement has occurred at various times in the past. Most of the fault traces of the San Andreas Fault Zone in Southern California are considered to be historically active (displacement in the past 200 years); and a minor amount are believed to have less recent activity. The US Geological Survey has estimated the probability of a ten to thirty percent potential for a 7.5 or more magnitude quake along the southern portion of the San Andreas fault within the next five to thirty years (LACSE, 2021). This fault is thought to be capable of producing a magnitude of 8.2 (USGS, 2008).

## VII.4. Historic Earthquakes

Since 1932, the Southern California Earthquake Caltech/USGS Southern California Seismic Network (SCSN) has recorded and located over 470,000 earthquakes. The catalog includes three M >7 mainshock–aftershock sequences, as well as data from another three (M 6.4, M 6.7, and M 6.7) mainshocks that caused major damage in the Los Angeles area.

On average, the catalog is complete for Mc ≥ 3:2 since 1932 and Mc ≥ 1:8 since 1981, with exceptions in the early hours or days of large aftershock sequences and regions along the edges of the network. The overall seismicity rate has remained fairly constant, except for major aftershock sequences.

The overall spatial and temporal seismicity patterns do not correspond well to high slip-rate late Quaternary faults, suggesting that the cause of small and major earthquakes may be different. Small earthquakes have historically been much more widely distributed geographically than the major earthquakes (M >7:5), which have been confined to late Quaternary mapped faults.

The SCSN data and the catalog have served as major resources for seismology research and civic and emergency planning and response, public outreach, and public consciousness on the subject of earthquake preparedness. A California Historical Earthquakes Map (CGS, 2021), showing the major earthquakes since 1769 with magnitude of 6.o or greater have occurred within 100 km of the project site is presented as Figure A-8.

## VII.5. Site Accelerations

### VII.5.1. Site Coordinates

The project site's latitude and longitude are 34.0655 degrees north and 117.9855 degrees west, respectively.

### VII.5.2. Site Classification

Based on the field investigation and geophysical shear wave profile (Figure A-9) indicate that the project soils are Site Class D; however, the subsoils are liquefiable and subject to seismic induced settlements as discussed in later section of this report. Therefore, the subsoils are considered Site Class F, unless the structure has fundamental period of less than or equal to 0.5 seconds.

Based on discussion with project Structural Engineer, the one story (1) expansion will have a

fundamental period of less than 1/2 seconds. According to ASCE 7-16, Chapter 20, subsection 20.3.1, exception "…a site class is permitted to be determined in accordance to Section 20.3 and the corresponding values of Fa and Fv are determined from Table 11.4-1 and 11.4-2."

Therefore, the project site is considered as Site Class "D - Stiff Soil" for the upper 100 feet as defined in Table 1613.5.2 of 2019 CBC.

Since the project subsoil is Site Class D and $S_1 > 0.2$, a site-specific ground motion hazard analysis (GMHA) report (HDNGEO, 2020) was completed and approved by CGS/HCAI (OSHPD No. 210020-19) for non-structural component. It's in our opinion the referenced GMHA report is considered valid for proposed ED Expansion project based on the following:

- Site-Specific geotechnical investigation was carried out and addressed in this report according to CBC Section 1803A.2
- Geohazard including site geology, evaluation active and potentially active faults, and ground motion parameters are prepared in according to CGS Note 48 Checklist and CBC Section 1806A.3

### VII.5.3. Seismic Design Category

The mapped spectral response acceleration parameter at one (1)-second period, $S_1$, is 0.627 g which is less than 0.75 g and the structure is considered to be Risk Category IV. According to Section 1613.2.5 of CBC 2019, for $S_{DS} \geq 0.50$ g then Seismic Design Category D should be used for the design of the proposed structure.

### VII.5.4. Seismic Hazard Deaggregation

Relative contributions of various combinations of earthquake magnitudes and distances to a particular seismic hazard at a site are determined using deaggregation of the seismic hazards. A probability distribution is established for all sources and either the mean or modal values of M and R are determined. The mean deaggregation provides the weighted mean values of M and R for all sources that contribute to the hazard. The modal value yields the M and R pair having the largest contribution in the hazard deaggregation of each grid location. Deaggregation of Magnitude-Distance (M-R), obtained from the online USGS web application, "Unified Hazard Tool," indicates that mode M-R for project site of M7.72 and source-to-site distance of 11.14 km to specify the peak ground acceleration. A magnitude of M7.72 was used in the liquefaction and other soil seismic analyses for the project site as applicable.

## VII.6. Earthquake Effects

### VII.6.1. Liquefaction

Liquefaction occurs when very wet soil is affected by strong ground motion. Soil particles (loose granular and low-plastic fines) shift and separate during shaking. This reduces the ability of the ground to support the building on top of it, and may cause foundations to separate and buildings to sink.

Factors considered to evaluate liquefaction potential include groundwater conditions, soil type, particle size distribution, earthquake magnitude and acceleration, and soil density obtained through the Standard Penetration Test (SPT). Soil subject to liquefaction composed of saturated fine-grained sand to coarse silts. Coarser-grained soils are considered free-draining and therefore dissipate excess pore water pressure, while fine-grained soils posses undrained shear strength.

The Seismic Hazards Zones Map (Figure A-10) obtained from USGS, The National Map online web application, that digitized from CDMG for the Baldwin Park Quadrangle, released in March 25, 1999, indicated the project site is located within an area where historic occurrences of liquefaction, or local geological, geotechnical and groundwater conditions would indicate permanent ground displacement due to liquefaction. The published historic highest groundwater level of fifteen (15) feet below existing grade (Figure A-5, Appendix A) would indicate the potential for liquefaction below this depth. Liquefaction analyses presented in Appendix D confirm that the subsoils at the site are liquefiable.

Liquefaction analyses were conducted using methods recommended by Idriss and Boulanger (IB2008) and the soil stratigraphy obtained from borings drilled for the current site investigation. CPT boreholes were not deep enough to conduct liquefaction analyses. For these analyses, a $PGA_M$ = 0.748 g from site-specific GMHA (HDNGEO, 2020) and earthquake magnitude of 7.72 Mw from preceding deaggregation were used.

### VII.6.2. Seismically Induced Settlement

Based on the examination of the subsoils conditions, seismic settlement for saturated and unsaturated sands were performed as recommended by IB2008 and Pradel 1998, respectively. The results of the liquefaction analyses are presented in Appendix D. The total seismically induced settlements at the project site are not anticipated to exceed 2 inches, According to the Guidelines for Evaluating and Mitigating Seismic Hazards in California (SP 117A, 2008) and 2019 CBC, structural mitigation may be acceptable if considered appropriate by project structural engineer or regulating agency.

### VII.6.3. Tsunamis/Seiche, Inundation, and Flooding

A tsunami is a seismic sea wave that inundates the coastal land and is typically caused by large earthquakes that displace oceanic crust. The subject site is located over 25 miles from the Pacific Ocean at a vertical elevation of over 300 feet MSL; the tsunami hazard is considered low for the subject site.

A seiche is a wave that occurs within a terrestrial body of water that may be a result of an earthquake or landslide. In a dam or reservoir, a seiche that breeches the spillway or causes collapse, presents an inundation hazard to the downstream areas. The subject site is not located near a dam or reservoir and the inundation hazard due to seiche is considered low.

The site is located downstream at approximately five (5) miles to the southwest of the Santa Fe Dam. Dam failure due to secondary effects of an earthquake could adversely affect the site with the possibility of inundation.

According to the FEMA National Flood Hazard Layer web application, City of Baldwin Park Zone 06100, obtained on March 21, 2021, indicate that the project site is located in Zone X, area of minimal flood hazard as shown on FEMA Flood Map, Figure A-11.

### VII.6.4. Surface Rupture

Surface rupture occurs when movement on a fault breaks through to the surface. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Fault rupture almost always follows preexisting faults, which are zones of weakness. Although, project area is not located within an Alquist-Priolo Earthquake Fault Zone (APEFZ) according to Seismic Hazard Zones Map (Figure A-7), the closest APEFZ is the Whittier Fault that is approximately within 6 mile of project site.

### VII.6.5. Landsliding

A landslide is the downhill movement of ground caused primarily by gravity acting on weakened rock or soils. Many things can contribute to a landslide: erosion, ground water, human activity such as grading, vibrations from earthquakes. The site lies far enough from the nearest significant upland slopes to preclude the hazards of induced landsliding.

### VII.6.6. Lateral Spreading

Lateral spreading typically occurs in sloping ground or level ground close to waterways or open face. When the underlying soils liquefy then the liquefied soil mass ('heavy liquid') will naturally move down-slope and will continue this movement until equilibrium is re-established. The topography of the project site, in the immediate vicinity of the site is relatively flat, therfore, the potential for lateral spreading at the subject site is also considered very low.

### VII.6.7. Subsidence

Subsidence refers to the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. It may be caused by a variety of human and natural activities, including earthquakes. It is our opinion that the potential hazard associated with subsidence at the property is very low.

## V. CONCLUSIONS

It is our opinion that the site is geotechnically suitable for the proposed development provided that the geotechnical recommendations presented herein are incorporated in the plans and specifications, and properly carried out in the field during construction. The following presents a summary of the findings:

- Based on observations at the boring and CPT locations, the generalized stratigraphic profile consists of fill/loose soils for the upper eight (8) feet underlying by medium dense to dense sands to depth of twenty-five (25) feet. Below this depth is dense sands to depth of forty-five (45) feet then become sandy gravels to maximum depth of exploration. Soft layer was encountered at depth of 50 feet for B-2 location.
- Groundwater was not encountered at the site to the maximum depth of exploration and is judged to be in excess of fifty-five (55) feet at this time. Published historic highest groundwater level is fifteen (15) feet below existing grade.
- The project soil profile is considered as Site Class D — Stiff Soil per CBC 2019, based on geophysical survey line result of average shear wave velocity of 329 m/s for the upper 100 feet of subsoils.
- The project site is not mapped in an area susceptible to subsidence, landslides, or current City of Baldwin Park/State of California APEQFZ.
- The project site is mapped in liquefiable zone and subject to seismic induced settlements up to 2 inches. Based on Guidelines for Evaluating and Mitigating Seismic Hazards in California (SP 117A, 2008), structural mitigation may be acceptable if considered appropriate by the Structural Engineer and HCAI/CGS.
- Deep foundation will be used to support the proposed structure.

- The FEMA flood map shown the site to be in Zone X, an area of minimal flood hazard.

## VI. SITE AND DEVELOPMENT RECOMMENDATIONS

### VI.1. General

The proposed development, outlined in subsection II.2, is feasible from a geotechnical engineering standpoint. Project plans and specifications should take into account the appropriate geotechnical features of the site and conform to the recommendations of the geotechnical report.

### VI.2. Clearing

Prior to earthwork or construction operations, initial site preparation should include stripping of any vegetation, removal of existing structures and foundations, concrete and asphalt pavement, floor slabs and underground construction. If encountered during site development, all remnants of prior structures should be removed.

The existing fill soils, where removed, may be re-used as structural fill provided that they do not contain any deleterious materials or particles over six (6) inches in largest dimension. Topsoil and soils with organic inclusions are not considered suitable for reuse as structural fill, but it may be stockpiled for future landscaping.

Underground facilities such as utilities, pipes or underground storage tanks may exist at the site. Removal of underground tanks is subject to state law as regulated by County or City Health and/or Fire Department agencies. If storage tanks containing hazardous or unknown substances are encountered, the proper authorities must be notified prior to any attempts at removing such objects.

Septic tanks should be removed in their entirety. Cesspools or seepage pits should be pumped of their contents and backfilled with a 2-sack sand-cement slurry. Any wells, if encountered during construction, should be exposed and capped in accordance with the requirements of the regulating agencies.

Depressions resulting from the removal of foundation of existing structures, buried pipes, obstructions and/or tree roots should be backfilled with properly compacted material.

### VI.3. Subgrade Preparation

Subgrade preparation will not be required since the structure is placed on a structural slab.

The subsoils beneath the walkways, driveways, patios and pavement areas should be overexcavated to facilitate construction of a two (2) foot thick compacted fill blanket. The lateral extent of overexcavation should be at least equal to the depth of fill. This alternative may be considered, provided that future maintenance as a result of excessive settlement of the underlying “loose” soils can be tolerated. Alternatively, one option to mitigate the potential adverse effects is to remove and replace these soils.

Construction activities and exposure to the environment can cause deterioration of the subgrade. Therefore, it is recommended that the final condition of the subgrade soils be observed and/or tested by HDNGEO field personnel, immediately, prior to slab construction.

## VI.4. Engineered Fill

Fill materials generated from the on-site soils are suitable for placement as compacted fill provided they are free of oversized rock greater than six (6) inches in largest dimension, expansive clay, organic materials, and deleterious debris.

Prior to placing any fill, the exposed soils bottom should be scarified to a minimum depth of 8- to 10-inches and moisture-conditioned (wetted or dried) to at least optimum moisture content and compacted to a minimum of ninety (90) percent relative compaction based on ASTM D 1557.

Engineered fill should be moisture-conditioned (wetted or dried) to at least optimum moisture content and compacted to a minimum of ninety-five (95) percent of the maximum dry density as determined by the modified Proctor (ASTM D1557). Fill should be placed in maximum lifts of 8-inches for granular soil and 6-inches of loose material for cohesive soils. Each lift should be tested prior to placement of subsequent lift. For cohesive soils, moisture-conditioning should be between 2-4 percentage points above optimum moisture content and near-optimum moisture content for granular fill.

Import soils should be predominantly granular and non-expansive materials (Expansion Index ≤ 30) with sufficient fines of 20 percent (relatively impermeable when compacted). In addition, low corrosivity material is defined as having a minimum resistivity of more than 2,000 ohm-cm when tested in accordance with California Test 643, unless defined otherwise by the corrosion consultant. Our engineer should be notified minimum of 3 days in order to evaluated the laboratory testing of import material at the borrow site for its suitability as fill prior to importation.

## VI.5. Shrinkage

The on-site soils will undergo some volume change when excavated and replaced as properly compacted fill. Since an accurate determination of in-place and compacted densities cannot be made over the entire project area, accurate earthwork shrinkage estimates cannot be provided. Based on our experience with similar soils, a shrinkage value in the order of ten (10) to fifteen (15) percent may be used as a guideline for the on-site soils.

## VI.6. Surface Drainage

Proper site grading and foundation drainage strategies are required to enhance future site performance. Positive surface drainage is defined as a minimum slope of 5 percent for a distance of at least 10 feet direct surface water away from structure and toward the street or suitable drainage facilities. All roof drains should be connected to solid pipes discharging to the curb or other suitable drain area. It is important that drainage be directed away from foundations and that proper drainage patterns be established at the time of construction and maintained throughout the life of the structures.

Landscape areas within ten (10) feet of the building perimeter should consist of planters that have sealed bottoms and bottom drains to prevent infiltration of water into the adjacent foundation soils. The surface of the ground in these areas should also be maintained at a minimum gradient of five (5) percent towards surface area drains.

Care should be exercised in controlling surface runoff onto permanent and temporary slopes. The area back of slope crests should be graded such that water will not be allowed to flow freely onto the slope face. If excavations of temporary slopes are carried out in the rainy

season, appropriate erosion protection measures may be required to minimize erosion of the slope cuts.

## VI.7. Temporary Excavations

Temporary construction excavations are anticipated adjacent to the existing structures and for construction of utility trenches and foundations.

### VI.7.1. Unsupported Excavations

Temporary excavation depth of approximately four (4) feet below grade may be cut vertically without shoring. Temporary unsurcharged excavations up to fifteen (15) feet high in level ground surface may be sloped back at 1H:1V (Horizontal:Vertical) or Hatter without shoring where the necessary space is available. No surcharge loads should be permitted within a horizontal distance equal to the height of cut from toe of excavation unless the cut is properly shored. Adjacent to existing buildings, the bottom of unshored excavations should not extend below a plane drawn at 1H:1V (Horizontal:Vertical) downward from the foundations of the existing buildings and underground pipelines unless the cut is properly shored. The exposed slope face should be kept moist (but not saturated) during construction to reduce local sloughing.

All excavations and shoring systems should meet, as a minimum, the requirements given in the State of California Occupational Safety and Health Standards. Stability of temporary slopes is the responsibility of the contractor.

## VI.8. Trench Backfill

Buried utilities and lifeline services should have ductile or flexible connections at the entry point to the structure to accommodate the large movements and settlements that can occur due to liquefaction.

The on-site soils may be used as trench backfill materials provided that it's free from oversized rock of greater than 6-inches in largest dimensions. Utility subgrade should be confirmed to be free of standing water, firm, and unyielding prior to placement of bedding material. It is our opinion that utility trench backfill could be placed and compacted by mechanical means. Trench backfill above pipe bedding may consist of approved, on-site or import soils placed in lifts no greater than 8 inches loose thickness and compacted to 90 percent of the maximum dry density , as determined by Modified Proctor (ASTM D1557).

The Contractor shall follow all Cal/OSHA requirement for safety of trench excavations.

## VI.9. Excavatability

Based on our experience with similar projects developed on similar type of natural materials and on the excavation of exploratory test borings, the materials may be excavated with conventional earth moving equipment. Very dense granular soils with gravel and cobbles could require special excavation equipment and greater effort.

# VII. FOUNDATION RECOMMENDATIONS

## VII.1. General

The following recommendations have been formulated from visual, physical and analytical considerations of existing site conditions and are believed to be applicable for the proposed development.

The subsoils are prone to liquefaction and subject to seismic induced settlement. As discussed with project team, structural mitigation by deep foundation will be used to support the proposed structure in lieu of ground improvement or overexcavation and recompaction and this is considered appropriate.

Foundation and slab reinforcement configurations should meet, as a minimum, the requirements of the governing agencies or CBC 2019.

## VII.2. Drilled, Cast-In-Place Concrete Piles

Drilled, cast-in-place pile (drilled piles) may be used to support the proposed structure. Drilled piles can be have a 36-inch diameter and pile length was determined by Project Structural Engineer as appropriate. These piles should extend into dense non-liquefiable sands encountered at about fifty-five (55) feet below the ground surface as observed at boring locations. Piles should extend to non-liquefiable soil and account for downdrag forces on the foundation elements due to settlement within the upper liquefiable soils.

Piles should be structurally connected with grade beams to form one structural element. The bottom of grade beams should be at least 12 inches below pad grade or lowest existing grade.

### VII.2.1. Axial Capacity

The compressive axial capacity of drilled piles were estimated using the Beta method for cohesionless soils. The pile capacity is derived from skin friction and mainly end bearing. The subsoils at about depths of fifteen (15) to twenty (20) feet below existing grade, are prone to liquefaction and seismic-induced settlements during a design seismic event. At some locations, a liquefiable soil layer was also encountered at depth of fifty (50) feet. These piles would be subject downward drag forces as the soil surrounding the pile undergoes settlements and capacity should be neglected for upper fifty (50) feet below existing grade.

Pile axial capacities including uplift resistance and downdrag loads for drilled piles are presented on Figure A-12. Downdrag load should be deducted from total allowable capacity to obtain downward capacity.

The aforementioned allowable capacities, are for single piles spaced a minimum of three (3) diameters on center, and may be increased by one-third ($^1/_3$) for short-term wind and seismic loads. It is understood that only single pile per pile cap is planned. In the event that piles are spaced less than three (3) diameters on center, additional group capacity reduction effects should be taken into account in evaluating the allowable axial capacity of the pile groups, and these reduction factors can be provided upon request.

### VII.2.2. Lateral Load Resistance

Lateral capacities are dependent on pile length, pile diameter, pile head fixity, pile configuration and pile type. The parameters for a single pile subject to lateral loads are presented in Table I. Variations of lateral deflection, shear force and bending moment along free and fixed head piles

are provided on Figures A-13 thru A-14. In addition to the lateral load capacity developed by the piles, lateral capacity may be developed by passive resistance of the soils against the pile caps. An allowable lateral bearing pressure equal to an equivalent fluid weight of 250 pounds per cubic foot acting against the pile caps may be used, provided the pile caps are poured tight against the properly compacted fills or native soils.

**TABLE I — LATERAL LOAD DESIGN CRITERIA FOR 36-INCH**

| Pile Head Deflection | Free Head (in) | | Fixed Head (in) | |
|---|---|---|---|---|
| **60-Foot Length** | **0.25** | **0.5** | **0.25** | **0.5** |
| Lateral Capacity (kips) | 56 | 90 | 135 | 200 |
| Max. moment at pile head (ft-kips) | 0 | 0 | -915 | -1500 |
| Max. moment at pile shaft (ft-kips) | 300 | 575 | 220 | 330 |
| Depth to max. moment in shaft (ft) | 9 | 10 | 14 | 17 |
| Depth to first zero moment (ft) | 27 | 27 | 35 | 35 |

| **65-Foot Length** | **0.25** | **0.5** | **0.25** | **0.5** |
|---|---|---|---|---|
| Lateral Capacity (kips) | 56 | 92 | 138 | 205 |
| Max. moment at pile head (ft-kips) | 0 | 0 | -920 | -1550 |
| Max. moment at pile shaft (ft-kips) | 330 | 585 | 250 | 375 |
| Depth to max. moment in shaft (ft) | 9 | 10 | 14 | 17 |
| Depth to first zero moment (ft) | 27 | 27 | 36 | 36 |

### VII.2.3. Pile Settlement

A loaded pile foundation would undergo settlements from three sources such as elastic compression of the pile shaft, elastic compression of the bearing stratum on which the pile is supported and long-term settlement of the bearing stratum. The total settlement at the top of the pile will be the sum of settlements from the above.

Elastic compression of the pile shaft is dependent on the loading and structural properties of the pile material. Elastic compression and long-term settlement of the bearing stratum will depend on the loading and compressibility characteristics of the supporting stratum at the base of the pile and along the shaft. Moreover, some changes in properties of the soils and liquefaction of some of the soil layers may change values of the applied loads to the pile such as increasing downdrag load due to settlement of the soils surrounding the piles. If the piles are designed to the recommended allowable capacities, settlements of the piles are not expected to exceed one-half (1/2) inch under static loading conditions, and one and a quarter (1.25) inch due to liquefaction of the subsoils as a result of earthquake.

### VII.2.4. Construction Considerations

Precautions should be taken during pile excavations to reduce caving and raveling. The following recommendations are presented and should be followed, where applicable.

Piles should be installed under the full-time observations of HDNGEO.

Pile excavations should be filled with concrete as soon after drilling as possible. Pile excavations should not be left open overnight.

In the event of caving of soil or water seepage into the pile excavation, casing should be used. Casing may be pulled as the pile excavation is filled with concrete. The use of “wet" construction, such as "super-mud," is not recommended unless non-destructive testing is performed.

Allowance for cobbles and boulders should be made by the drilling contractor.

Concrete should be placed and vibrated throughout the full length of the pile so that no voids will exist in either the pile base or the shaft. Placement procedures, such as tremie, should be used so that the concrete is not allowed to fall freely more than five (5) feet and to prevent concrete from striking the walls of the excavations and possibly causing caving.

Where the drilling operation might affect the concrete in an adjacent pile (i.e., where pile spacing is less than three [3] diameters), drilling should not be carried out before the previously poured pile concrete has set for at least twenty-four (24) hours, or as permitted by HDNGEO.

### VII.3. Floor Slabs

A structural slab supported by pile caps and grade beams is planned for the proposed structure. Slabs in moisture sensitive areas should be dampproofed in accordance with CBC 2019, subsection 1805A.2.1 and floor base course per CBC Section 1805A.4.1 with minimum 4-inch crush rocks. The upper foot of subgrade should be scarified and re-compacted to a minimum ninety-five (95) percent relative compaction to provide uniform subgrade.

### VII.4. Minor Structure

Minor structures may be designed using the presumptive load-bearing values outlined in CBC 2019, provided that the risk of future settlements and associated maintenance can be tolerated.

### VII.5. Ultimate Value

The recommended design values presented in this report are for use with loadings determined by a conventional working stress design. When considering an ultimate design approach, the recommended design values may be multiplied by the factors given in Table I:

**TABLE II — ULTIMATE DESIGN LOAD FACTORS**

| Foundation Loading | Ultimate Design Loading |
|---|---|
| Drilled CIP Pile | 3 |
| Passive Pressure | 1.33 |
| Coefficient of Friction | 1.25 |

In no event, however, should the foundation sizes be reduced from those required for support of dead-plus-live loads when using working stress values.

## VIII. PAVEMENT SECTIONS

### VIII.1. Flexible Pavement

Based on a design R-value of fifty (50), the following alternative preliminary minimum pavement sections may be used. The traffic index assumed in Table II, below, should be confirmed by the Civil Engineer and R-value tests should be performed during grading, prior to finalizing the pavement sections.

**TABLE III — ASPHALTIC CONCRETE PAVEMENT SECTIONS**

| Pavement Utilization | Traffic Index | Asphaltic Concrete (Inches) | Class II Base (Inches) |
|---|---|---|---|
| Automobile Parking Areas | 5 | **3** | **3** |
| Truck and bus loading/unloading areas and driveways | 6 | **4** | **3** |

The upper twelve (12) inches of subgrade soils, below the aggregate base, should be scarified, moisture conditioned and recompacted to a minimum of ninety-five (95) percent relative compaction, at to slightly above optimum moisture content, based on ASTM D 1557. Below this upper subgrade should be at least ninety (90) percent per relative compaction.

The aggregate base must meet CALTRANS "Class II Base" specifications and should be compacted to at least ninety-five (95) percent relative compaction based on ASTM D 1557. Asphaltic concrete should be compacted to at least ninety-five (95) percent of the density obtained with the California Kneading Compactor (CAL 304).

### VIII.2. Rigid Pavement

A Portland Cement concrete (PCC) pavement may also be used. In the design of the PCC pavement section shown in Table VI, below, the following design parameters were used:

- Modulus of subgrade reaction of the soil, k — 240 pci
- Modulus of Rupture of concrete, MR — 500 psi
- Traffic Category, TC — C
- Average daily truck traffic, ADTT — 100

The traffic category and average daily truck traffic should be confirmed by the civil engineer and R-value tests should be performed during grading, prior to finalizing PCC thickness.

Based on the design parameters presented above, the following rigid pavement section, calculated in general conformance with the procedure recommended by ACI 330R-01, may be used.

**Table IV — PCC Pavement Section**

| Pavement Utilization | PCC Minimum Thickness (Inches) |
|---|---|
| Truck loading/unloading areas (TC = C) | 6 |

The upper twelve (12) inches of subgrade soils below the PCC should be scarified, moisture conditioned and recompacted to a minimum of ninety-five (95) percent relative compaction, at to slightly above optimum moisture content, based on ASTM D 1557. Below this upper subgrade should be at least ninety (90) percent per relative compaction.

The PCC pavement reinforcement should be designed by the structural engineer for shrinkage, temperature stresses and loading conditions. A thickened edge should be constructed on the outside of the concrete pavements subject to wheel loads. Control joints should be included in the design of the PCC by the structural engineer at a maximum spacing of fifteen (15) feet each way.

## IX. SOIL CORROSIVITY

Per CBC 2019, concrete and steel protection shall comply with the durability requirements set forth in ACI 318. When soluble sulfate concentrations are equal to or greater than 2,000 ppm in soil and 1,000 ppm in groundwater, mitigation measures must be taken to protect any concrete structures in contact with the soils. Soils are considered corrosive and deleterious to ferrous materials when chloride concentration is greater than or equal to 500 ppm, deleterious to foundation elements (e.g. lime in concrete) when the pH is 5.5 or less and/or when minimum electrical resistivity is less than 1000 ohm-centimeters.

Chemical testing of onsite soils such as water soluble sulfate, chloride, pH and electrical resistivity tests were conducted on representative samples of onsite soils, and the results are provided in Appendix C. The tests results indicate that the subsoils at the site have a "low" corrosive potential with respect to concrete and “moderate" corrosive potential with respect to steel and other metals. Therefore, Type II Portland cement may be used for the construction of concrete structures in contact with the subgrade soils and protection may be required for metals in contact with the subgrade soils.

We recommend that a corrosion specialist be consulted to determine the extent of corrosion susceptibility and/or protection that may be warranted for the project site.

## X. PLAN REVIEW, OBSERVATION AND TESTING

Post-investigation services are an important and integrated part of this investigation and should be carried out by our once. The project foundation and grading plans, and specifications should be forwarded to our once for review for conformance with the intent of the soils recommendations.

Geotechnical observations of excavation bottoms should be carried out prior to fill placement. Observations and testing of all fill placement should be carried out on a continuous basis to

verify the design assumptions and conformance with the intent of the recommendations. Observations of footing bottoms should be carried out prior to concrete pour.

## XI. LIMITATIONS

Professional judgments and geotechnical investigation are presented in this report. They are based partly on evaluation of the technical information gathered, partly on historical reports and partly on our general experience with subsurface conditions in the area. We do not guarantee the performance of the project in any respect other than that our engineering work and the judgment rendered meet the standards and care of our profession. It should be noted that the borings may not represent potentially unfavorable subsurface conditions between borings. If during construction soil conditions are encountered that vary from those discussed in this report or historical reports or if design loads and/or configurations change, we should be notified immediately in order that we may evaluate effects, if any, on foundation performance. The recommendations presented in this report are applicable only to this specific site. These data should not be used for other purposes. This report does not relate any conclusions or recommendations about the potential for hazardous and/or contaminated materials existing at the site.

The recommendations presented herein assume that the plan review, observations and testing services, outlined in Section X of the report, will be provided by HDNGEO. During execution of the aforementioned service, our office can finalize the report recommendations based on observations of actual subsurface conditions evident during construction. We cannot assume liability for the adequacy of the recommendations if another party is retained to observe construction.

This report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project, and incorporated into the plans and specifications. In this respect, it is recommended that we be allowed the opportunity to review the project plans and the specifications for conformance with the geotechnical recommendations.

This office does not practice or consult in the field of safety engineering. We do not direct the contractor's operations, and we cannot be responsible for other than our own personnel on the site. Therefore, the safety of others is the responsibility of the contractor. The contractor should notify the owner if he considers any of the recommended actions presented herein to be unsafe.

This report is subject to review by appropriate regulating agencies.

Respectfully submitted,

**HDNGEO**

H. D. Nguyen, PE
RCE 82460
Managing Principal

Lan N Pham, PE, GE
RGE 686, Exp. 3-31-2023
Chief Geotechnical Engineer

HDN for
Reza Imam, PhD.
Associate Engineer

Christopher Tomlin, MBA, CEG
CEG 2066, Exp 12-18-2023
Associate Geologist

## XII. REFERENCES

American Society of Civil Engineers, 2016, "Minimum Design Loads for Buildings and Other Structures", ASCE Standard, ASCE/SEI 7-16.

Boore, D.M. and Atkinson, G.M. (2007), Boore Atkinson NGA Ground Motion Relations for the Geometric Mean Horizontal Component of Peak and Spectral Ground Motion Parameters, PEER 2007/01, Pacific Earthquake Engineering Research Center, Berkeley, California.

Boulanger, R.W and Idriss, I.M. (2014). “CPT and SPT Based Liquefaction Triggering Procedures”, Center for Geotechnical Modeling, Department of Civil and Environmental Engineering, University of California, Davis, Report No. UCD/CGM-14/01, April.

Bray, J.D. and Sancio, R.B., “Assessment of the Liquefaction Susceptibility of Fine-Grained Soil”, ASCE, Journal of Geotechnical and Geoenvironmental Engineering, September 2006, 1165.

California Building Standards Commission, 2019, California Building Code (CBC): California Code of Regulations, Title 24, Part 2, Volumes 1 and 2.

California Department of Conservation, California Geological Survey; Toppozada, T.R.; Real, C.R.; Parke, D.L.; Branum, D., CGS Map Sheet 48: Historic Earthquakes, 1769 to 2015 - California (Magnitude 5.0-plus), a digital database.

California Department of Conservation, Division of Mines and Geology, 2008, Guidelines for Evaluation and Mitigation of Seismic Hazards in California: Special Publication 117.

California Department of Water Resources (CDWR), 2020, California’s Groundwater Bulletin 118, Appendix F: Hydrologic Region Basin Maps with Basin Tables South Coast Hydrologic Region. Last Updated 2020.

California Department of Water Resources (CDWR), 2020, Map of Groundwater Basins in California.

California Department of Water Resources (CDWR), 2021, Water Data Library Reviewed Online on Various Dates at http://www.water.ca.gov/waterdatalibrary/index.cfm.

California Division of Mines and Geology, March 1999, Seismic Hazard Evaluation of the Baldwin Park 7.5-MIN Quadrangle, Los Angeles County, California: CDMG, Open-File Report 98-13.

California Division of Mines and Geology, 1998, Seismic Hazard Zone Report for the Baldwin Park 7.5-MIN Quadrangle, Los Angeles County, California: CDMG, Seismic Hazard Zone Report 022.

California Geological Survey (CGS), 2005, Engineering Geology and Seismology for Public Schools and Hospitals in California, 345 Pages. November 1.

California Geological Survey (CGS), 2019, Note 48, Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals and Essential Services Buildings. CGSNote48. November

Campbell, K. and Bozorgnia, J., 2008. NGA ground motion model for the geometric mean horizontal component of PGA, PGV, PGD, and 5% damped linear elastic response spectra for periods ranging from 0.01 to 10 s, Earthquake Spectra, v 24. pp. 139-172.

Chiou, B. and Youngs, R., 2008. An NGA model for the average horizontal component of peak ground motion and response spectra, Earthquake Spectra, v 24. pp. 173-216.

City of Baldwin Park, 2020 General Plan, Public Safety Element, November 2002.

County of Los Angeles (LAC), 2020, Chapter 8, Safety Element of the Los Angeles County General Plan. Pages 170 to 178.

Day, S., R. Graves, J. Bielak, D. Dreger, S. Larsen, K. Olsen, A. Pitarka, and L. Petersen, M. and others, 2008. Documentation for the 2008 update of the national seismic hazard maps, USGS OFR 08 1128. Available on the web at http://pubs.usgs.gov/of/2008/1128/.

Earthquake Monitoring in Southern California, for Seventy-Seven Years (1932–2008) by Kate Hutton, Jochen Woessner, and Egill Hauksson, Bulletin of the Seismological Society of America, Vol. 100, No. 2, pp. 423–446, April 2010.

Federal Emergency Management Agency (FEMA), Los Angeles County, California and Incorporated Areas, Flood Insurance Rate Map, Map Number 06037C1700F, effective date September 26, 2008.

HDNGEO, 2020, “Campus-wide Site Classification and Ground-Motion Studies”,Kaiser Permanente Baldwin Park Campus 1011 Baldwin Park Blvd., Baldwin Park, California. Project Number 1904.1, dated November 20, 2020.

HDNGEO, 2019, “Limited Geotechnical Investigation Report, Kaiser Permanente, KPB SBPK IMP BPCP Standby Emergency Power (SEP) Utility Power Upgrade L00850205”, 1011 Baldwin Park Blvd., Baldwin Park, California. Project Number 1904, dated October 2019.

Idriss, I. M., and Boulanger, R. W. (2008) "Soil Liquefaction during Earthquakes." MNO-12, Earthquake Engineering Research Institute, Oakland, CA.

Ishihara, K. and Yoshimine, M., 1992. Evaluation of Settlements in Sand Deposits Following Liquefaction During Earthquakes, Soils and Foundations, Japanese Society of Soil Mechanics and Foundation Engineering, Vol. 32, No. 1, March 1992.

Jennings, C. W. and Bryant, W. A., 2010, Fault Activity Map of California: California Geological Survey, Geologic Data Map Series, Data Map No. 6, Scale 1:750,000.

Jennings, C.W., Gutierrez, C., Bryant, W., Saucedo, G. and C. Wills, 2010, 2010 Geologic map of California; California Geological Survey, Geologic Data Map No. 2, compilation and interpretation by Charles W. Jennings (1977).

LeRoy Crandall and Associates, 1986, "Report of Geotechnical Investigation, Proposed Medical Center Development, Baldwin Park Boulevard between Dalewood Street and Bess Avenue, Baldwin Park, California, for Kaiser Permanente". Project No. AE-86183, dated September 4, 1986.

LeRoy Crandall and Associates, 1986, "Report of Geotechnical Investigation, Proposed Medical Center Development, Baldwin Park Boulevard between Dalewood Street and Bess Avenue, Baldwin Park, California, for Kaiser Permanente". Project No. AE-86183, dated September 4.

LeRoy Crandall and Associates, 1992, “Supplement Exploration Borings, Proposed Parking Structure, Dalewood Street and Bess Avenue, Baldwin Park, California, for Kaiser Permanente". Project No. LCA L89027.AE, dated May 13.

Petersen, M. D., Bryant, W. A., Cramer, C. H., Cao, T., Reichle, M. S., Frankel, A. D., Lienkaemper, J. J., McCroy, P. A., and Schwartz, D. P., 1996, Probabilistic Seismic Hazard Assessment for the State of California, CDMG, Open File Report 96-08.

Petersen, Mark D., Frankel, Arthur D., Harmsen, Stephen C., Mueller, Charles S, Haller, Kathleen M., Wheeler, Russell L., Wesson , Robert L., Zeng, Vuehua, Boyd, Oliver S., Perkins, David M.,

Luco, Nicolas, Field, Edward H., Wills, Chris J., and Rukstales, Kenneth S., 2008, Documentation for the 2008 Update of the United States National Seismic Hazard Maps: U.S. Geological Survey Open File Report 2008 1128, 61 pages.

Pradel D. 1998. Procedure to evaluate earthquake-induced settlements in dry sandy soils,J. Geotech. & Geoenv. Engrg., ASCE, 124 (4), 364-368.

Proposal SDPRG 1R4 (2009). Proposal for changes. 3rd Member Organization Ballot (December, 2008).

Southern California Earthquake Center (SCEC), 2001, Active Faults in the Los Angeles Metropolitan Region, Special Publication Series No. 001, Working Group C, Compiled by Dolan, J. F., Gath, E. M., Grant, L. B., Legg, M., Lindwall, S., Mueller, K., Osking, M., Ponti, D. F., Rubin, C. M., Rockwell, T. K., Shaw, J. H., Treiman, J. A., Walls, C., and Yeats, R. S., 47 Pages.

Southern California Earthquake Center (SCEC), 1995, Working Group on California Earthquake Probabilities, Seismic Hazards in Southern California: Probable Earthquakes, 1994 to 2024: Bulletin of the Seismological Society of America, Volume 85, Number 2, Pages 379-439.

"Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California", Revised and Re-Adopted September 11, 2008 by the California Geologic Survey in Accordance with the Seismic Hazards Mapping Act of 1990.

USGS, 2021, Earthquake Hazards Program, “Unified Hazard Tool”, https://earthquake.usgs.gov/hazards/interactive/

USGS, 2021, Earthquake Hazards Program, “U.S. Seismic Design Map”, https://earthquake.usgs.gov/hazards/designmaps/usdesign.php

United States Geological Survey (USGS) and California Geological Survey (CGS), 2008, Quaternary Fault and Fold Database for the United States. Reviewed Online on Various Dates at USGS web site: http//earthquakes.usgs.gov/hazards/qfaults.

# APPENDIX A

Figure A-1 Site Location Map
Figure A-2 Site and Exploration Locations Plan
Figure A-3 Regional Geologic Map
Figure A-4 Geologic Cross Sections A-A' and B-B'
Figure A-5 Historic High Groundwater Map
Figure A-6 Regional Fault Map
Figure A-7 Vicinity Fault Map
Figure A-8 Historic Earthquakes Map
Figure A-9 Shear Wave Velocity Profile
Figure A-10 Seismic Hazards Zones Map
Figure A-11 FEMA Flood Map
Figure A-12 Pile Axial Capacity
Figure A-13 Lateral Load Capacity — 60 FOOT
Figure A-14 Lateral Load Capacity — 65 FOOT

**Site Coordinates:**
Lat: 33.0655 N
Lon: 117.9855 W

1:16,056
0 0.13 0.25 0.5 mi
0 0.2 0.4 0.8 km

N

Source: The National Map Advance Viewer

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## SITE LOCATION MAP

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd.
Baldwin Park, California

Project No. C21-0415

Figure **A-1**

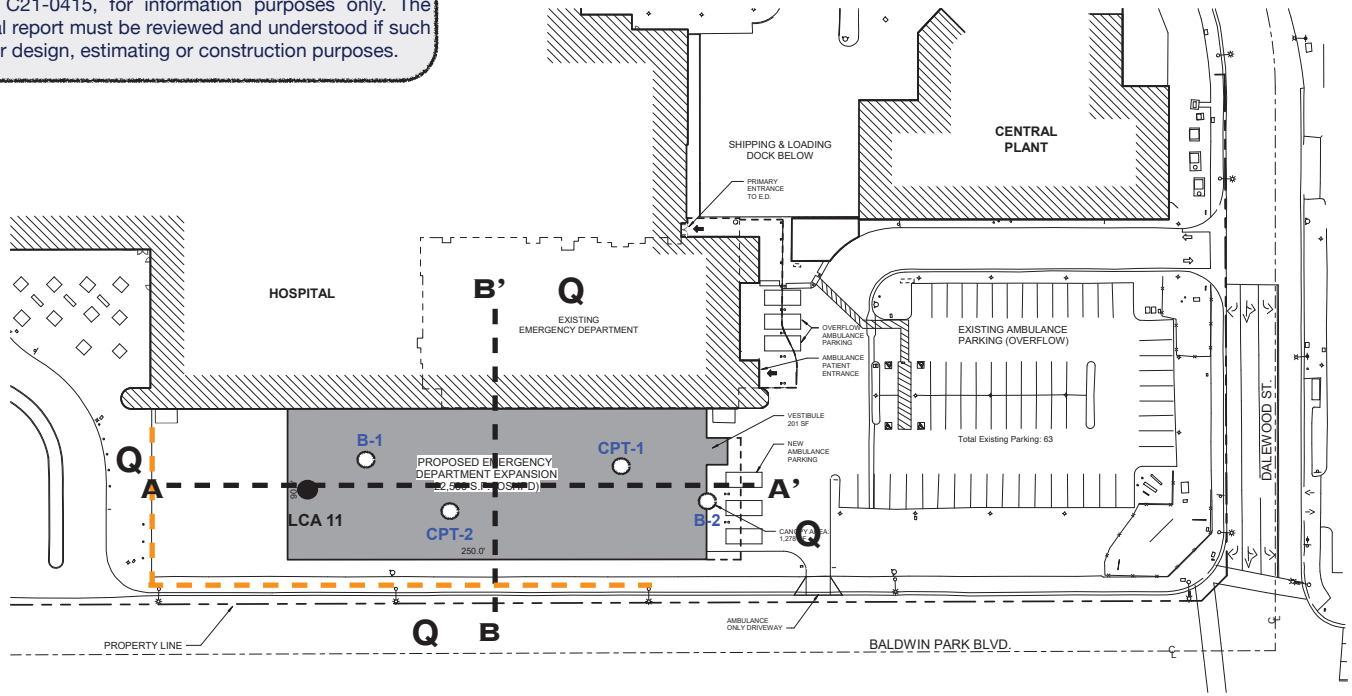
If the sheet is not 30"x42", it is a reduced print. Scale Accordingly.

**LEGENDS:**

- ○ Approximate Locations of Boring and CPT
- ● Approximate Location of Boring (LCA 1992)
- Approximate Location of Geophysical Survey Line
- Q Quaternary Alluvium
- A—A' Geological Cross Sections

**NOTES:**

1. HDNGEO has added only Geological/Geotechnical data to this plan prepared by others. We have not verify any other information of this plan and assume no responsibility of its accuracy.
2. The presented information contained in this drawing are, part of HDNGEO report no. C21-0415, for information purposes only. The complete geotechnical report must be reviewed and understood if such data are to be used for design, estimating or construction purposes.




**SCALE AS SHOWN:** 0 50 100 ft

**HDNGEO C21-0415** | **SITE AND EXPLORATION LOCATIONS PLAN** | **FIGURE A-2** | 1 | 1" = 30'-0"

8/11/2020 1:17:14 PM BIM 360://1120 KPBPMC Campus Projects/Kaiser Baldwin Park - HOS - ED Expansion_A19.rvt

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**ISSUE:**

| No. | Issued | Date |
|---|---|---|

Agency Approval:

The type of approval to be issued by The Office of Statewide Health and Planning Department for this project is:

Facility:
**KAISER PERMANENTE**
**BALDWIN PARK MEDICAL CENTER**
1011 BALDWIN PARK BLVD,
BALDWIN PARK, CA 91706

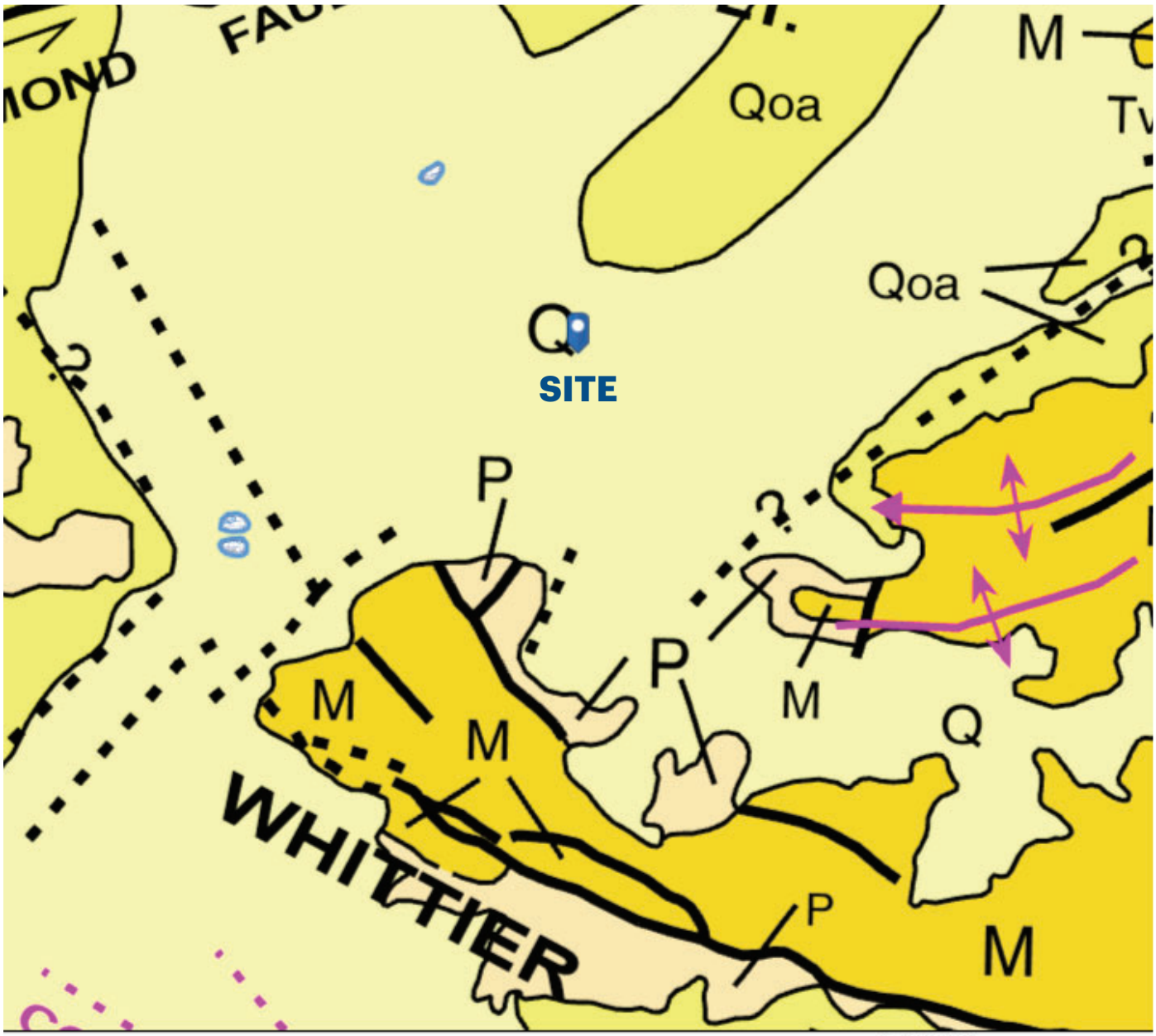
Project:
**KP# L0094:**
**Emergency Department Expansion / Remodel**

Sheet Title:
**ENLARGED SITE PLAN**

**CITY REVIEW**

Fac No: 17207 | Bldg No: 02521 | Floor Lev: 1 | Section:
Date: 08/11/2020 | Client Project No: L0094
Sheet:

**A3**




**Generalized Rock Types:**

**Q** — Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.

**Qoa** — Older alluvium, lake, playa, and terrace deposits.

**M** —Sandstone, shale, siltstone, conglomerate, and breccia; moderately to well consolidated.

**P** — Sandstone, siltstone, shale, and conglomerate; mostly moderately consolidated.

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

N

Source: Jennings, C.W., Gutierrez, C., Bryant, W., Saucedo, G. and C. Wills, 2010, 2010 Geologic map of California; California Geological Survey, Geologic Data Map No. 2, compilation and interpretation by Charles W. Jennings (1977).

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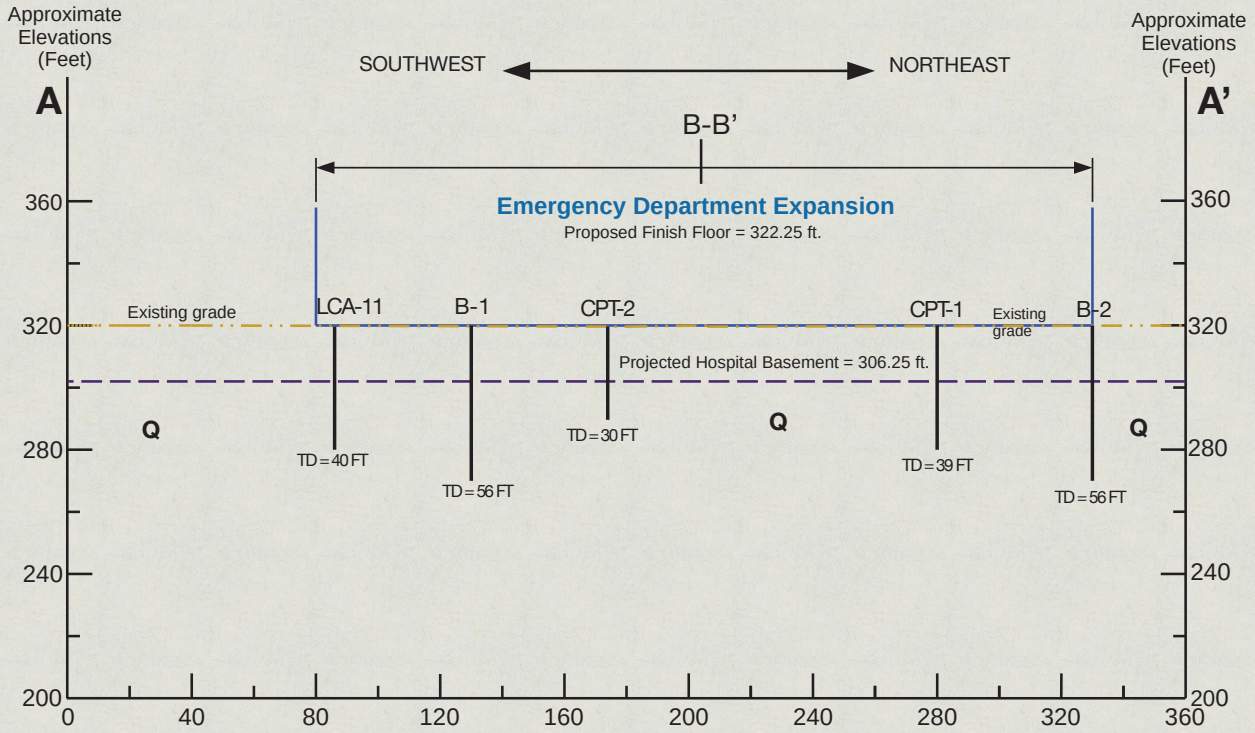
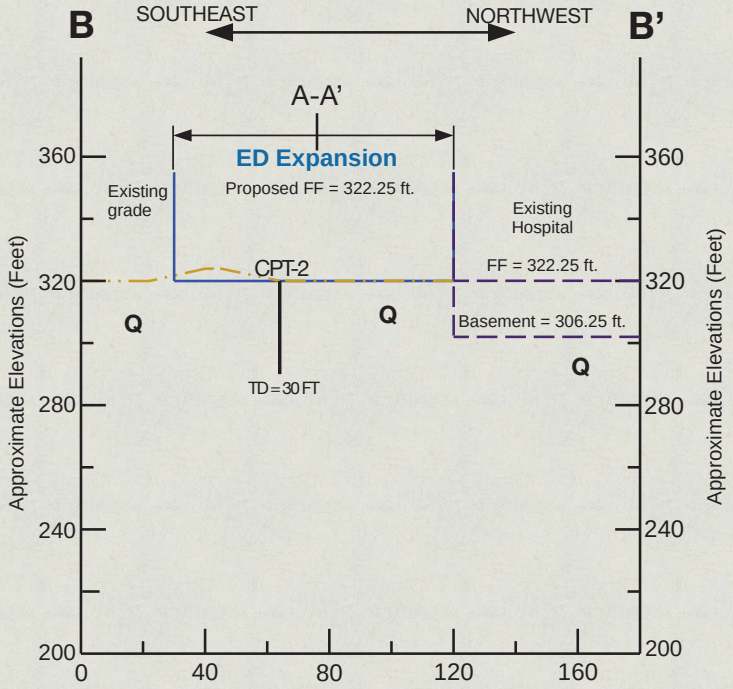
**REGIONAL GEOLOGIC MAP**

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd
Baldwin Park, California

Project No. C21-0415

Figure **A-3**




**Scale as shown:**
Horizontal & Vertical 1 in = 40 ft

**Explanations:**

**Q --** Quaternary Alluvium
TD -- Total Depth
Existing grade

**Notes:**

1. Cross sections are shown on Figure A-2, Appendix A.
2. Soil profiles are known with accuracy only at the locations observed. Subsurface conditions between borehole locations had been inferred from geological or geotechnical evidence and may vary from that shown.

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## GEOLOGIC CROSS SECTIONS A-A' & B-B'

Kaiser Permanente – Baldwin Park Medical Center
Emergency Department Expansion
Baldwin Park, California
Figure A-4

Source: Plate 1.2 Historically Highest Groundwater Contours and Borehole Log Data Locations, Baldwin Park Quadrangle, Seismic Hazard Zone Report 022, 1998.

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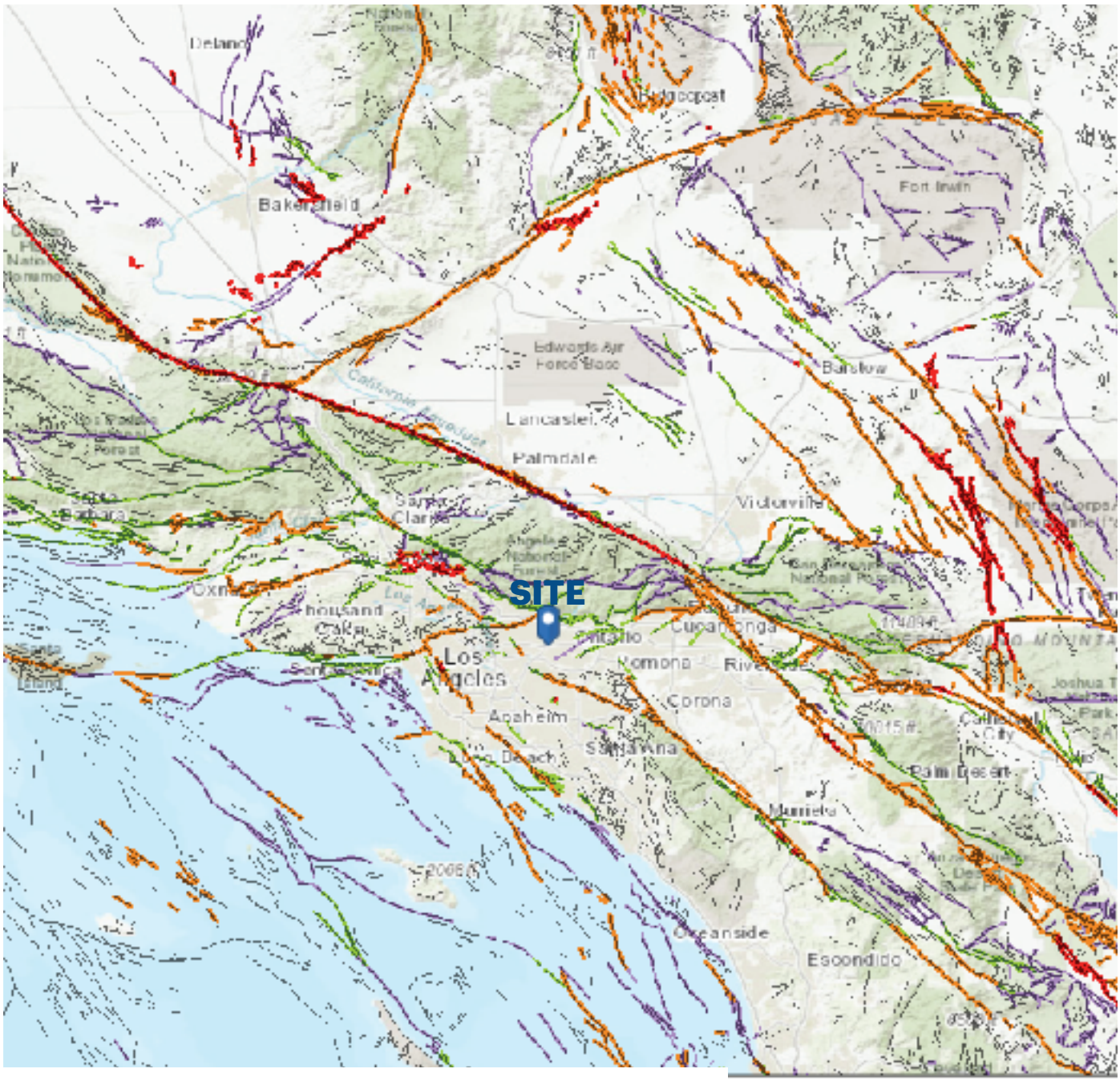
**Historic High Groundwater Map**

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd.
Baldwin Park, California

Project No. C21-0415

Figure **A-5**




**Fault Legend:**

- Historic Fault (200 yrs)
- Holocene fault displacement (during past 11,700 yrs) without historic record
- Late Quaternary Fault Displacement (during past 700,00 years)
- Quaternary Fault (age undifferentiated)

Fault, certain  fault, approx. located  fault, concealed

1:2,311,162

0  15  30  60 mi

N

Source: Jennings, C.W., and Bryant, W.A., 2010, Fault activity map of California: California Geological Survey Geologic Data Map no. 6, scale 1:750,000, a digital database.

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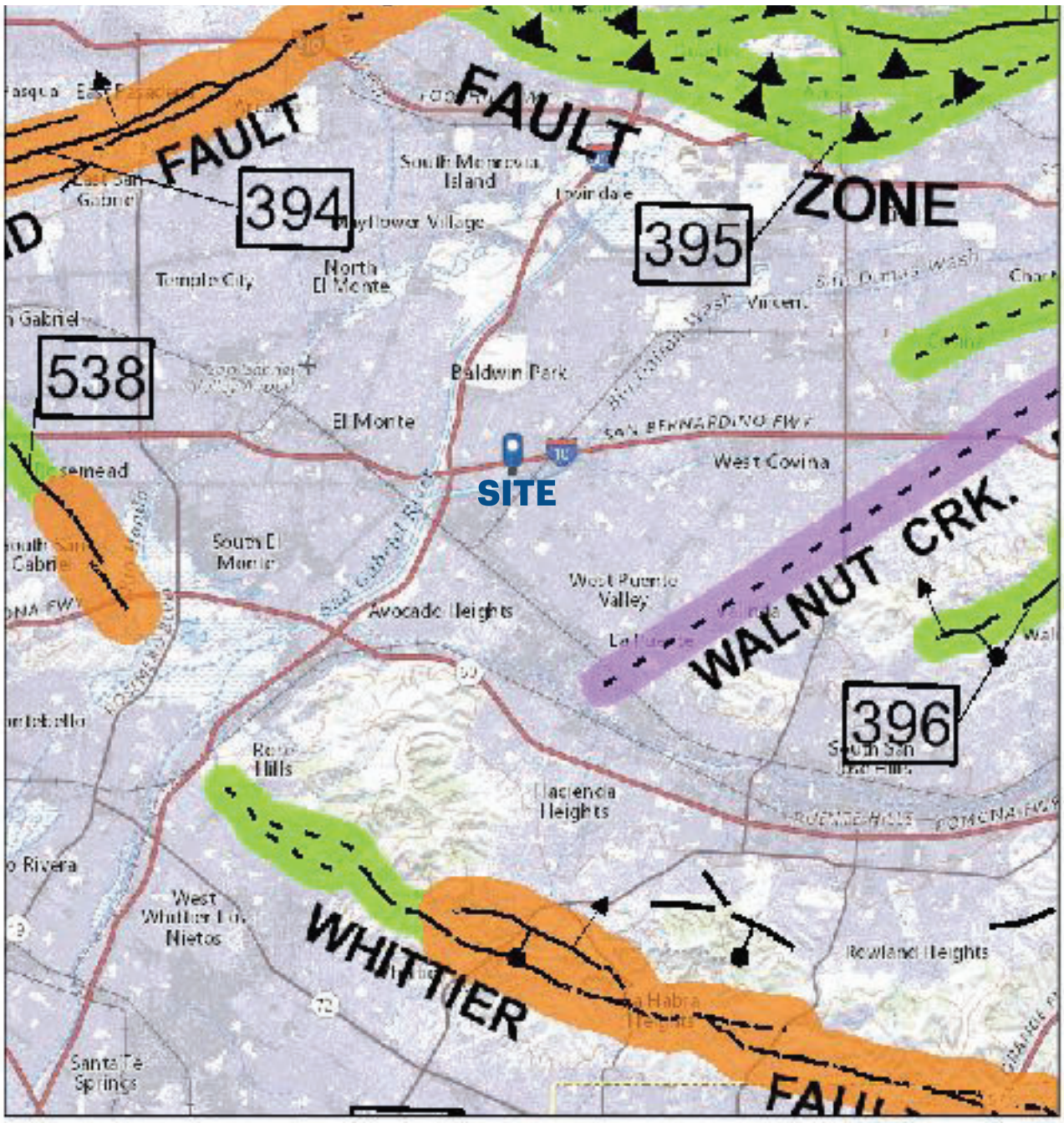
# REGIONAL FAULT MAP

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd
Baldwin Park, California

Project No. C21-0415

Figure **A-6**




**Fault Classification:**

- **Historic Fault (200 yrs)**
- **Holocene fault displacement (during past 11,700 yrs) without historic record**
- **Late Quaternary Fault Displacement (during past 700,00 years)**
- **Quaternary Fault (age undifferentiated)**

1:144,443

0 1 2 4 mi

0 1.5 3 6 km

Source: Jennings, C.W., and Bryant, W.A., 2010, Fault activity map of California: California Geological Survey Geologic Data Map no. 6, scale 1:750,000, a digital database.

N

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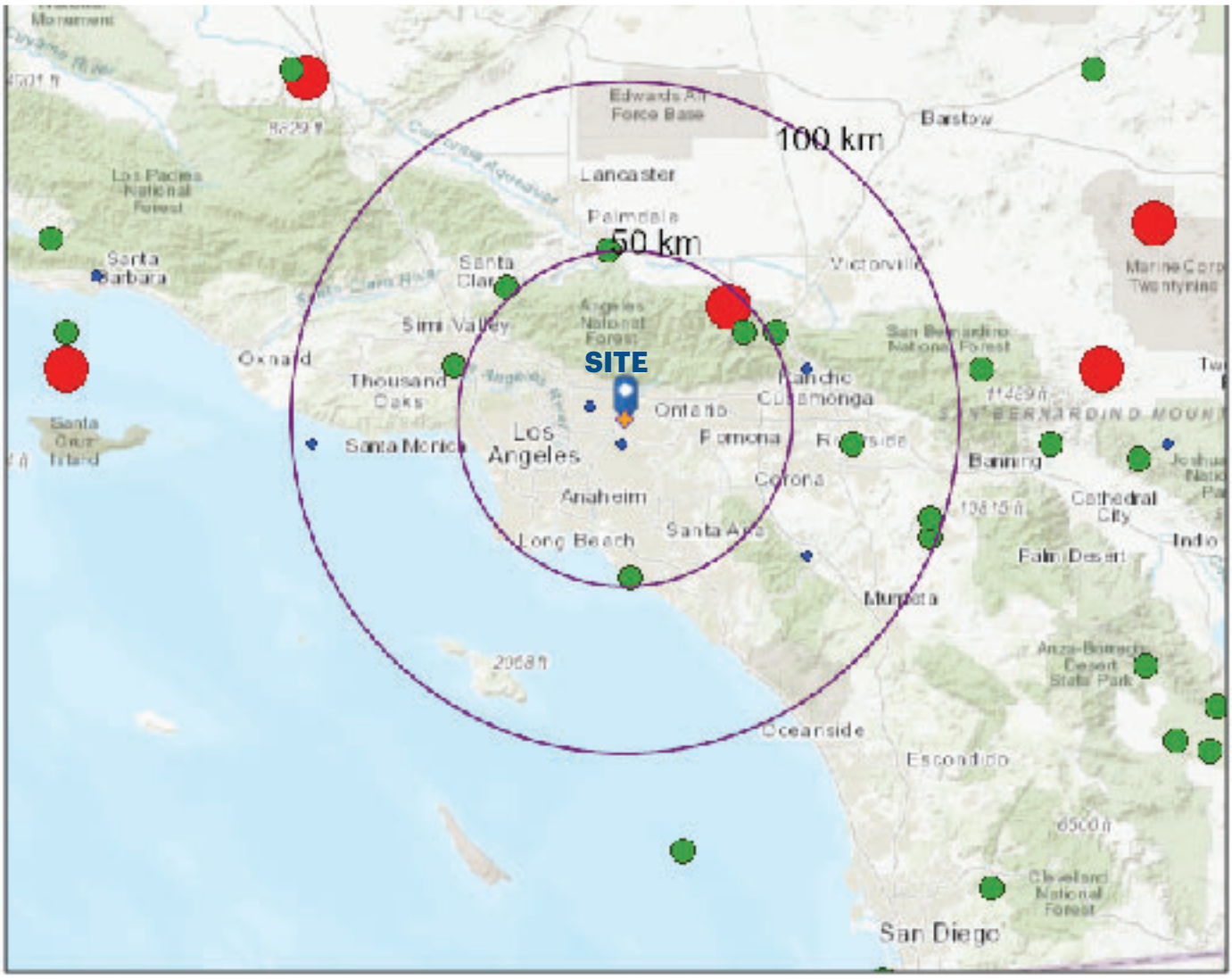
## VICINITY FAULT MAP

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd
Baldwin Park, California

Project No. C21-0415

Figure **A-7**




Source: California Department of Conservation, California Geological Survey; Toppozada, T.R.; Real, C.R.; Parke, D.L.; Branum, D., CGS Map Sheet 48: Historic Earthquakes, 1769 to 2015 - California (Magnitude 5.0-plus), a digital database.

N

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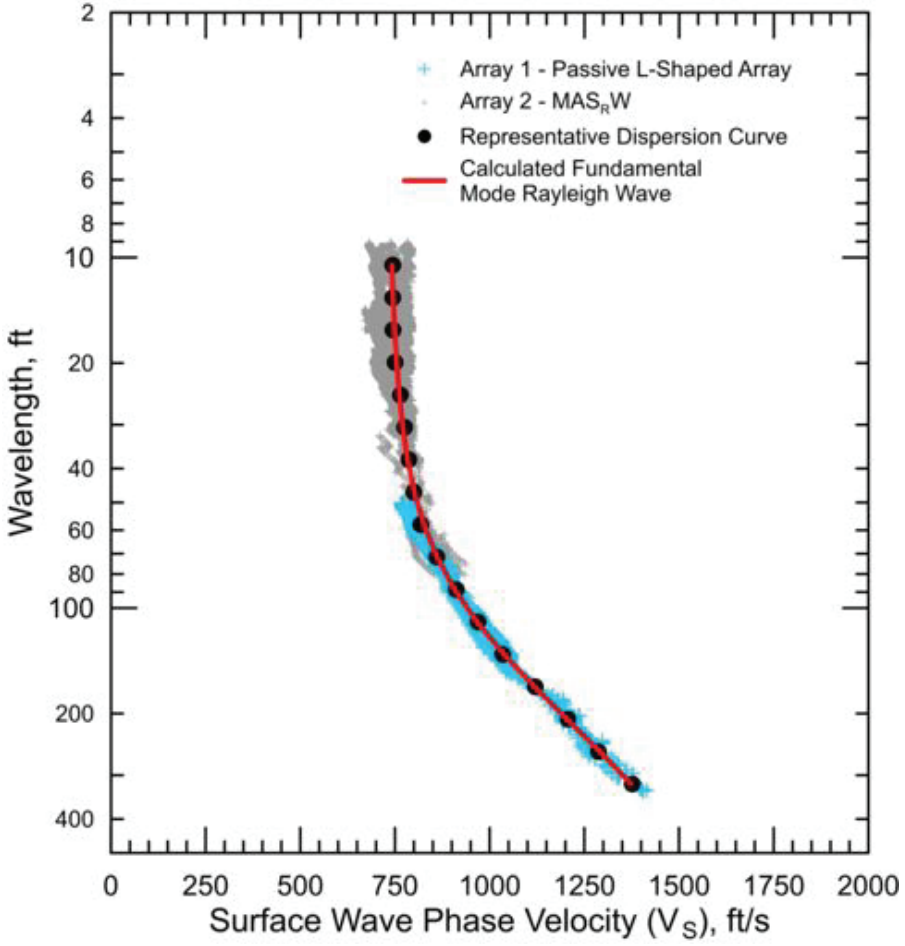
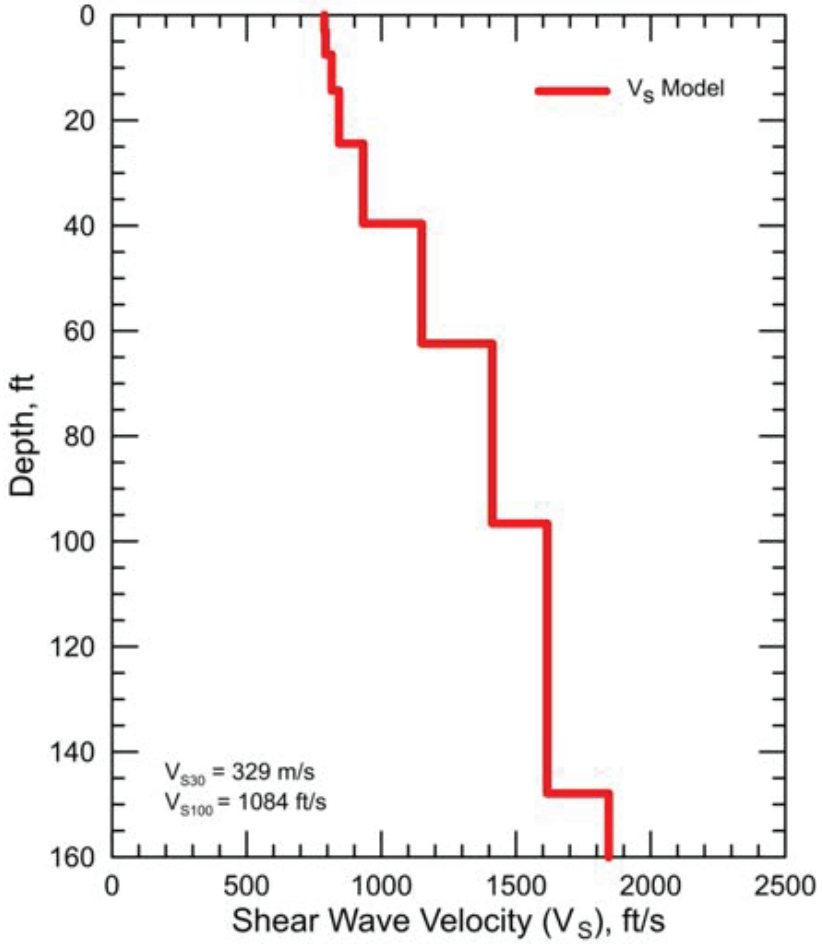
**HISTORIC EARTHQUAKES MAP**

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd
Baldwin Park, California

Project No. C21-0415

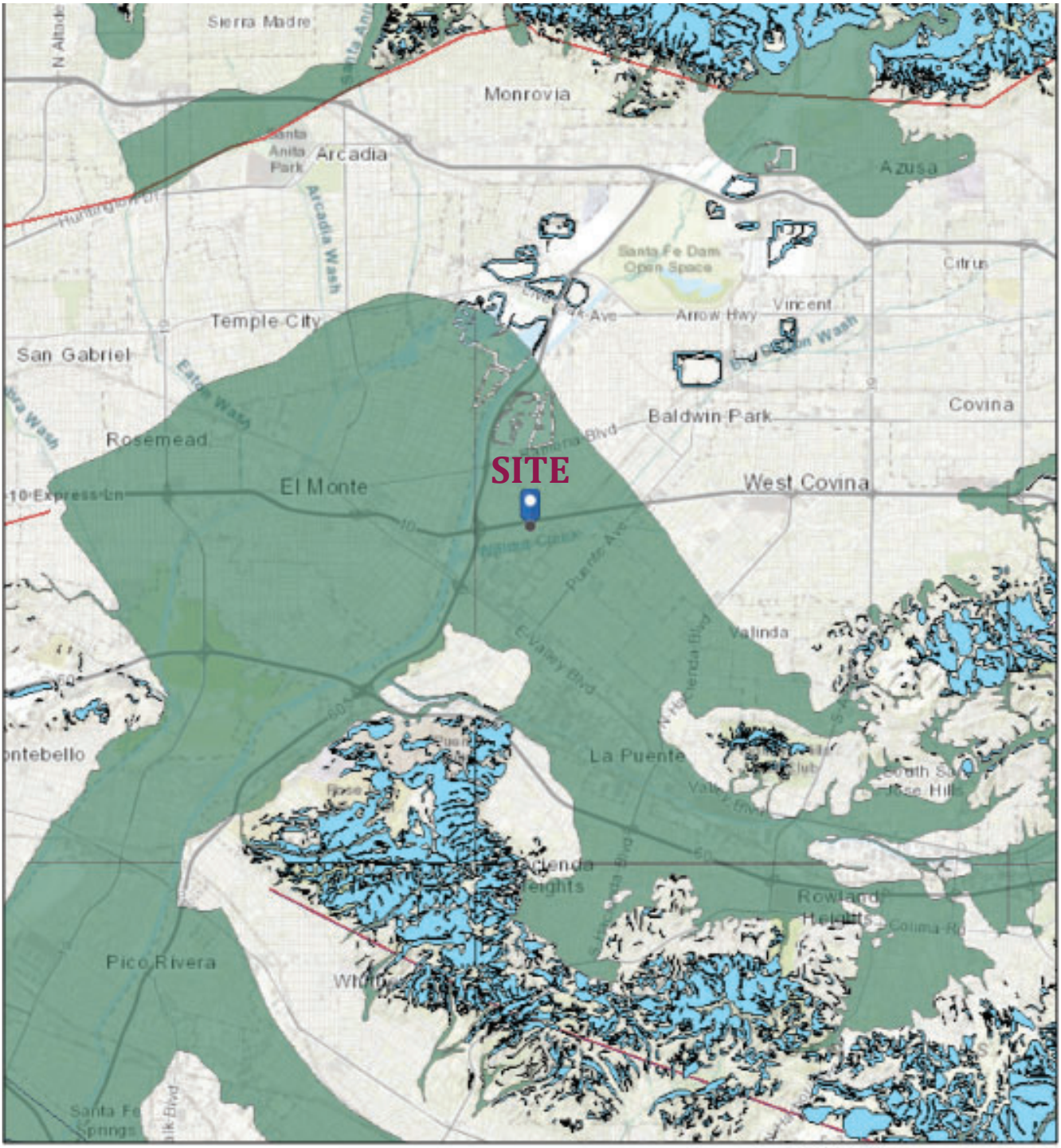
Figure **A-8**




| | |
|---|---|
| GEOVision geophysical services | FIGURE 2<br>SURFACE WAVE MODELS - A1 and A2<br>FUNDAMENTAL MODE ASSUMPTION |
| Project No: 21365<br>Date: Nov 8, 2021<br>Drawn By: A. McNab<br>Approved By:<br>Figure 2.cdr | KAISER PERMANENTE<br>BALDWIN PARK, CALIFORNIA<br><br>PREPARED FOR<br>HDNGEO |

**Figure A-9**




**Legends:**

- Liquefaction Zones
- Landslide Zones

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

N

Source: Seismic Hazards Program, California Geological Survey, California Department of Conservation, Field, E.H., Biasi, G.P., Bird,P.,Dawson,T.E., Felzer, K.R., Jackson, D.D., Johnson, K.M., Jordan, T.H., Maden, C., Michael, A.J., Milner, K.R., Page,

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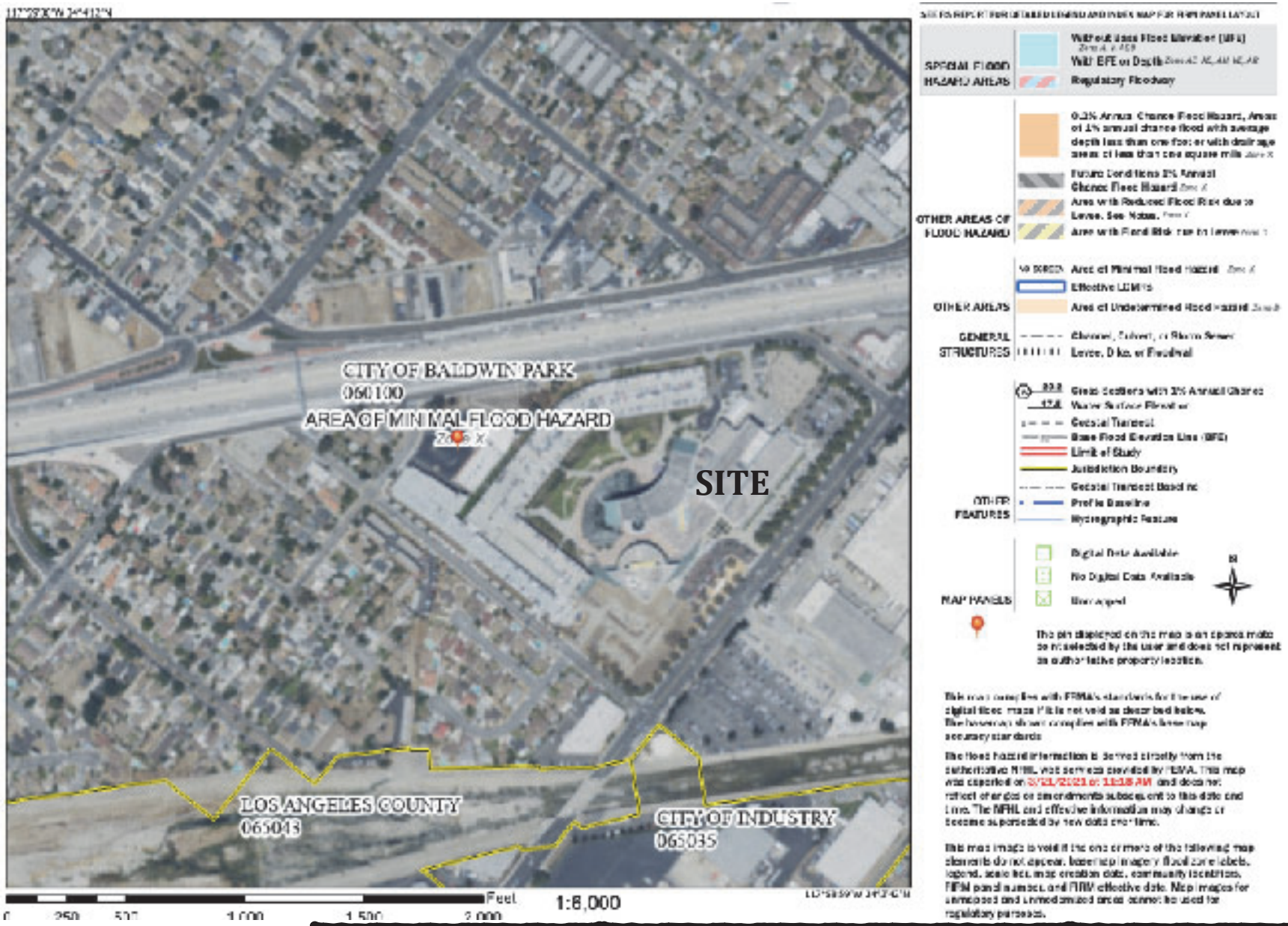
## SEISMIC HAZARDS ZONES MAP

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd
Baldwin Park, California

Project No. C21-0415

Figure **A-10**



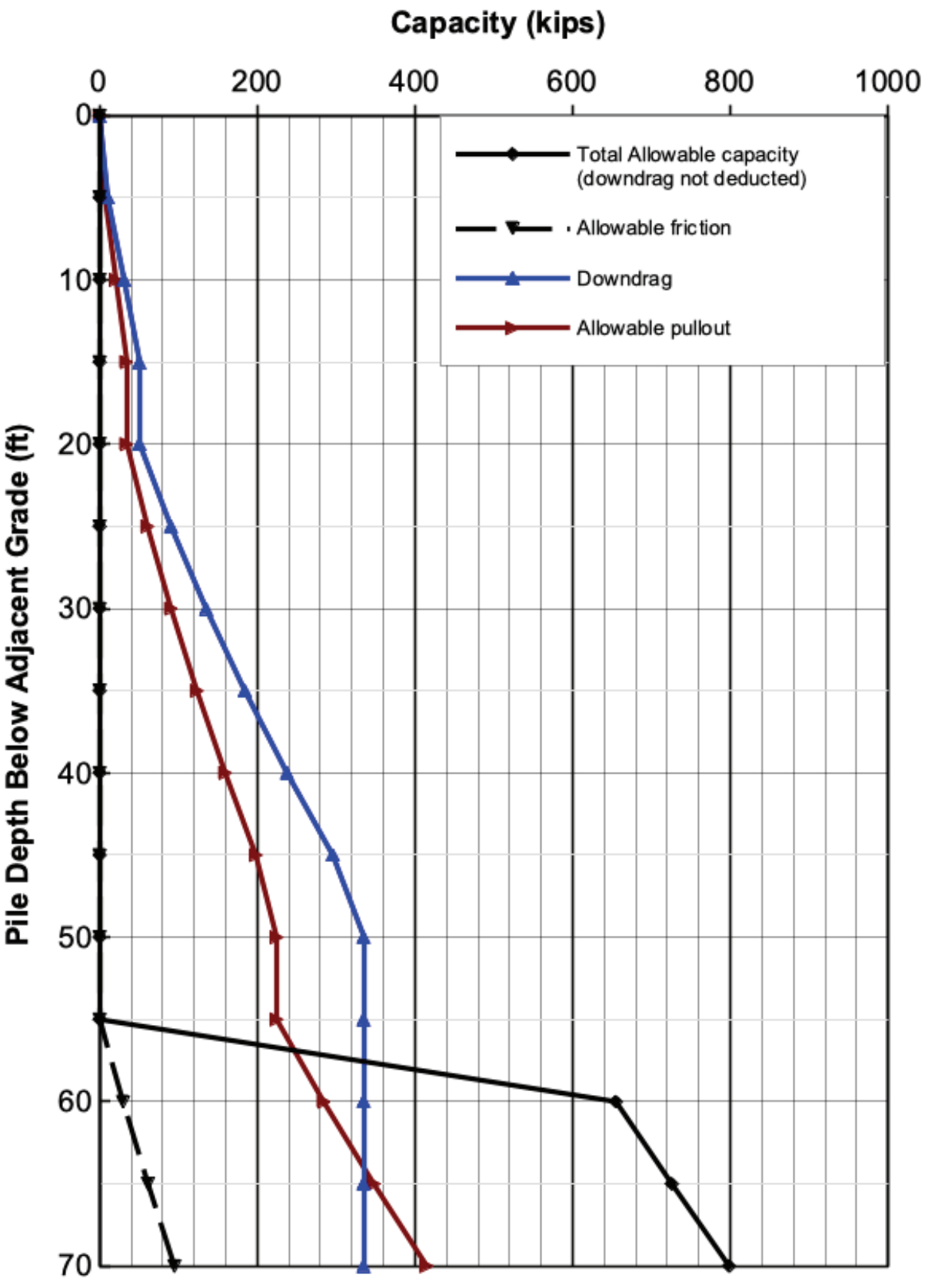

# FEMA FLOOD MAP

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd.
Baldwin Park, California

HDNGEO

Project No. C21-0415

Figure **A-11**

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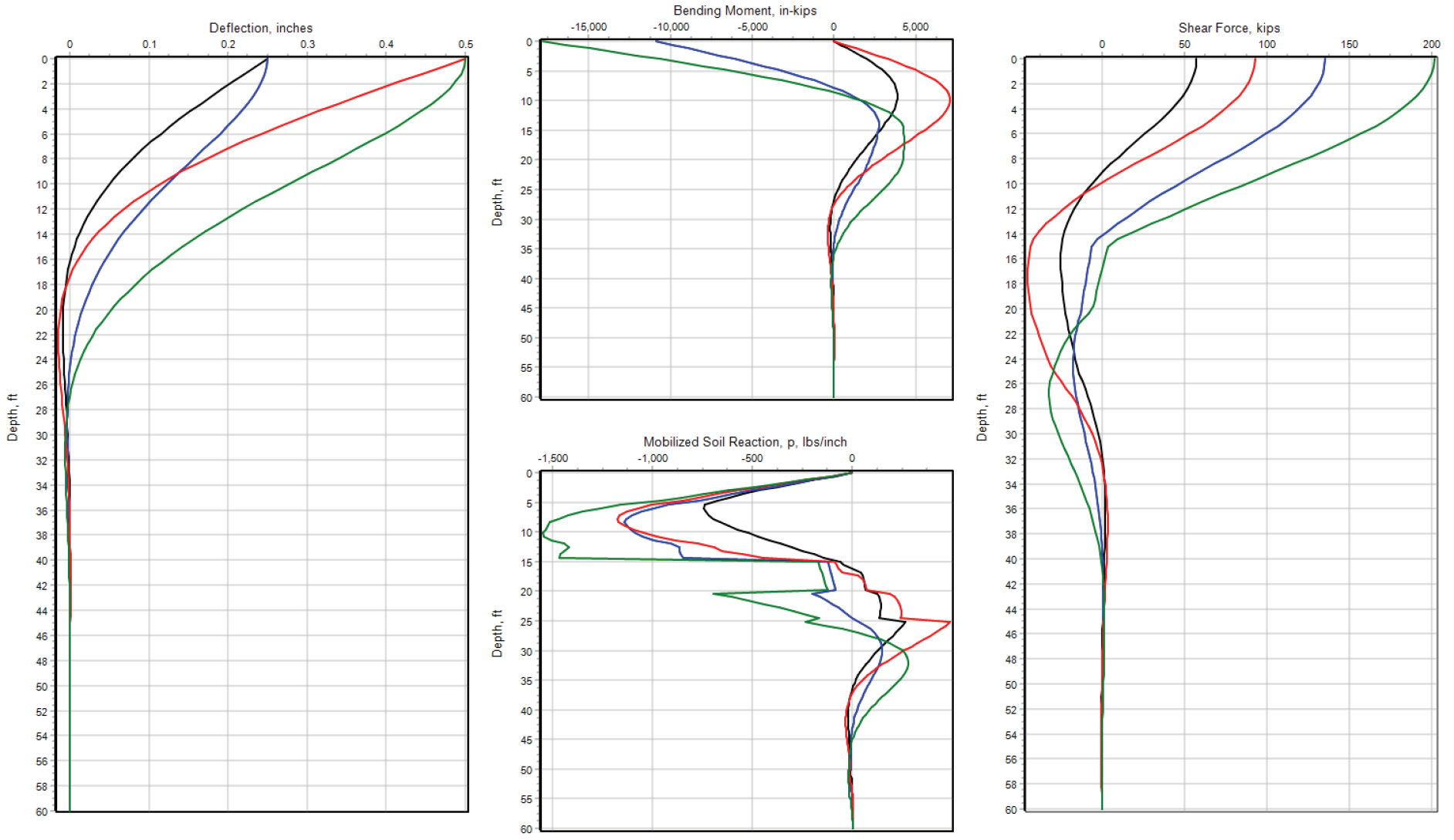
**PILE AXIAL CAPACITY**

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd.
Baldwin Park, California

Project No. C21-0415

Figure **A-12**

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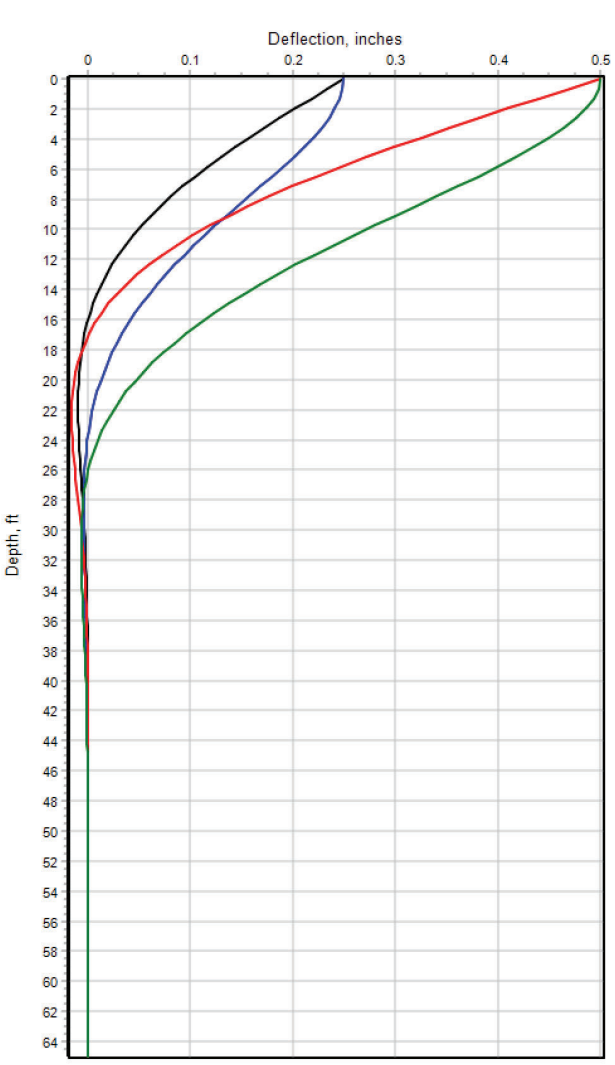
**LATERAL LOAD CAPACITY**

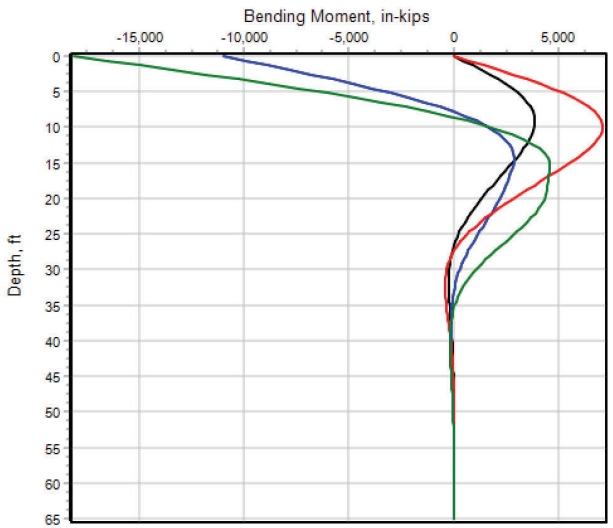
Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd.
Baldwin Park, California

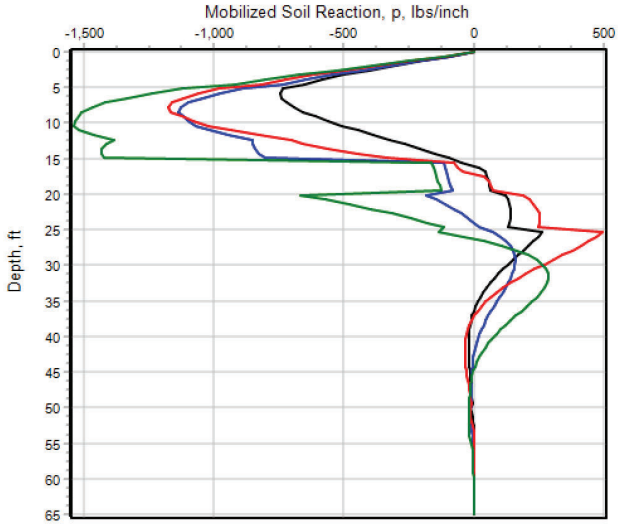
Project No. C21-0415

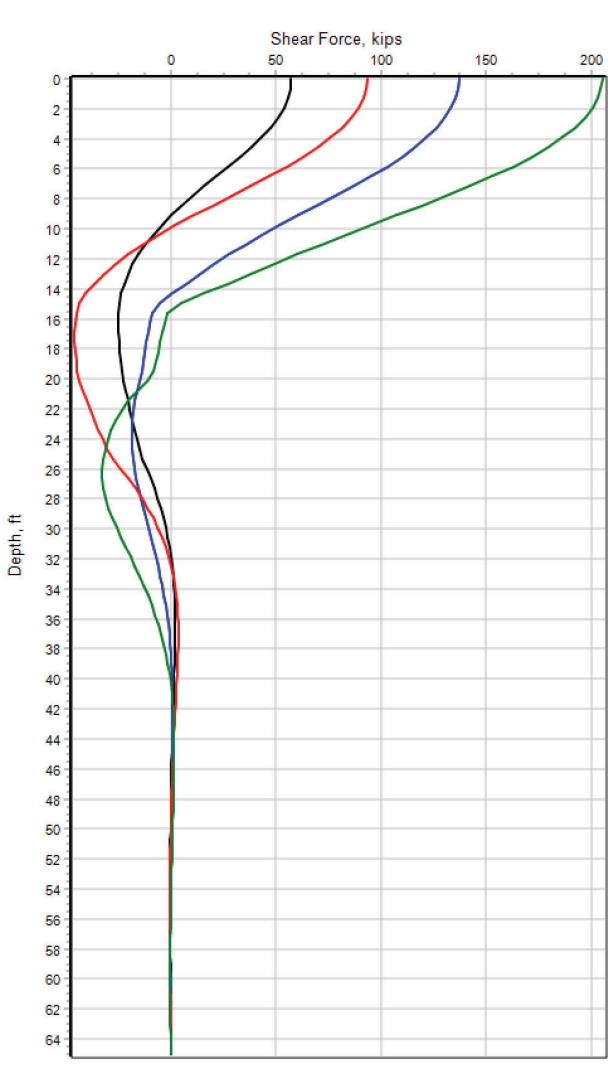
Figure **A-13**

## 36-INCH CIP PILE — 60 FOOT




HDNGEO

**LATERAL LOAD CAPACITY**

Kaiser Permanente — ED Expansion
1011 Baldwin Park Blvd.
Baldwin Park, California

Project No. C21-0415

Figure **A-14**

## 36-INCH CIP PILE — 65 FOOT

# APPENDIX B

Figure B-1 Key To Boring Logs
Figure B-2 Log of Boring B-1
Figure B-3 Log of Boring B-2
Figure B-4 Log of CPT-1
Figure B-5 Log of CPT-2

LeRoy Crandall and Associates (1990)
Figure B-6 Log of Boring B-11

GeoVision Geophysical Services, Inc. (November 9, 2021)

The terms and symbols used on the Log of Borings to summarize the results of the field investigation and subsequent laboratory testing are described in the following:

It should be noted that materials, boundaries, and conditions have been established only at the boring locations, and are not necessarily representative of subsurface conditions elsewhere across the site.

## A. PARTICLE SIZE DEFINITION (ASTM D2487 AND D422)

| | | | | | |
|---|---|---|---|---|---|
| Boulder | -- | larger than 12-inches | Sand, medium | -- | No.40 to No. 10 sieves |
| Cobble | -- | 3-inches to 12-inches | Sand, fine | -- | No.200 to No. 40 sieves |
| Gravel, coarse | -- | 3/4-inch to 3-inches | Silt | -- | 5µm to No. 200 sieves |
| Gravel, fine | -- | No.4 sieve to 3/4 -inch | Clay | -- | smaller than 5 µm |
| Sand, coarse | -- | No.10 to No.4 sieve | | | |

## B. SOIL CLASSIFICATION

Soils and bedrock are classified and described according to their engineering properties and behavioral characteristics. The soil of each stratum is described using ASTM D2487 and D2488.

The following adjectives may be employed to define percentage ranges by weight of **minor components**:

| | | | | | |
|---|---|---|---|---|---|
| trace | -- | 1-10% | little | -- | 10-20% |
| some | -- | 20-35% | “and” or ”y” | -- | 35-50% |

**STRAFIFIED SOILS**

| Description | Stratified thickness |
|---|---|
| parting | 0 to 1/16-in. |
| seam | 1/16 to 1⁄2-in. |
| layer | 1⁄2-in. to 12-in. |
| stratum | > 12-in. |

**PLASTICITY OF SOILS**

| Description | Plastic Index |
|---|---|
| Non-plastic | 0 |
| Low | 1-10 |
| Medium | 11-30 |
| High | >30 |

## C. SOIL DENSITY AND CONSISTENCY

The density of coarse-grained soils and the consistency of fine-grained soils are described on the basis of the Standard Penetration Test:

| COARSE GRAINED SOILS | | FINE GRAINED SOILS | | | |
|---|---|---|---|---|---|
| Apparent Density | SPT Blows Per Foot | Estimated Consistency | SPT Blows Per Foot | Pocket Penetrometer (tsf) | Torvane Measurement (tsf) |
| very loose | < 5 | very soft | < 2 | < 0.25 | < 0.12 |
| loose | 5 to 10 | soft | 2 to 4 | 0.25 to 0.50 | 0.12 to 0.25 |
| medium | 11 to 30 | firm (medium) | 5 to 8 | 0.50 to 1.0 | 0.25 to 0.50 |
| dense | 31 to 50 | stiff | 9 to 15 | 1.0 to 2.0 | 0.50 to 1.0 |
| very dense | over 50 | very stiff | 16 to 30 | 2.0 to 4.0 | 1.0 to 2.0 |
| | | hard | > 30 | > 4.0 | > 2.0 |

D. **STANDARD PENETRATION TEST (SPT) -- D1586**

The SPT test involves failure of the soil around the tip of a split spoon sampler for a condition of constant energy transmittal. The split spoon, 2-inches outside diameter and 1 3/8-inches inside diameter, is driven eighteen (18) inches. The sampler is seated in the first six (6) inches and the number of blows required to drive the sampler the last foot is recorded as the "N" value or SPT blow count. The driving energy is provided by a 140 lb weight dropping thirty (30) inches.

E. **ABBREVIATION OF LABORATORY TEST DESIGNATIONS**

| | | | |
|---|---|---|---|
| C | Consolidation | pH | pH |
| CBR | California Bearing Ratio | PP | Pocket Penetrometer |
| Ch | Water Soluble Chlorides | PS | Particle Size Analysis |
| DS | Direct Shear | RV | R-Value |
| EI | Expansion Index | SE | Sand Equivalent |
| ER | Electrical Resistivity | SG | Specific Gravity |
| k | Permeability | SO4 | Water Soluble Sulfates |
| MD | Moisture Content and Dry Density | TX | Triaxial Compression |
| MP | Modified Proctor Compaction Test | TV | Torvane Shear |
| O | Organic Content | U | Unconfined Compression |

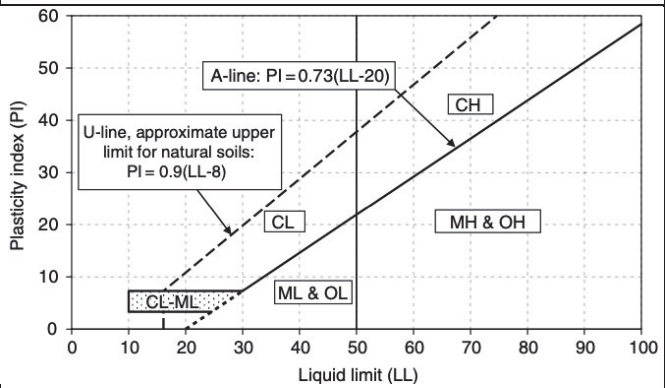
F. **LOCATION AND ELEVATION**

The coordinates provided on boring logs are approximately determined based using a hand-help GPS device. The accuracy of such devices is highly variable and depend upon many factors at the time of usage. Ground surface elevation are also interpreted based on available topographical survey map of the site.

G. **STRATIFICATION LINES**

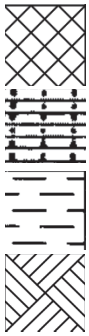
The stratification lines indicated on the boring logs and profiles represent the **approximate** boundary between material types and the transition may be gradual.

| MAJOR DIVISION | | | Typical Description | | Laboratory Classification Criteria | Group Symbol | Graphic Symbol |
|---|---|---|---|---|---|---|---|
| **Coarse-Grained Soils** (More than 50% Retained on No. 200) | **Gravels** < 50% of coarse fraction passes the No. 4 sieve size | **Clean Gravels** < 5% passing the No. 200 sieve size | Borderline cases require the use of dual symbols | **Well graded** Meet gradation requirements | Gradation requirements are: $C_u = \frac{D_{60}}{D_{10}} > 4$ and $C_c = \frac{D_{30}^2}{D_{10} x D_{60}} = 1 \text{ to } 3$ | GW | |
| | | | | **Poorly graded** Does not meet gradation requirements | | GP | |
| | | **Gravels with fines** > 12% passing the No. 200 sieve size | | Plasticity limits of material passing No. 40 sieve size plots below "A" line and P.I. < 4 | Plasticity limits above "A" line with P.I. > 4 < 7 are boundary cases and require use of dual symbols | GM | |
| | | | | Plasticity limits of material passing No. 40 sieve size plots below "A" line and P.I. > 7 | | GC | |
| | **Sands** ≥ 50% half of the coarse fraction passes the No. 4 sieve size | **Clean Sands** < 5 % passing the No. 200 sieve size | Borderline cases require the use of dual symbols | **Well graded** Meet gradation requirements | Gradation requirements are: $C_u = \frac{D_{60}}{D_{10}} > 6$ and $C_c = \frac{D_{30}^2}{D_{10} x D_{60}} = 1 \text{ to } 3$ | SW | |
| | | | | **Poorly graded** Does not meet gradation requirements | | SP | |
| | | **Sands with fines** > 12% passing the No. 200 sieve size | | Plasticity limits of material passing No. 40 sieve size plots below "A" line and P.I. < 4 | Plasticity limits above "A" line with P.I. > 4 < 7 are boundary cases and require use of dual symbols | SM | |
| | | | | Plasticity limits of material passing No. 40 sieve size plots below "A" line and P.I. > 7 | | SC | |
| **Coarse-Grained Soils** (50% or More Passes No. 200 Sieve) | **Silts and Clays** Liquid Limit < 50 | Above "A" line and P.I., > 4 < 7 are borderline cases requiring use of dual symbols | | | Below "A" line and P.I. < 4 | ML | |
| | | | | | Above "A" line and P.I. > 7 | CL | |
| | | | | | Below "A" line and P.I. < 4 and $\frac{LL(ovendrysoil)}{LL(airdrysoil)} < 0.7$ | OL | |
| | **Silts and Clays** Liquid Limit > 50 | | | | Below "A" line | MH | |
| | | | | | Above "A" line | CH | |
| | | | | | Below "A" line and P.I. < 4 and $\frac{LL(ovendrysoil)}{LL(airdrysoil)} < 0.7$ | OH | |
| Highly Organic Peat $\frac{LL(ovendrysoil)}{LL(airdrysoil)} < 0.7$ | | | | | | PT | |




Plasticity chart for the Unified/ASTM soil classification system.

## Additional Soil Classification



Fill Soil

Ss Sandstone

Ms Siltstone

Cs Claystone

HDNGEO

**KEY TO BORING LOGS**

Figure B-**1** *Page 3 of 3*

# LOG OF BORING

SAMPLE TYPE: THIN WALLED TUBE | SPT SPLIT SPOON | CALIFORNIA MODIFIED SAMPLER | DISTURBED | NO RECOVERY | CORE

| DEPTH (feet) | SOIL DESCRIPTION | SOIL CLASSIFICATION | REMARKS/ OTHER TESTS |
|---|---|---|---|
| | PAVEMENT, Conrete = 8 in. | | |
| | SAND (FILL), brown, moist, medium- to coarse-grained, little fine with gravels. | SM | Bulk sample 1-5 ft. EI, MP, RV |
| 5 | ...very dense, rock at tip sampler NR. | | N = 79 |
| | SAND, light brown, slightly moist, medium- to coarse-grained, little silt and gravels, dense. | SW-SM | Blow count = 54/12 in. PS, DS, C |
| 10 | GRAVEL, light brown, damp, coarse-grained sands, trace of silt, desne. | GP-GM | PS |
| 15 | SAND, light brown, slightly moist, fine-grained,trace of silt, medium dense | SP-SM | Blow count = 20/12 in. 200 Wash |
| 20 | ...damp, micaceous, trace of silt, medium dense. | | 200 Wash |
| 25 | ...fine- to medium-grained, very dense | | Blow count = 50/4 in. 200 Wash |
| 30 | ...fine-grained, medium dense | | 200 Wash |
| 35 | | | |

DRY DENSITY (PCF): 80 90 100 110 120

Water Content (%):

Plastic Limit ($W_P$) — Liquid Limit ($W_L$)

Penetration, blows/foot: 10 20 30 40 50

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| | | | |
|---|---|---|---|
| PROJECT | **Kaiser Permanente -- ED Expansion 1011 Baldwin Park Boulevard, Baldwin Park, CA** | | **BORING NO. B-1** |
| DEPTH TO WATER feet ▼ | SURFACE ELEV. **322 feet** | LOGGED BY **HDN** | PROJECT NO. **C21-0415** |
| DEPTH TO SLOUGH ▲ | DRILL RIG **GtechDrill GT8** DRILLER **2R Drilling** | DATE LOGGED **10/25/2021** | FIGURE NO. B- **2** |

Note: This log of boring should be evaluated in conjunction with the complete geotechnical report. This log of boring represents conditions observed at the specific boring location and at the date indicated.

# LOG OF BORING

SAMPLE TYPE: THIN WALLED TUBE | SPT SPLIT SPOON | CALIFORNIA MODIFIED SAMPLER | DISTURBED | NO RECOVERY | CORE

| DEPTH (feet) | GRAPHIC LOG | SOIL DESCRIPTION | SOIL CLASSIFICATION | SAMPLE | DRY DENSITY (PCF) 80 90 100 110 120; Water Content (%); Plastic Limit ($W_P$) — Liquid Limit ($W_L$); Penetration, blows/foot: 10 20 30 40 50 | REMARKS/ OTHER TESTS |
|---|---|---|---|---|---|---|
| | | SAND, light brown, slightly moist, fine-grained, trace of silt and gravels, dense. | SP-SM | | | 200 Wash |
| 40 | | ...little gravels, dense | | | | 200 Wash |
| 45 | | ...trace of silt, damp | | | | 200 Wash |
| 50 | | ...little silt | | | | 200 Wash |
| 55 | | ...trace of silt | | | | 200 Wash |
| 60 | | End of Boring at 56.5 feet.<br>Boring dry at completion of drilling.<br>Backfilled with soil cuttings. | | | | |
| 65 | | | | | | |
| 70 | | | | | | |

HDNGEO

| | | | |
|---|---|---|---|
| PROJECT | **Kaiser Permanente -- ED Expansion**<br>**1011 Baldwin Park Boulevard, Baldwin Park, CA** | | **BORING NO. B-1** |
| DEPTH TO WATER feet ▼ | SURFACE ELEV. **322 feet** | LOGGED BY **HDN** | PROJECT NO. **C21-0415** |
| DEPTH TO SLOUGH ▲ | DRILL RIG **GtechDrill GT8**<br>DRILLER **2R Drilling** | DATE LOGGED **10/25/2021** | FIGURE NO. B- **2** |

Note: This log of boring should be evaluated in conjunction with the complete geotechnical report. This log of boring represents conditions observed at the specific boring location and at the date indicated.

# LOG OF BORING

SAMPLE TYPE: THIN WALLED TUBE | SPT SPLIT SPOON | CALIFORNIA MODIFIED SAMPLER | DISTURBED | NO RECOVERY | CORE

| DEPTH (feet) | SOIL DESCRIPTION | SOIL CLASSIFICATION | REMARKS/ OTHER TESTS |
|---|---|---|---|
| | PAVEMENT, Conrete = 8 in. | | |
| | SAND (FILL), grayish brown, moist, medium- to coarse-grained, little fine w gravels. | SM | Bulk sample 1-5 ft. Ch, ER, pH, $SO_4$ |
| 5 | ...silty with gravels, medium dense | | Blow count = 34/12 in. DS, C |
| | SAND, light brown, slightly moist, medium- to coarse-grained, trace of silt, medium dense. ...become gravelly sand | SP-SM | PS |
| 10 | SAND, light brown, damp, gravelly, trace of silt, medium desne. | SP | Blow count = 31/12 in. PS, DS |
| 15 | SAND, light brown, slightly moist, fine-grained, trace of silt and gravels, loose. | SP-SM | 200 Wash |
| 20 | ...little silt, medium dense. | | Blow count = 38/12 in. 200 Wash |
| 25 | ...dense | | |
| 30 | ... damp, medium- to coarse grained, some gravels, very dense | | Blow count = 79/12 in. |
| 35 | | | |

DRY DENSITY (PCF): 80 90 100 110 120

Water Content (%):

Plastic Limit ($W_P$) — Liquid Limit ($W_L$)

Penetration, blows/foot: 10 20 30 40 50

HDNGEO

| | | | |
|---|---|---|---|
| PROJECT | **Kaiser Permanente -- ED Expansion 1011 Baldwin Park Boulevard, Baldwin Park, CA** | | **BORING NO. B-2** |
| DEPTH TO WATER feet ▼ | SURFACE ELEV. **322 feet** | LOGGED BY **HDN** | PROJECT NO. **C21-0415** |
| DEPTH TO SLOUGH ▲ | DRILL RIG **GtechDrill GT8** DRILLER **2R Drilling** | DATE LOGGED **10/25/2021** | FIGURE NO. B- **3** |

Note: This log of boring should be evaluated in conjunction with the complete geotechnical report. This log of boring represents conditions observed at the specific boring location and at the date indicated.

# LOG OF BORING

SAMPLE TYPE: THIN WALLED TUBE | SPT SPLIT SPOON | CALIFORNIA MODIFIED SAMPLER | DISTURBED | NO RECOVERY | CORE

| DEPTH (feet) | GRAPHIC LOG | SOIL DESCRIPTION | SOIL CLASSIFICATION | SAMPLE | DRY DENSITY (PCF) 80 90 100 110 120; Water Content (%); Plastic Limit ($W_P$) — Liquid Limit ($W_L$); Penetration, blows/foot: 10 20 30 40 50 | REMARKS/ OTHER TESTS |
|---|---|---|---|---|---|---|
| 40 | | SAND, light brown, slightly moist, micaceous fine-grained, trace of silt and gravels, dense. | SP-SM | | | 200 Wash |
| | | ...medium- to coarse- grained, little gravels, dense | | | | |
| 45 | | GRAVEL, light brown, damp, medium- to coarse sands, trace of silt, rock at tip of sampler, very dense. | GP | | | N = 63 |
| 50 | | SAND, light brown, slightly moist, fine-grained, silty, medium dense. | SP-SM | | | 200 Wash |
| 55 | | ...trace of silt, some gravels, very dense | | | | N = 68 |
| 60 | | End of Boring at 56.5 feet.<br>Boring dry at completion of drilling.<br>Backfilled with soil cuttings. | | | | |
| 65 | | | | | | |
| 70 | | | | | | |

HDNGEO

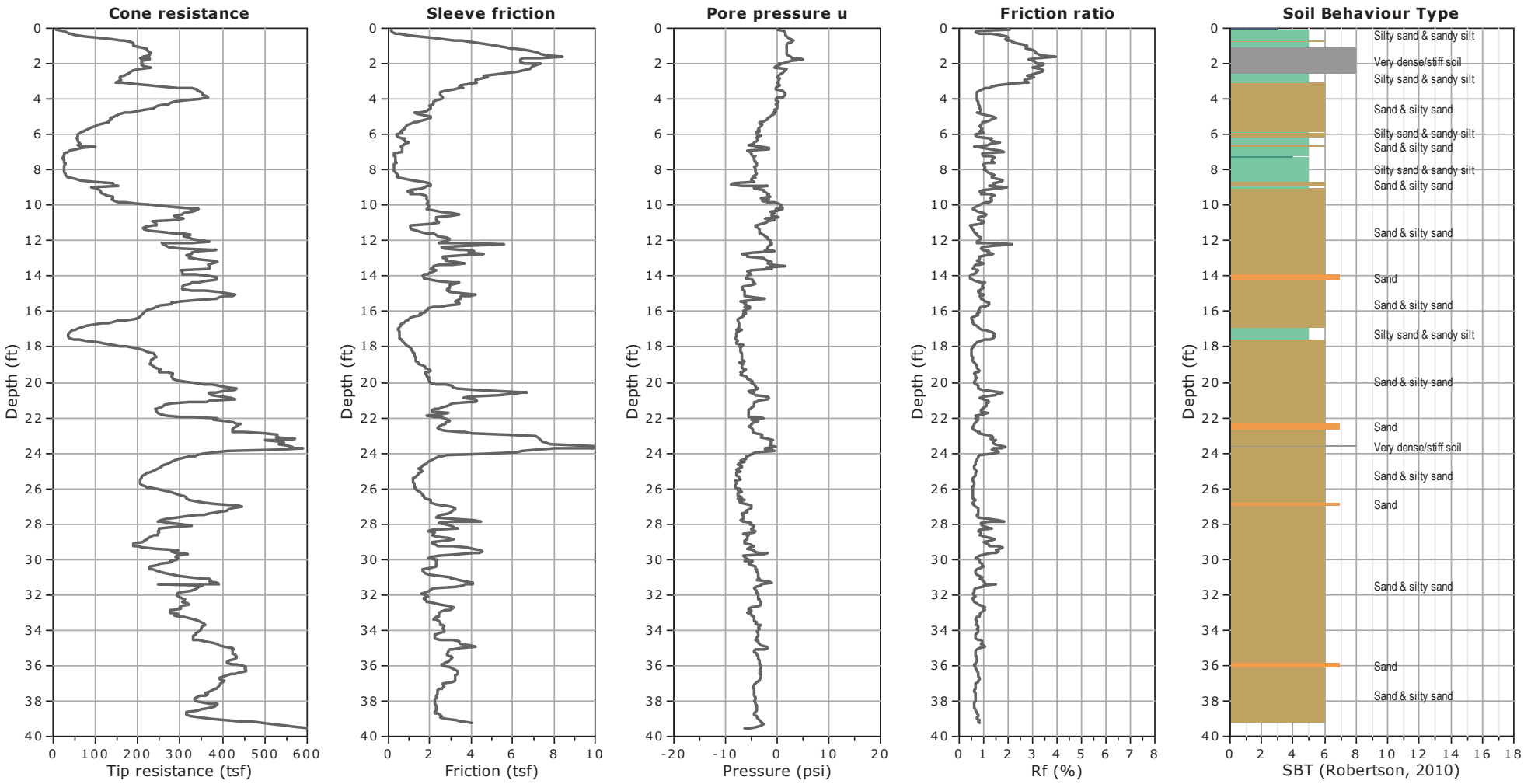
| | | | |
|---|---|---|---|
| PROJECT | **Kaiser Permanente -- ED Expansion**<br>**1011 Baldwin Park Boulevard, Baldwin Park, CA** | | **BORING NO. B-2** |
| DEPTH TO WATER feet ▼ | SURFACE ELEV. **322 feet** | LOGGED BY **HDN** | PROJECT NO. **C21-0415** |
| DEPTH TO SLOUGH ▼ | DRILL RIG **GtechDrill GT8**<br>DRILLER **2R Drilling** | DATE LOGGED **10/25/2021** | FIGURE NO. B- **3** |

Note: This log of boring should be evaluated in conjunction with the complete geotechnical report. This log of boring represents conditions observed at the specific boring location and at the date indicated.

**Kehoe Testing and Engineering**
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

**Project:** HDNGEO / ED Expansion
**Location:** Baldwin Park, CA

**CPT-1**
Total depth: 39.57 ft, Date: 10/15/2021





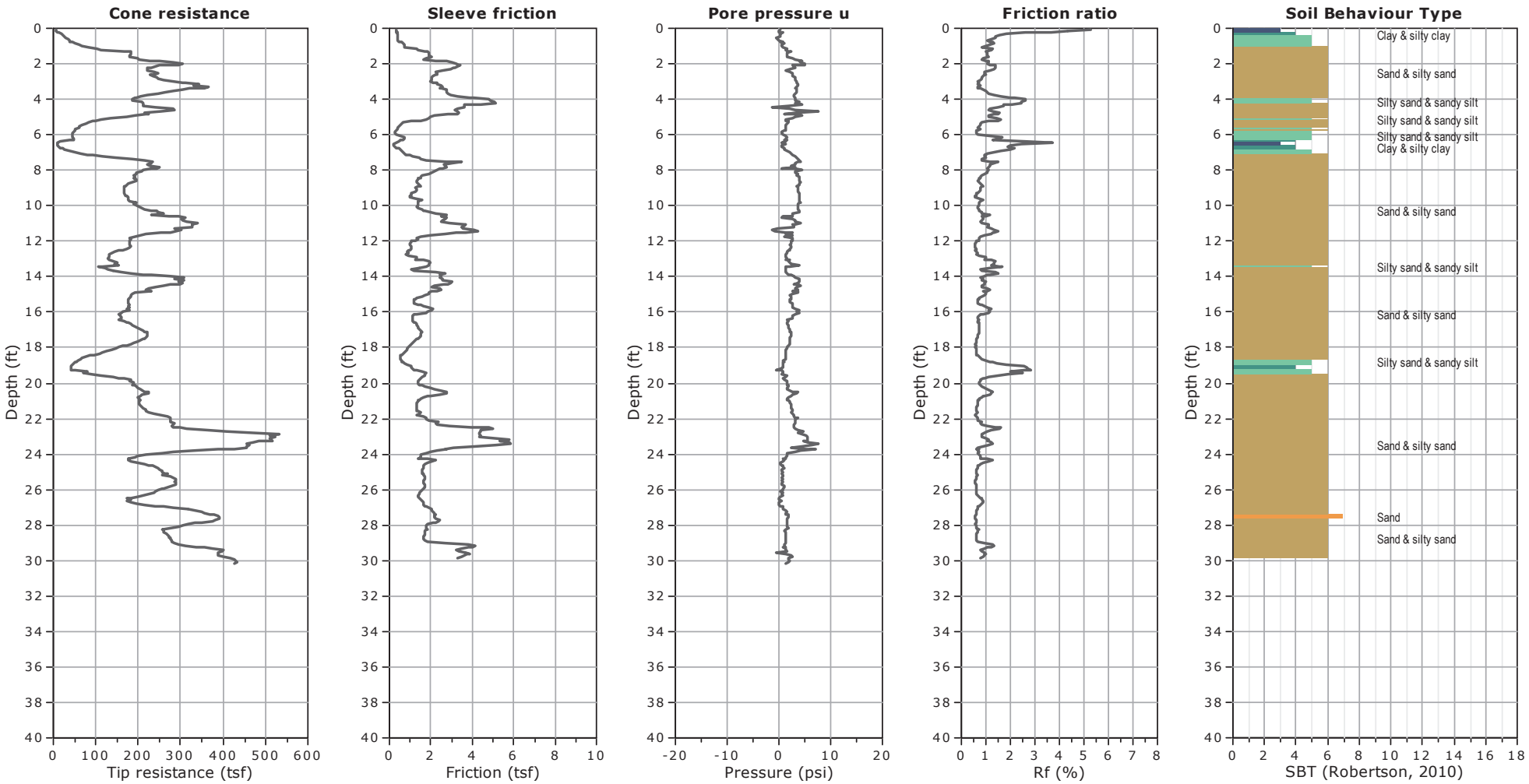

HDNGEO

FIGURE B-4

**Kehoe Testing and Engineering**
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

**Project:** **HDNGEO / ED Expansion**
**Location:** **Baldwin Park, CA**

**CPT-2**
Total depth: 30.18 ft, Date: 10/15/2021






**HDNGEO**

**FIGURE B-5**

# BORING 11

DATE DRILLED: June 23, 1986

EQUIPMENT USED: 18"-Diameter Bucket

ELEVATION 99.3

| ELEVATION (ft.) | DEPTH (ft.) | "N" VALUE STD. PEN. TEST | MOISTURE (% of dry wt.) | DRY DENSITY (lbs./cu. ft.) | DRIVE ENERGY (ft.-kips/ft.) | SAMPLE LOC. | |
|---|---|---|---|---|---|---|---|
| | | | 4.4 | 109 | 12 | | SM |
| | | | 7.0 | 105 | 10 | | SP |
| 95 | 5 | | 4.0 | 112 | 5 | | |
| | | | 2.9 | 112 | 8 | | |
| 90 | 10 | | 5.3 | 103 | 12 | | |
| 85 | 15 | | 12.9 | 93 | 8 | | |
| 80 | 20 | | 2.4 | 111 | 10 | | |
| 75 | 25 | | 3.5 | 107 | 10 | | |
| 70 | 30 | | 1.8 | 107 | 11 | | |
| 65 | 35 | | 3.1 | 118 | 17 | | |
| 60 | 40 | | 4.6 | 115 | 26 | | |

2" Asphaltic Paving

SILTY SAND - fine, about 10% Gravel, some Cobbles, light grey

Lens of Sand

SAND - fine to medium, some fines, about 10% Gravel, some Cobbles, grey

Light grey

Some Gravel

Fine Sand

Fine to medium Sand

NOTE: Water not encountered. Caving below 3' (to 2½' in diameter).

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

## LOG OF BORING

LeROY CRANDALL AND ASSOCIATES

GEOVision
geophysical services

# REPORT

# SURFACE WAVE MEASUREMENTS

# KAISER PERMANENTE
# BALDWIN PARK, CALIFORNIA

**GEO***Vision* Project No. 21365

*Prepared for*

HDNGEO
9877 Chapman Ave.
Garden Grove, CA 92841

*Prepared by*

**GEO***Vision*, Inc.
1124 Olympic Drive
Corona, California 92881
(951) 549-1234

Report 21365-01 Rev 0

November 9, 2021

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# 1 INTRODUCTION

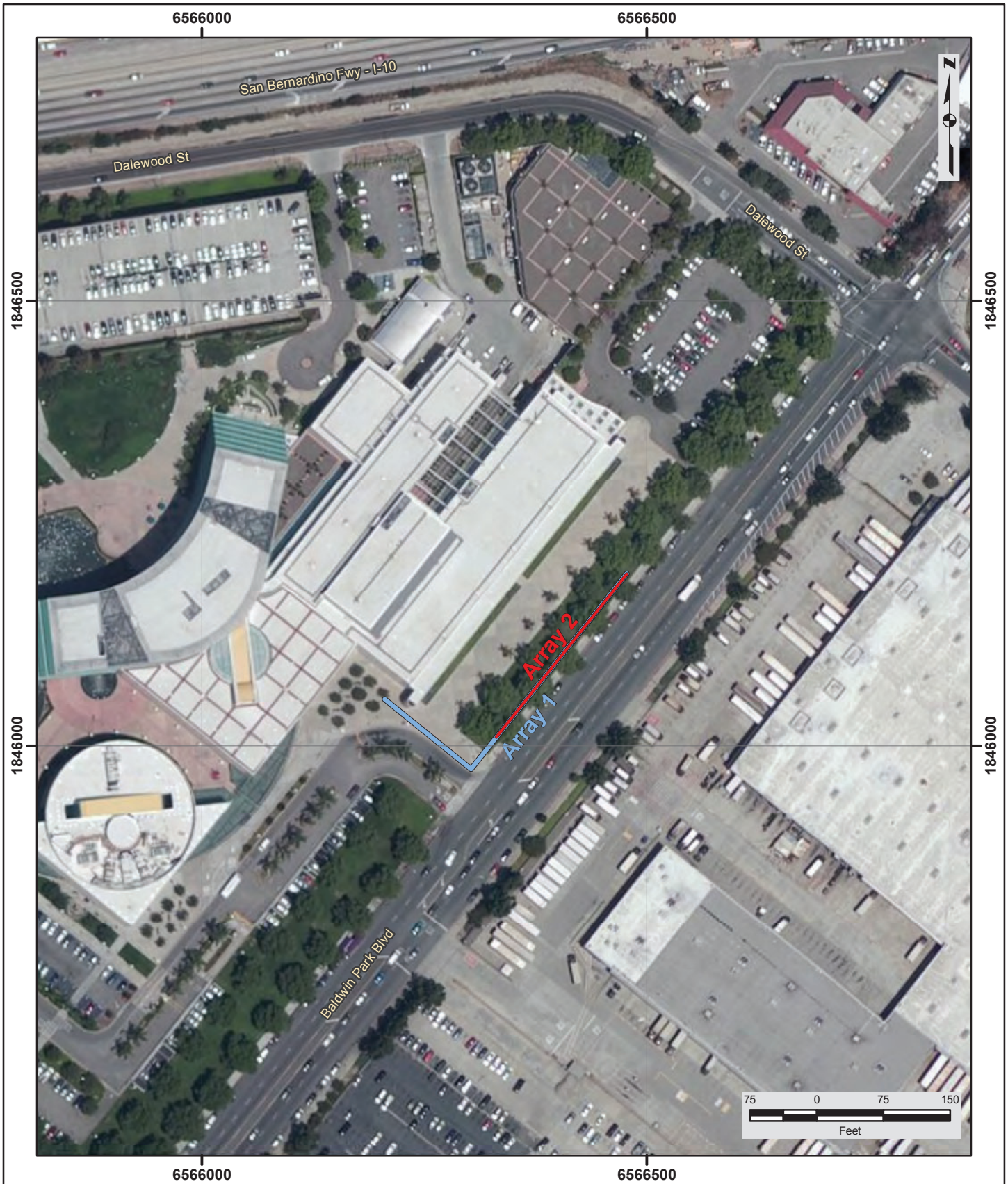
In-situ seismic measurements using active- and passive-source surface wave techniques were performed at Kaiser Permanente, Baldwin Park, California on October 25, 2021. The purpose of this investigation was to provide a shear (S) wave velocity profile to a depth of 100 ft (30 m), or greater, and estimate the average S-wave velocity of the upper 30 m ($V_{S30}$) or 100 ft ($V_{S100ft}$). The active-source surface wave technique utilized during this investigation consisted of the multi-channel analysis of surface waves (MASW) method. The passive-source surface wave technique consisted of the array microtremor method. The locations of the active- and passive-source surface wave testing locations are shown on Figure 1. Array microtremor measurements were made using an L-shaped array (Array 1) and MASW measurements were made on a linear array along one of the legs of Array 1 (Array 2).

For seismic design, the 2019 California Buiilding Code (CBC) and 2018 International Building Code (IBC) reference the provisions in ASCE/SEI 7-16 (Minimum Design Loads and Associated Criteria for Buildings and Other Structures). The Site Classes and associated S-wave velocity ranges outlined in Table 20.3-1 of ASCE/SEI 7-16 are as follows:

Site Class A – Hard rock – $V_{S100ft} > 5{,}000$ ft/s
Site Class B – Rock – $2{,}500 < V_{S100ft} \leq 5{,}000$ ft/s
Site Class C – Very dense soil and soft rock – $1{,}200 < V_{S100ft} \leq 2{,}500$ ft/s
Site Class D – Stiff soil – $600 < V_{S100ft} \leq 1{,}200$ ft/s
Site Class E – Soft clay soil – $V_{S100ft} < 600$ ft/s (IBC)
Site Class F – Soils requiring site response analysis

At many sites, active surface wave techniques (MASW) with the utilization of portable energy sources, such as hammers and weight drops, are sufficient to obtain S-wave velocity sounding to 100 ft (30 m) depth. At sites with high ambient noise levels and/or very soft soils, these energy sources may not be sufficient to image to this depth and a larger energy source, such as a bulldozer, is necessary. Alternatively, passive surface wave techniques, such as the array microtremor technique can be used to extend the depth of investigation at sites that have adequate ambient noise conditions. It should be noted that two-dimensional passive-source surface wave arrays (e.g., triangular, circular, or L-shaped arrays) are expected to perform better than linear arrays.

This report contains the results of the active and passive surface wave measurements conducted at the site. An overview of the surface wave methods is given in Section 2. Field and data reduction procedures are discussed in Sections 3 and 4, respectively. Data modeling is presented in Section 5 and interpretation and results are presented in Section 6. References and our professional certification are presented in Sections 7 and 8, respectively.




Active Surface Wave Array (MASW)
Passive Surface Wave Array (L-Shaped)

NOTES:
1. Coordinate System: California State Plane, NAD83, Zone V (0405), US Survey Feet
2. Base map source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

GEOVision geophysical services

| | |
|---|---|
| Date: | 11/5/2021 |
| GV Project: | 21365 |
| Developed by: | A McNab |
| Drawn by: | T Rodriguez |
| Approved by: | A Martin |
| File Name: | 21365-1.MXD |

**FIGURE 1**
**SITE MAP**

**SITE LOCATED AT**
**KAISER PERMANENTE**
**BALDWIN PARK, CALIFORNIA**

**PREPARED FOR**
**HDNGEO**

# 2 OVERVIEW OF SURFACE WAVE TECHNIQUES

## 2.1 Introduction

Active- and passive-source (ambient vibration) surface wave techniques are routinely utilized for site characterization. Active surface wave techniques include the spectral analysis of surface waves (SASW) and multi-channel array surface wave (MASW) methods. Passive surface wave techniques include the horizontal over vertical spectral ratio (HVSR) technique and the array and refraction microtremor methods.

The basis of surface wave methods is the dispersive characteristic of Rayleigh and Love waves when propagating in a layered medium. Surface waves of different wavelengths ($\lambda$) or frequencies (f) sample different depth. As a result of the variance in the shear stiffness of the distinct layers, waves with different wavelengths propagate at different phase velocities; hence, dispersion. A surface wave dispersion curve is the variation of $V_R$ or $V_L$ with $\lambda$ or f. The Rayleigh wave phase velocity ($V_R$) depends primarily on the material properties ($V_S$, mass density, and Poisson's ratio or compression wave velocity) over a depth of approximately one wavelength. The Love wave phase velocity ($V_L$) depends primarily on $V_S$ and mass density. Rayleigh and Love wave propagation are also affected by damping or seismic quality factor (Q). Rayleigh wave techniques are utilized to measure vertically polarized S-waves ($S_V$-wave); whereas Love wave techniques are utilized to measure horizontally polarized S-waves ($S_H$-wave).

## 2.2 Surface Wave Techniques

The MASW and array microtremor techniques were utilized during this investigation and are discussed below.

### 2.2.1 MASW Technique

A description of the MASW method is given by Park, 1999a and 1999b and Foti, 2000. Ground motions are typically recorded by 24, or more, geophones typically spaced 1 to 3 m apart along a linear array and connected to a seismograph. Energy sources for shallow investigations include various sized hammers and vehicle mounted weight drops. When applying the MASW technique to develop a one-dimensional (1-D) $V_S$ model, it is preferable to use multiple-source offsets from both ends of the array. The most commonly applied MASW technique is the Rayleigh-wave based MASW method, which we refer to as $MAS_RW$ to distinguish from Love-wave based MASW ($MAS_LW$). $MAS_RW$ and $MAS_LW$ acquisition can easily be combined with P- and S-wave seismic refraction acquisition, respectively. $MAS_RW$ data are generally recorded using a vertical source and vertical geophone but may also be recorded using a horizontal geophone with radial (in-line) orientation. $MAS_LW$ data are recorded using transversely orientated horizontal source and transverse horizontal geophone.

A wavefield transform is applied to the time-history data to convert the seismic record from time-offset space to frequency-wavenumber (f-k) space in which the fundamental or higher surface-wave modes can be easily identified as energy maxima and picked. Frequency and/or wavenumber can easily be mapped to phase velocity, slowness, or wavelength using the following properties: $k = 2\pi/\lambda$, $\lambda = v/f$. Common wave-field transforms include: the f-k transform (a 2D fast Fourier transform), slant-stack transform (also referred to as intercept-

slowness or τ-p transform and equivalent to linear Radon transform), frequency domain beamformer, and phase-shift transform. The minimum wavelength that can be recovered from MASW data set without spatial aliasing is equal to the minimum receiver spacing. Occasionally, SASW analysis procedures are used to extract surface wave dispersion data, from fixed receiver pairs, at smaller wavelengths than can be recovered by wavefield transformation. Construction of a dispersion curve over the wide frequency/wavelength range necessary to develop a robust $V_S$ model while also limiting the maximum wavelength based on an established near-field criterion (e.g. Yoon and Rix, 2009; Li and Rosenblad, 2011), generally requires multiple source offsets.

Although the clear majority of MASW surveys record Rayleigh waves, it has been shown that Love wave techniques can be more effective in some environments, particularly shallow rock sites and sites with a highly attenuative, low velocity surface layer (Xia, et al., 2012; **GEO***Vision*, 2012; Yong, et al., 2013; Martin, et al., 2014). Rayleigh wave techniques, however, are generally more effective at sites where velocity gradually increases with depth because larger energy sources are readily available for the generation of Rayleigh waves. Rayleigh wave techniques are also more applicable to sites with high velocity layers and/or velocity inversions because the presence of such structures is more apparent in the Rayleigh wave dispersion curves than in Love wave dispersion curves. Rayleigh wave techniques are preferable at sites with a high velocity surface layer because Love waves do not theoretically exist in such environments. Occasionally, the horizontal radial component of a Rayleigh wave may yield higher quality dispersion data than the vertical component because different modes of propagation may have more energy in one component than the other. Recording both the vertical and horizontal components of the Rayleigh wave is particularly useful at sites with complex modes of propagation or when attempting to recover multiple Rayleigh wave modes for multi-mode modeling as demonstrated in Dal Moro, et al, 2015. Joint inversion of Rayleigh and Love wave data may yield more accurate $V_S$ models and also offer a means to investigate anisotropy, where $S_V$- and $S_H$-wave velocity are not equal, as shown in Dal Moro and Ferigo, 2011.

### 2.2.2 Array Microtremor Technique

A detailed discussion of the array microtremor method can be found in Okada, 2003. Unlike active source techniques which use an active energy source (i.e. hammer), the array microtremor technique (also referred to as passive surface wave or array ambient vibration method) records background noise (ambient vibrations) emanating from ocean wave activity, wind noise, traffic, industrial activity, construction, etc. The technique uses 4, or more, receivers aligned in a 2-dimensional array. Triangle, circle, semi-circle, and "L" shaped arrays are commonly used, although any 2-dimensional arrangement of receivers can be used. For investigations of the upper 100 m, receivers typically consist of 1 to 4.5 Hz geophones. For deeper investigations, 5 to 120 s seismometers are generally utilized. The nested triangle array, which consists of several embedded equilateral triangles, is popular as it provides accurate dispersion curves with a relatively small number of geophones. The "L" array is useful at sites located at the corner of intersecting streets. The maximum receiver separation in an array should be at a minimum equal to the desired depth of investigation. Typically, 15 to 60 minutes of ambient vibration data is recorded depending on the size of the array, desired depth of investigation, and noise conditions. Investigations to depths on the order of 1 km may require that ambient vibrations are recorded for a much longer duration. The surface wave dispersion curve is typically estimated from array microtremor data using various f-k methods such as beamforming (Lacoss, et al., 1969), and

maximum-likelihood (Capon, 1969), and the spatial-autocorrelation (SPAC) method. The beam-forming and maximum-likelihood methods are generally referred to as the frequency wavenumber (FK) and high-resolution frequency wavenumber (HRFK or HFK) methods. The SPAC method was originally based on work by Aki, 1957 and has since been extended and modified (Ling and Okada, 1993 and Ohori *et al*., 2002) to permit the use of noncircular arrays, and is now collectively referred to as extended spatial autocorrelation (ESPAC or ESAC). Further modifications to the SPAC method permit the use of irregular or random arrays (Bettig *et al*., 2001). Although it is common to apply SPAC methods to obtain a surface wave dispersion curve for modeling, other approaches involve direct modeling of the coherency data, also referred to as SPAC coefficients (Asten, 2006 and Asten, *et al*., 2015). The beam-forming and maximum-likelihood methods are generally referred to as the frequency wavenumber (FK) and high-resolution frequency wavenumber (HRFK or HFK) methods, respectively. More recently, a Rayleigh wave three-component beamforming method (RTBF) has been developed (Wathelet, et al., 2018) and appears to offer significant resolution enhancements over other methods.

FK, HRFK and RTBF methods are generally expected to perform better when ambient vibration sources are not azimuthally well-distributed (e.g. rural area where the primary noise source is a large industrial facility). SPAC methods are expected to perform better when noise sources are azimuthally well-distributed (e.g. in a large urbanized area).

The minimum wavelength surface wave that can be extracted from an array microtremor dataset acquired utilizing a symmetric array is typically set equal to the minimum receiver spacing. The maximum wavelength is often set equal to twice the maximum receiver separation for SPAC analysis and the maximum receiver spacing for FK analysis.

## 2.3 Surface Wave Dispersion Curve Modeling

The dispersion curves generated from the active and passive surface wave soundings are generally combined and modeled using iterative forward and inverse modeling routines. The final model profile is assumed to represent actual site conditions. The theoretical model used to interpret the dispersion curve assumes horizontally layered, laterally invariant, homogeneous-isotropic material. Although these conditions are seldom strictly met at a site, the results of active and/or passive surface wave testing provide a good "global" estimate of the material properties along the array. The results may be more representative of the site than a borehole "point" estimate.

The surface wave forward problem is typically solved using the Thomson-Haskell transfer-matrix (Thomson, 1950; Haskell, 1953) later modified by Dunkin (1965) and Knopoff (1964), dynamic stiffness matrix (Kausel and Roësset, 1981), or reflection and transmission coefficient (Kennett, 1974) methods. All of these methods can determine fundamental- and higher-mode phase velocities, which correspond to plane waves in 2-D space. The transfer-matrix method is often used in MASW and passive surface-wave software packages, whereas the dynamic stiffness matrix is utilized in many SASW software packages. MAS$_R$W and/or passive surface-wave modeling may involve modeling of the fundamental mode, some form of effective mode, or multiple individual modes (multi-mode). As outlined in Roësset et al. (1991), several options exist for forward modeling of Rayleigh wave SASW data. One formulation takes into account only fundamental mode plane Rayleigh-wave motion (called the 2-D solution), whereas another includes all stress waves (e.g. body, fundamental, and higher mode surface waves) and

incorporates a generalized receiver geometry (3-D global solution) or actual receiver geometry (3-D array solution).

The fundamental mode assumption is generally applicable to modeling Rayleigh-wave dispersion data collected at normally dispersive sites, providing there are not abrupt increases in velocity or steep velocity gradients. Effective-mode or multi-mode approaches are often required for irregularly dispersive sites and sites with steep velocity gradients at shallow depth. If active and passive surface wave data are combined or $MASW$ data are combined from multiple seismic records with different source offsets and receiver gathers, then effective-mode computations are limited to algorithms that assume far-field plane Rayleigh wave propagation. Local search (e.g. linearized matrix inversion methods) or global search methods (e.g., Monte Carlo approaches such as simulated annealing, generic algorithms and neighborhood algorithm) are typically used to solve the inverse problem.

The maximum wavelength ($\lambda_{max}$) recovered from a surface wave data set is typically used to estimate depth of investigation although a sensitivity analysis of the $V_S$ models would be a more robust means to estimate depth of investigation. For normally dispersive velocity profiles with a gradual increase in $V_S$ with depth, the maximum depth of investigation is on the order of $\lambda_{max}/2$ for both Rayleigh and Love wave dispersion data. For velocity profiles with an abrupt increase in $V_S$ at depth, the maximum depth of investigation is on the order of $\lambda_{max}/3$ for Rayleigh wave dispersion data but less than $\lambda_{max}/3$ for Love wave dispersion data. The depth of investigation can be highly variable for sites with complex velocity structure (e.g. high velocity layers).

As with all surface geophysical methods, the inversion of surface wave dispersion data does not yield a unique $V_S$ model and multiple possible solutions may equally fit the experimental data. Based on experience at other sites, the shear wave velocity models ($V_S$ and layer thicknesses) determined by surface wave testing are within 20% of the velocities and layer thicknesses that would be determined by other seismic methods (Brown, 1998). The average velocity of the upper 30 m (100 ft), however, is much more accurate, often to better than 5%, because it is not sensitive to the layering in the model. $V_{S30}$ does not appear to suffer from the non-uniqueness inherent in $V_S$ models derived from surface wave dispersion curves (Martin et al., 2006, Comina et al., 2011). Therefore, $V_{S30}$ is more accurately estimated from the inversion of surface wave dispersion data than the resulting $V_S$ models.

It may not always be possible to develop a coherent, fundamental mode dispersion curve over sufficient frequency range for modeling due to dominant higher modes with the higher modes not clearly identifiable for multi-mode modeling. It may, however, be possible to identify the Rayleigh wave phase velocity of the fundamental mode at 40 m wavelength ($V_{R40}$) in which case $V_{S30}$ can at least be estimated using the Brown et al., 2000 relationship:

$$V_{S30} = 1.045V_{R40}$$

This relationship was established based on a statistical analysis of a large number of surface wave data sets from sites with control by velocities measured in nearby boreholes and has been further evaluated by Martin and Diehl, 2004, and Albarello and Gargani, 2010. Further investigation of this approach has revealed that $V_{S30}$ is generally between $V_{R40}$ and $V_{R45}$ with $V_{R40}$ often being most appropriate for shallow groundwater sites and $V_{R45}$ for deep ground water sites. A detailed study of such an approach for Love wave dispersion data has not been

conducted; however, preliminary analysis demonstrates that $V_{S30}$ is generally between $V_{L50}$ and $V_{L55}$. Although we do not recommend that these empirical $V_{S30}$ estimates replace modeling of surface wave dispersion data, they do offer a means of cost effectively evaluating $V_{S30}$ over a large area. $V_{R40}$ or $V_{L55}$ can also be used to quantify error in $V_{S30}$ by evaluating the scatter in the dispersion data at these wavelengths.

# 3 FIELD PROCEDURES

The active- and passive-source surface wave sounding locations at the site were established by **GEO***Vision* personnel and are shown in Figure 1. Two types of surface wave data were acquired at the site: an active-source surface wave array to characterize near-surface velocity structure and a passive-source surface wave array to characterize deeper velocity structure. Passive surface wave data were acquired along Array 1 using the array microtremor method. Active surface wave data were acquired along Array 2 using the MASW technique.

The passive surface wave equipment consisted of two Geometrics Geode signal enhancement seismographs, 4.5 Hz vertical geophones, and seismic cables. The L-shaped Array 1 consisted of 48, 4.5 Hz geophones spaced 10 ft apart with the legs of the array being 190 ft and 280 ft long.

Ambient noise measurements were made along the passive array for 60 minutes with a 2-millisecond sample rate (120, 30 second records). All passive surface wave data were stored on a laptop computer for later processing. The field geometry and associated files names were documented in field notes.

MASW equipment used during this investigation consisted of one Geometrics Geode signal enhancement seismographs, 4.5 Hz vertical geophones, seismic cable, a 4 lb. hammer, and a 20 lb. sledgehammer. MASW data were acquired along a linear array of 48 geophones spaced 5 ft apart. Shot points were located between 5 and 45 ft from the end geophone locations and at 35 ft intervals in the interior of the array. The 20 lb. hammer were used for off-end shots and 4 lb. hammer and 20 lb. sledgehammer were used for the end shots as well as interior source locations. Data from the transient impacts (hammers) were generally averaged 8 to 10 times to improve the signal-to-noise ratio. All field data were saved to hard disk and documented on field data acquisition forms.

# 4 DATA REDUCTION

The MASW data were reduced using the software Seismic Pro Surface V9.0 developed by Geogiga and multiple in-house scripts for various data extraction and formatting tasks, with all data reduction documented in a Microsoft Excel spreadsheet.

The following steps were used for data reduction:

- Input seismic records to be used for analysis into software package.
- Check and correct source and receiver geometry as necessary.
- Select offset range used for analysis (multiple offset ranges utilized for each seismic record as discussed below) and document in spreadsheet.
- Apply phase shift transform to seismic record to convert the data from time – offset to frequency – phase velocity space.
- Identify, pick, save, and document dispersion curve.
- Change the receiver offset range and repeat process.
- Repeat process for all seismic records.
- Use in-house script to apply near-field criteria with maximum wavelength set equal to 1.0 times the source to midpoint of receiver array distance.
- Use in-house script to merge multiple dispersion curves extracted from the MASW data collected along each seismic line for a specific source type (different source locations, different receiver offset ranges, etc.).
- Edit dispersion data, as necessary (e.g. delete poor quality curves and outliers).
- Calculate a representative dispersion curve at equal log-frequency or log-wavelength spacing for the MASW dispersion data using a moving average, polynomial curve fitting routine.

This unique data reduction strategy, which can involve combination of over 70 dispersion curves for a 1D sounding, is designed for characterizing sites with complex velocity structure that do not yield surface wave dispersion data over a wide frequency range from a single source type or source location. The data reduction strategy ensures that the dispersion curve selected for modeling is representative of average conditions beneath the array and spans as broad a frequency/wavelength range as possible while considering near field effects.

The array microtremor data were reduced using the Seisimager software package developed by Oyo Corporation/Geometrics, Inc. and the following steps:

The processing sequence for implementation of the ESAC method in the SeisImager software package is as follows:

- Input all seismic records for a dataset into software.
- Load receiver geometry (x and y positions) for each channel in seismic record.
- Calculate the SPAC coefficients for each seismic record and average.
- Optionally, select a subset of receiver offset ranges for analysis (e.g. only select receiver pairs with multiple azimuths).
- For each frequency calculate the RMS error between the SPAC coefficients and a Bessel function of the first kind and order zero over a user defined phase velocity range and velocity step.

- Plot an image of RMS error as a function for frequency (f) and phase velocity (v).
- Identify and pick the dispersion curve as the continuous trend on the f-v image with the lowest RMS error.
- Repeat the process for all arrays and time blocks.
- Use an in-house script to convert dispersion curves to appropriate format for editing.
- Edit dispersion data, as necessary, and use in-house script to combine all dispersion data after setting maximum wavelength to about 2 times the maximum receiver spacing (equivalent to $k_{min}/2$ for a symmetrical array).
- Calculate a representative dispersion curve for the passive dispersion data from each array using a moving average polynomial curve fitting routine.

The representative dispersion curves from the active and passive surface wave data were combined and the moving average polynomial curve fitting routine in WinSASW V3 was used to generate a composite representative dispersion curve for modeling. During this process, the active and passive surface wave dispersion data were given equal weights. An equal logarithm wavelength sample rate was used for the representative dispersion curve to reflect the gradual loss in model resolution with depth.

# 5 DATA MODELING

Surface wave data were modeled using the fundamental mode routine in the Seisimager WaveEq software package. During this process, an initial velocity model was generated based on general characteristics of the dispersion curve and the inverse modeling routine utilized to adjust the layer $V_S$ until an acceptable agreement with the observed data was obtained. Layer thicknesses were adjusted, and the inversion process repeated until a $V_S$ model was developed with low RMS error between the observed and calculated dispersion curves. In many cases, once an acceptable $V_S$ model is developed, layer thicknesses are again adjusted, and the inversion process repeated to develop an ensemble of $V_S$ models with similar RMS error to quantify non-uniqueness. Because the primary purpose of this investigation was to estimate $V_{S30}$, it was not considered necessary to develop multiple $V_S$ models. Data inputs into the modeling software include layer thickness, S-wave velocity, P-wave velocity or Poisson's ratio, and mass density. P-wave velocity and mass density only have a very small influence (i.e., less than 10%) on the S-wave velocity model generated from a surface wave dispersion curve. However, realistic assumptions for P-wave velocity, which is significantly impacted by the location of the saturated zone, and mass density will slightly improve the accuracy of the S-wave velocity model.

Constant mass density values of 1.83 to 2.03 gm/cm$^3$ (114 to 126 lb/ft$^3$) were used in the velocity profiles for subsurface soils/rock depending on P- and S-wave velocity. Within the normal range encountered in geotechnical engineering, variation in mass density has a negligible (±2%) effect on the estimated $V_S$ from surface wave dispersion data. During modeling of Rayleigh wave dispersion data, the compression wave velocity, $V_P$, for unsaturated sediments was estimated using a Poisson's ratio, $v$, of 0.3 and the relationship:

$$V_P = V_S\,[(2(1-v))/(1-2v)]^{0.5}$$

Poisson's ratio has a larger effect than density on the estimated $V_S$ from Rayleigh wave dispersion data. Achenbach (1973) provides approximate relationship between Rayleigh wave velocity ($V_R$), $V_S$ and $v$:

$$V_R = V_S\,[(0.862 + 1.14\,v)/(1+ v)]$$

Using this relationship, it can be shown that $V_S$ derived from $V_R$ only varies by about 10% over possible 0 to 0.5 range for Poisson's ratio where:

$$V_S = 1.16V_R \text{ for } v = 0$$
$$V_S = 1.05V_R \text{ for } v = 0.5$$

The realistic range of Poisson's ratio for typical unsaturated sediments is about 0.25 to 0.35. Over this range, $V_S$ derived from modeling of Rayleigh wave dispersion data will vary by about 5%. There is no evidence of shallow groundwater based on the seismic refraction first arrival data. It was assumed that the depth to the high Poisson's ratio, saturated zone is about 100 ft.

# 6 INTERPRETATION AND RESULTS

The fit of the calculated fundamental mode dispersion curve to the experimental data collected along Arrays 1 and 2 and the modeled $V_S$ profile for the surface wave sounding are presented as Figure 2. The resolution decreases gradually with depth due to the loss of sensitivity of the dispersion curve to changes in $V_S$ at greater depth. The $V_S$ profile used to match the field data is provided in tabular form in both metric and Imperial units as Tables 1 and 2, respectively.

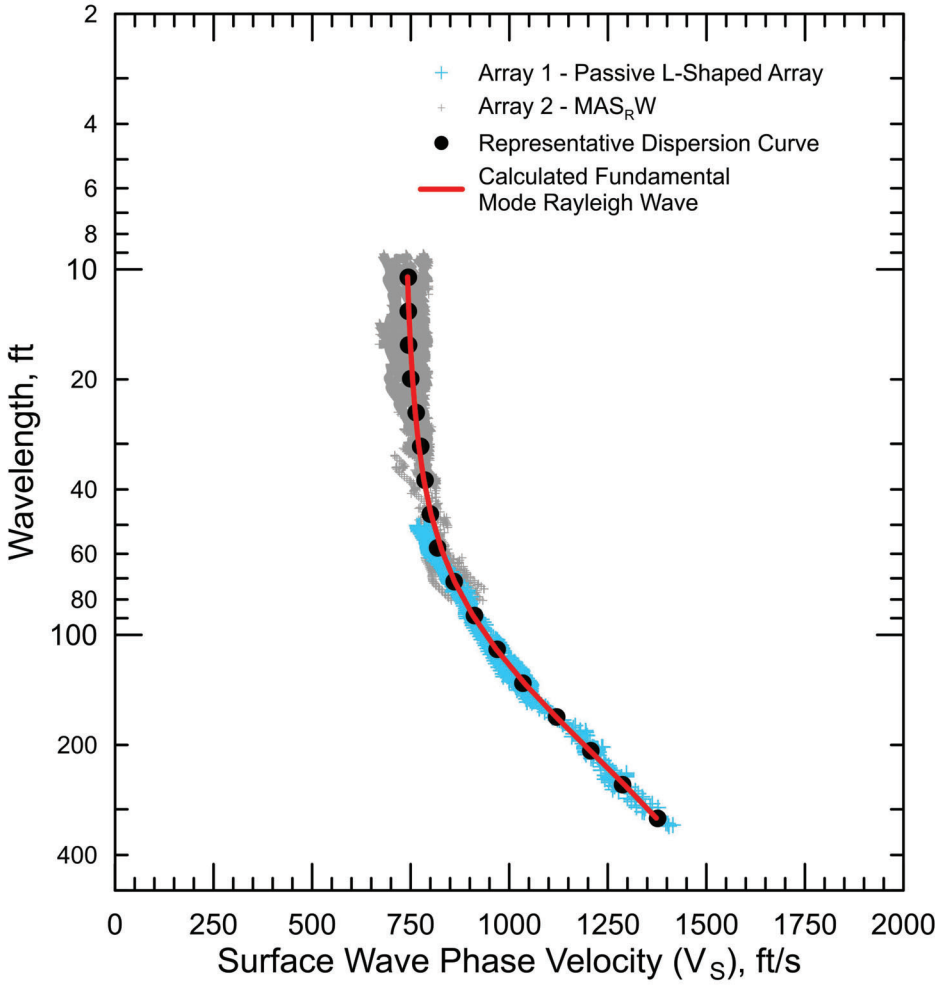
The $V_S$ models were developed from the surface wave dispersion data derived from array microtremor and MASW data acquired along Arrays 1 and 2, respectively. The Rayleigh wave phase velocities from the passive surface wave array are in good agreement with those from the MASW data in the region where they connect. Scatter in dispersion data from the two methods are expected to be associated with lateral velocity variability beneath the arrays.

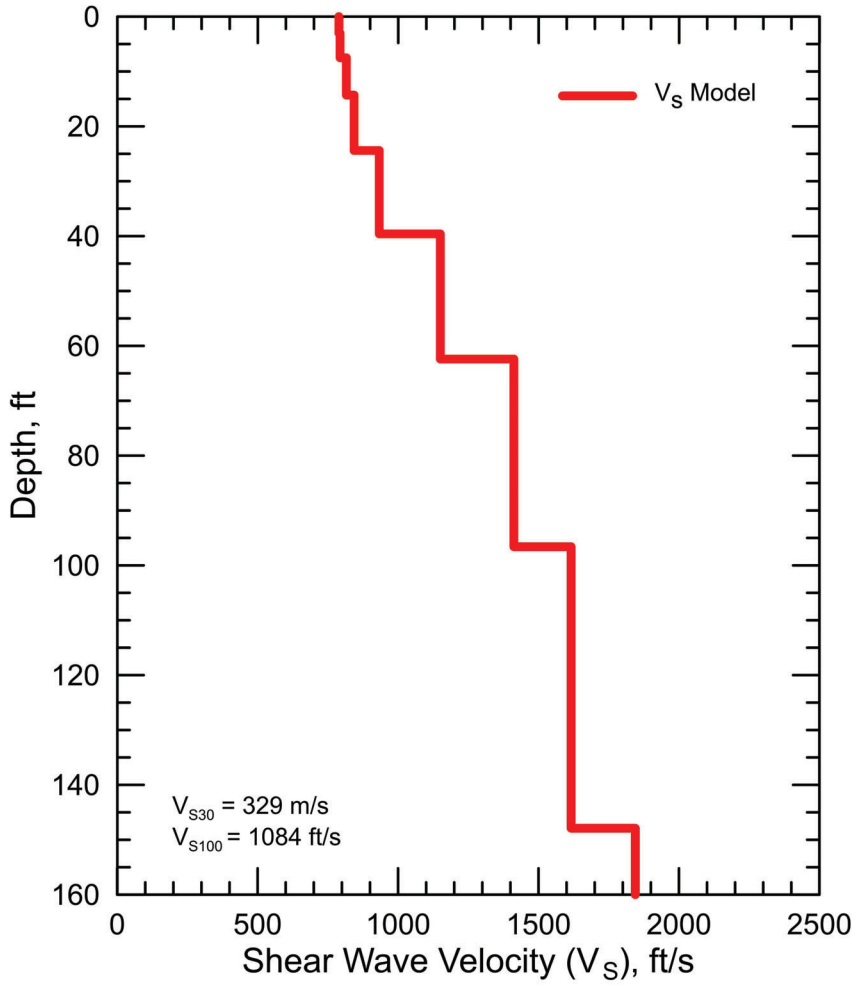
The estimated depth of investigation for the combined active and passive surface wave sounding is about 165 ft, about 50% of the maximum Rayleigh wave wavelength. The $V_S$ model indicates that $V_S$ ranges from about 790 ft/s immediately below the surface to about 1845 ft/s at a depth of about 148 ft.

The average shear wave velocity to a depth of 100 ft ($V_{S100ft}$) is 1084 ft/s for the $V_S$ model. Therefore, per the criteria in the 2019 CBC and ASCE/SEI 7-16, the site is classified as Site Class D, stiff soil.

**Table 1 Arrays 1 and 2 $V_S$ Model**

| Depth to Top of Layer (ft) | Layer Thickness (ft) | S-Wave Velocity (ft/s) | Inferred P-Wave Velocity (ft/s) | Inferred Poisson's Ratio | Assumed Density (lb/ft$^3$) |
|---|---|---|---|---|---|
| 0.0 | 3.0 | 789 | 1579 | 0.333 | 114 |
| 3.0 | 4.5 | 794 | 1588 | 0.333 | 115 |
| 7.5 | 6.8 | 816 | 1632 | 0.333 | 117 |
| 14.3 | 10.1 | 843 | 1687 | 0.333 | 118 |
| 24.4 | 15.2 | 933 | 1866 | 0.333 | 120 |
| 39.6 | 22.8 | 1150 | 2301 | 0.333 | 120 |
| 62.4 | 34.2 | 1412 | 2825 | 0.333 | 124 |
| 96.6 | 51.3 | 1616 | 3232 | 0.333 | 125 |
| 147.9 | Half Space | 1845 | 6280 | 0.453 | 127 |




| | |
|---|---|
| GEOVision geophysical services | FIGURE 2<br>SURFACE WAVE MODELS - A1 and A2<br>FUNDAMENTAL MODE ASSUMPTION |
| Project No: 21365 | KAISER PERMANENTE<br>BALDWIN PARK, CALIFORNIA |
| Date: Nov 8, 2021 | |
| Drawn By: A. McNab | |
| Approved By: | PREPARED FOR<br>HDNGEO |
| Figure 2.cdr | |

# 7 REFERENCES


Achenbach J, 1973, Wave Propagation in Elastic Solids, Elsevier, Amsterdam, Netherlands.

Aki K, 1957, Space and time spectra of stationary stochastic waves, with special reference to microtremors. *Bull. Earthq. Inst. Univ. Tokyo*, Vol. 35, p 415–457.

Albarello D and Gargani G, 2010, "Providing NEHRP soil classification from the direct interpretation of effective Rayleigh-wave dispersion curves", *Bulletin of the Seismological Society of America,* Vol. 100, No. 6, p 3284-3294.

Asten M, 2006, Site shear velocity profile interpretation from microtremor array data by direct fitting of SPAC curves, in *Proceedings of the Third Int. Symp. Effects of Surface Geol. Seismic Motion*, Vol. 2, LCPC Edition, Grenoble, France, August 30–September 01, Paper No. 99, p 1069-1080.

Asten M, Stephenson WJ and Hartzell, S, 2015, The use of wavenumber normalization in computing spatially averaged coherencies (krSPAC) of microtremor data from asymmetric arrays, *Proceedings 6th International Conference on Earthquake Geotechnical Engineering*, Christchurch, New Zealand, 9 p.

Bettig B, Bard PY, Scherbaum F, Riepl J, Cotton F, Cornou C and Hatzfeld D, 2001, Analysis of dense array noise measurements using the modified spatial auto-correlation method (SPAC): application to the Grenoble area, *Bollettino di Geofisica Teoricaed Applicata*, Vol 42, p 281–304.

Brown L, 1998, Comparison of $V_S$ profiles from SASW and borehole measurements at strong motion sites in Southern California, Master's thesis, University of Texas, Austin.

Brown L, Diehl J and Nigbor R, 2000, A simplified method to measure average shear-wave velocity in the top 30 m ($V_s30$), *Proc. 6th International Conference on Seismic Zonation*, p 1–6.

Capon J, 1969, High-resolution frequency-wavenumber spectrum analysis, *Proc. Institute of Electrical and Electronics Engineers (IEEE)*, Vol. 57, no. 8, p 1408–1418.

Comina C, Foti S, Boiero D, and Socco LV, 2011, Reliability of $V_{S,30}$ evaluation from surface-wave tests, *J. Geotech. Geoenviron. Eng.*, p 579–586.

Dal Moro G, Moura R, Moustafa A, 2015, Multi-component joint analysis of surface waves, *Journal of Applied Geophysics*, Vol. 119, p 128-138.

Dal Moro G and Ferigo F, 2011, Joint Analysis of Rayleigh- and Love-wave dispersion curves: Issues, criteria and improvements, *Journal of Applied Geophysics*, Vol. 75, p 573-589.

Dunkin J W, 1965, Computation of modal solutions in layered, elastic media at high frequencies, *Bulletin of the Seismological Society of America*, Vol. 55, pp. 335–358.

Foti S, 2000, Multistation Methods for Geotechnical Characterization using Surface Waves, Ph.D. Dissertation, Politecnico di Torino, Italy.

GEOVision, Inc (2012): EPRI (2004, 2006) ground-motion model (GMM) review project: Shear wave velocity measurements at seismic recording stations, http://www.epri.com/abstracts/Pages/ProductAbstract. aspx?ProductId=000000003002000719.

Haskell N A, 1953, The dispersion of surface waves on multilayered media, *Bull. Seismol. Soc. Am.*, v. 43, pp. 17–34.

García-Jerez A, Piña-Flores J, Sánchez-Sesma F, Luzón, F, Perton, M, 2016, A computer code for forward computation and inversion of the H/V spectral ratio under the diffuse field assumption, Computers & Geosciences, In Press.

Kausel, E. and J. M. Röesset (1981). Stiffness matrices for layered soils, *Bulletin of the Seismological Society of America*, v. 71, no. 6, pp. 1743–1761.

Kennett, B.L.N (1974). Reflections, rays and reverberations, *Bulletin of the Seismological Society of America*, v. 64, no. 6, pp. 1685–1696.

Knopoff L. (1964). "A matrix method for elastic wave problems." *Bulletin of the Seismological Society of America*, Vol. 54, pp. 431–438.

Lacoss R, Kelly E and Toksöz M, 1969, Estimation of seismic noise structure using arrays, *Geophysics*, v. 34, pp. 21-38.

Li J and Rosenblad B, 2011, Experimental study of near-field effects in multichannel array-based surface wave velocity measurements, *Near Surface Geophysics*, Vol. 9, 357-366.

Ling S and Okada H, 1993, An extended use of the spatial correlation technique for the estimation of geological structure using microtremors, *Proc. the 89th Conference Society of Exploration Geophysicists Japan (SEGJ)*, pp. 44–48 (in Japanese).

Martin A and Diehl J, 2004, Practical experience using a simplified procedure to measure average shear-wave velocity to a depth of 30 meters ($V_S30$), *Proceedings of the 13th World Conference on Earthquake Engineering*, Vancouver, B.C., Canada, August 1-6, 2004, Paper No. 952.

Martin A, Shawver J and Diehl J, 2006, Combined use of Active and Passive Surface Wave Techniques for Cost Effective UBC/IBC Site Classification, *Proceedings of the 8th National Conference on Earthquake Engineering*, San Francisco, California, Paper No. 1013.

Martin A, Yong A and Salomone L, 2014, Advantages of active Love wave techniques in geophysical characterization of seismographic station sites – case studies in California and the Central and Eastern United States, Proceedings of the Tenth U.S. National Conference on Earthquake Engineering, Frontiers of Earthquake Engineering, July 21-25, Anchorage, Alaska.

Ohori M, Nobata A, and Wakamatsu K, 2002, A comparison of ESAC and FK methods of estimating phase velocity using arbitrarily shaped microtremor arrays, *Bull. Seismol. Soc. Am.*, v. 92, no. 6, p. 2323–2332.

Okada H, 2003, The Microtremor Survey Method, *Society of Exploration Geophysics Geophysical Monograph Series*, Number 12, 135p.

Park C, Miller R and Xia J, 1999a, Multimodal analysis of high frequency surface waves, *Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems '99*, 115-121.

Park C, Miller R and Xia, J, 1999b, Multichannel analysis of surface waves, *Geophysics*, Vol 64, No. 3, 800-808.

Roesset J, Chang D and Stokoe K, 1991, Comparison of 2-D and 3-D Models for Analysis of Surface Wave Tests, *Proceedings,* 5th *International Conference on Soil Dynamics and Earthquake Engineering*, Karlsruhe, Germany.

Thomson W T, 1950, Transmission of elastic waves through a stratified solid medium, *J. Applied Physics*, v. 21, no. 2, pp. 89–93.

Wathelet M, Guillier B, Roux P, Cornou C and Ohrnberger M, 2018, Rayleigh wave three-component beamforming: signed ellipticity assessment from high-resolution frequency-wavenumber processing of ambient vibration arrays, *Geophysical Journal International*, Vol 215, p 507-523.

Xia J, Xu Y, Luo Y, Miller R, Cakir R and Zeng C, 2012, Advantages of using Multichannel analysis of Love waves (MALW) to estimate near-surface shear-wave velocity, *Surveys in Geophysics,* 841–860.

Yong A, Martin A, Stokoe K and Diehl J, 2013, ARRA-funded $V_{S30}$ measurements using multi-technique method approach at strong-motion stations in California and Central-Eastern United States, Open-File Report 2013-1102, United States Geological Survey, http://pubs.usgs.gov/of/2013/1102/.

Yoon S and Rix G, 2009, Near-field effects on Array-based surface wave methods with active sources, *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 135, no. 3, 399-406.

# 8 CERTIFICATION

All geophysical data, analysis, interpretations, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a **GEO*Vision*** California Professional Geophysicist.

Prepared by,

AT McNab

11/8/2021

Andy McNab
Project Geophysicist
**GEO*Vision*** Geophysical Services

Date

Reviewed and approved by,

Antony J Martin

11/9/2021

Antony J. Martin
California Professional Geophysicist, P. Gp.
**GEO*Vision*** Geophysical Services

Date

* This geophysical investigation was conducted under the supervision of a California Professional Geophysicist using industry standard methods and equipment. A high degree of professionalism was maintained during all aspects of the project from the field investigation and data acquisition, through data processing interpretation and reporting. All original field data files, field notes and observations, and other pertinent information are maintained in the project files and are available for the client to review for a period of at least one year.

  A professional geophysicist's certification of interpreted geophysical conditions comprises a declaration of his/her professional judgment. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations or ordinances.

# APPENDIX C

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Figure C-17 Consolidation Test Results
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Figure C-19 Resistant "R"-Value

LeRoy Crandall and Associates (1990)

Figure C-20 Consolidation Test Results

| BORING | DEPTH | MOISTURE CONTENT | DRY DENSITY | ATTERBERG LIMITS | | | PARTICLE SIZE DISTRIBUTION | | | | OTHER TESTS | SOIL DESCRIPTION AND REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (FEET) | (%) | (PCF) | LL | PL | PI | CLAY (%) | SILT (%) | SAND (%) | GRAVEL (%) | | (USCS) |
| **B-1** | 1-5 | — | | | | | | | | | EI, MP, RV | SM, Bulk sample |
| | 5-6.5 | — | | | | | | | | | | SP |
| | 7.5-9 | 5 | 110.5 | | | | 10 | | 76 | 14 | DS, C | SW-SM |
| | 10-11.5 | 2 | | | | | 8 | | 45 | 47 | | GP-GM |
| | 15-16.5 | 6 | 98.1 | | | | 13 | | 87 | | 200 Wash | SM |
| | 20-21.5 | 3 | | | | | 5 | | 95 | | 200 Wash | SP-SM |
| | 25-26.5 | 5 | 92.7 | | | | 4 | | 96 | | 200 Wash | SP |
| | 30-31.5 | 3 | | | | | 7 | | 93 | | 200 Wash | SP-SM |
| | 35-36.5 | 6 | | | | | 5 | | 95 | | 200 Wash | SP-SM |
| | 40-41.5 | 5 | | | | | 8 | | 92 | | 200 Wash | SP-SM |
| | 45-46.5 | 4 | | | | | 3 | | 97 | | 200 Wash | GP |
| | 50-51.5 | 5 | | | | | 16 | | 84 | | 200 Wash | SM |
| | 55-56.5 | 5 | | | | | 8 | | 92 | | 200 Wash | SP-SM |
| | | | | | | | | | | | | |
| **B-2** | 1-5 | 6 | | | | | | | | | $SO_4$, Cl, pH, ER | SM, Bulk sample |
| | 5-6.5 | 2 | 101.2 | | | | | | | | DS, C | SM |
| | 7.5-9 | 5 | | | | | 8 | | 66 | 27 | | SP-SM |
| | 10-11.5 | 4 | 107.7 | | | | 4 | | 60 | 37 | DS | SP |
| | 15-16.5 | 6 | | | | | 8 | | 92 | | 200 Wash | SP-SM |
| | 20-21.5 | 7 | 111.4 | | | | 12 | | 88 | | 200 Wash | SP-SM |
| | 25-26.5 | 4 | | | | | | | | | | SP |
| | 30-31.5 | 2 | | | | | | | | | | SP |
| | 35-36.5 | 4 | | | | | 4 | | 96 | | 200 Wash | SP |
| | 40-41.5 | 3 | | | | | | | | | | SP |
| | 45-46.5 | 2 | | | | | | | | | | GP |
| | 50-51.5 | 17 | | | | | 40 | | 60 | | 200 Wash | SM |
| | 55-56.5 | — | | | | | | | | | | SP |

HDNGEO

**Summary of Laboratory Test Results**

Kaiser Permanente — ED Expansion
Baldwin Park, California

Project No. C21-0415

Figure C-**1** *Page 1 of 2*

**EXPANSION POTENTIAL**
**ASTM D 4829**

| Soil Sample Location (feet) | Expansion Index | Expansion Potential |
|---|---|---|
| B-1 at 1-5 | 1 | **Very Low** |

| Soil Sample Location (feet) | **R-Value by Exudation (CT 301)** |
|---|---|
| B-1 at 1-5 | **74** |

**CORROSIVITY SERIES TESTS (ASTM) (Units)**

| Soil Sample Location (feet) | Soluble Chloride (D4327) (PPM) | pH (D4972) | Electrical Resistivity (G187) (Ohm-cm) | Degree of Corrosivity |
|---|---|---|---|---|
| B-2 at 1-5 | 38.1 | 10.1 | 8,040 | **Moderate** |

| Soil Sample Location (feet) | Water-Soluble Sulfates (D4327) (PPM) | Degree of Sulfate |
|---|---|---|
| B-2 at 1-5 | 99.6 | **Low** |

HUSHMAND ASSOCIATES, INC.
Geotechnical and Earthquake Engineers

**Hushmand Associates, Inc.**
250 Goddard,
Irvine, CA 92618

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**e.** hai@haieng.com

November 19, 2021

**HDNGEO VSOB, DBE, MBE, SB (Micro)**
**SCIENGEO Strengthen the Earth thru Geotechnical.**
9877 Chapman Avenue Ste D-461, Garden Grove, CA 92841

Attention: Mr. Hai D. Nguyen

**SUBJECT:** **Laboratory Test Results**
**Project Name:** **KPBP - ED Expansion**
**HAI Project No.:** **HDN-21-003**

Dear Mr. Nguyen:

Enclosed is the result of the laboratory testing conducted on samples for the subject project. The testing was conducted in general accordance with the following test procedures:

| Type of Test | Test Procedure |
|---|---|
| Moisture Content & Dry Density | ASTM D2216 & D2937 |
| Percent Passing (#200 Sieve) | ASTM D1140 |
| Particle Size Analysis (Sieve only) | ASTM D6913 |
| Modified Proctor Compaction (4'') | ASTM D1557 |
| Expansion Index | ASTM D4829 |
| Direct Shear (Consolidated & Drained) | ASTM D3080 |
| Consolidation | ASTM D2435 |
| Corrosion (Set 1) | ASTM G187, D516, D512B, G51 |
| R value | CTM301 |

Attached is: Sixteen (16) Moisture Content test results; seven (7) Moisture Content & Dry Density test results; thirteen (13) Percent Passing (#200 Sieve) test results; four (4) Particle Size Analysis (Sieve only) test results; one (1) Modified Proctor Compaction (4'') test result; one (1) Expansion Index test result; three (3) 3-point Direct shear test results; two (2) Consolidation test results; one (1) Corrosion test result; and one (1) R-Value test result.

We appreciate the opportunity to provide our testing services to HDNGEO. If you have any questions regarding these test results, please contact us.

Sincerely,

HUSHMAND ASSOCIATES, INC.

Kang C. Lin, BS, EIT
Laboratory Manager

Ashkaan Hushmand, PhD, PE
Project Engineer

HUSHMAND ASSOCIATES, INC.
Geotechnical and Earthquake Engineers

# MOISTURE CONTENT AND DRY DENSITY OF RING SAMPLES

## ASTM D2216 & ASTM D2937

***Client:*** HDNGEO
***Project Name:*** KPBP - ED Expansion
***Project No.:*** -

**HAI Proj No.:** HDN-21-003
**Performed by:** GA
**Checked by:** KL
**Date:** 11/2/2021

| No. | Boring No. | Sample No. | Depth | Wt of Ring + Soil | Height of Sample | Dia. of Sample | Volume of Sample | Wt of Rings | Wt of Soil | Wet Density | Wt of Cont. + Wet Soil | Wt of Cont. + Dry Soil | Wt of Container | Moisture Content | Dry Density |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ft | gr | in | in | cu.ft | gr | gr | pcf | gr | gr | gr | % | pcf |
| 1 | B-1 | R | 7.5-9 | 549.12 | 3.00 | 2.416 | 0.0080 | 132.35 | 416.77 | 115.4 | 191.49 | 183.73 | 11.8 | 4.5 | 110.5 |
| 2 | B-1 | SS | 10-11.5 | - | - | - | - | - | - | - | 457.32 | 449.52 | 65.82 | 2.0 | - |
| 3 | B-1 | R | 15-16.5 | 1017.26 | 6.00 | 2.416 | 0.0159 | 264.70 | 752.56 | 104.2 | 447.9 | 425.43 | 65.97 | 6.3 | 98.1 |
| 4 | B-1 | SS | 20-21.5 | - | - | - | - | - | - | - | 440.89 | 430.84 | 66.12 | 2.8 | - |
| 5 | B-1 | R | 25-26.5 | 969.16 | 6.00 | 2.416 | 0.0159 | 264.70 | 704.46 | 97.6 | 436.94 | 418.39 | 66.28 | 5.3 | 92.7 |
| 6 | B-1 | SS | 30-31.5 | - | - | - | - | - | - | - | 442.88 | 431.09 | 65.85 | 3.2 | - |
| 7 | B-1 | SS | 35-36.5 | - | - | - | - | - | - | - | 440.83 | 420.45 | 73.16 | 5.9 | - |
| 8 | B-1 | SS | 40-41.5 | - | - | - | - | - | - | - | 380.07 | 365.16 | 63.94 | 4.9 | - |
| 9 | B-1 | SS | 45-46.5 | - | - | - | - | - | - | - | 392.75 | 381.51 | 66.39 | 3.6 | - |
| 10 | B-1 | SS | 50-51.5 | - | - | - | - | - | - | - | 420.42 | 402.67 | 67.53 | 5.3 | - |
| 11 | B-1 | SS | 55-56.5 | - | - | - | - | - | - | - | 402.4 | 386.91 | 67.62 | 4.9 | - |

# MOISTURE CONTENT AND DRY DENSITY OF RING SAMPLES

## ASTM D2216 & ASTM D2937

***Client:*** HDNGEO
***Project Name:*** KPBP - ED Expansion
***Project No.:*** -

**HAI Proj No.:** HDN-21-003
**Performed by:** GA
**Checked by:** KL
**Date:** 11/2/2021

| No. | Boring No. | Sample No. | Depth | Wt of Ring + Soil | Height of Sample | Dia. of Sample | Volume of Sample | Wt of Rings | Wt of Soil | Wet Density | Wt of Cont. + Wet Soil | Wt of Cont. + Dry Soil | Wt of Container | Moisture Content | Dry Density |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ft | gr | in | in | cu.ft | gr | gr | pcf | gr | gr | gr | % | pcf |
| 1 | B-2 | B | 1-5 | - | - | - | - | - | - | - | 234.09 | 222.44 | 11.78 | 5.5 | - |
| 2 | B-2 | R | 5-6.5 | 510.32 | 3.00 | 2.416 | 0.0080 | 138.12 | 372.20 | 103.1 | 114.15 | 112.22 | 11.53 | 1.9 | 101.2 |
| 3 | B-2 | SS | 7.5-9 | - | - | - | - | - | - | - | 412.19 | 396.48 | 67.64 | 4.8 | - |
| 4 | B-2 | R | 10-11.5 | 541.53 | 3.00 | 2.416 | 0.0080 | 138.12 | 403.41 | 111.7 | 223.96 | 216.22 | 11.93 | 3.8 | 107.7 |
| 5 | B-2 | SS | 15-16.5 | - | - | - | - | - | - | - | 451.1 | 430.6 | 67.17 | 5.6 | - |
| 6 | B-2 | R | 20-21.5 | 1098.50 | 6.00 | 2.416 | 0.0159 | 276.24 | 822.26 | 113.9 | 426.97 | 403.47 | 67.8 | 7.0 | 106.4 |
| 7 | B-2 | SS | 25-26.5 | - | - | - | - | - | - | - | 180.43 | 175.05 | 25.14 | 3.6 | - |
| 8 | B-2 | R | 30-31.5 | 916.12 | 5.00 | 2.416 | 0.0133 | 230.20 | 685.92 | 114.0 | 252.55 | 247.07 | 11.81 | 2.3 | 111.4 |
| 9 | B-2 | SS | 35-36.5 | - | - | - | - | - | - | - | 329.29 | 318.88 | 65.37 | 4.1 | - |
| 10 | B-2 | SS | 40-41.5 | - | - | - | - | - | - | - | 204.97 | 200.1 | 11.79 | 2.6 | - |
| 11 | B-2 | SS | 45-46.5 | - | - | - | - | - | - | - | 209.22 | 204.91 | 24.08 | 2.4 | - |
| 12 | B-2 | SS | 50-51.5 | - | - | - | - | - | - | - | 431.28 | 378.88 | 67.74 | 16.8 | - |

# MATERIALS FINER THAN 75-µm (No. 200) SIEVE by WASHING
## ASTM D1140

*Client:* HDNGEO
*Project:* KPBP - ED Expansion
*Project No.:* -

*HAI Project No.:* HDN-21-003
*Performed by:* -
*Checked by:* KL
*Date:* 11/2/2021

| Boring No. | Sample No. | Depth (ft) | Sample Description (USCS) | Dry Soil before Wash + $W_{Container}$ | Dry Soil after #200 Wash + $W_{Container}$ | $W_{Container}$ | Wt of soil passing # 200 sieve | Initial wt of dry soil | **Soil % passing 200 sieve** |
|---|---|---|---|---|---|---|---|---|---|
| | | | | g | g | g | g | g | % |
| B-1 | R | 15-16.5 | Brown, Silty Sand (SM) | 425.43 | 378.82 | 65.97 | 312.85 | 359.46 | **12.97** |
| B-1 | SS | 20-21.5 | Light Brown, Poorly Graded Sand (SP) | 430.84 | 413.55 | 66.12 | 347.43 | 364.72 | **4.74** |
| B-1 | R | 25-26.5 | Light Brown, Poorly Graded Sand (SP) | 418.39 | 405.53 | 66.28 | 339.25 | 352.11 | **3.65** |
| B-1 | SS | 30-31.5 | Light Brown, Poorly Graded Sand with Silt (SP-SM) | 431.09 | 405.12 | 65.85 | 339.27 | 365.24 | **7.11** |
| B-1 | SS | 35-36.5 | Light Brown, Poorly Graded Sand with Silt (SP-SM) | 420.45 | 401.90 | 73.16 | 328.74 | 347.29 | **5.34** |
| B-1 | SS | 40-41.5 | Light Brown, Poorly Graded Sand with Silt (SP-SM) | 365.16 | 342.36 | 63.94 | 278.42 | 301.22 | **7.57** |
| B-1 | SS | 45-46.5 | Light Brown, Poorly Graded Sand (SP) | 381.51 | 371.32 | 66.39 | 304.93 | 315.12 | **3.23** |
| B-1 | SS | 50-51.5 | Brown, Silty Sand (SM) | 402.67 | 348.74 | 67.53 | 281.21 | 335.14 | **16.09** |
| B-1 | SS | 55-56.5 | Light Brown, Poorly Graded Sand with Silt (SP-SM) | 386.91 | 362.31 | 67.62 | 294.69 | 319.29 | **7.70** |

# MATERIALS FINER THAN 75-µm (No. 200) SIEVE by WASHING
## ASTM D1140

*Client:* HDNGEO
*Project:* KPBP - ED Expansion
*Project No.:* -

*HAI Project No.:* HDN-21-003
*Performed by:* -
*Checked by:* KL
*Date:* 11/2/2021

| Boring No. | Sample No. | Depth (ft) | Sample Description (USCS) | Dry Soil before Wash + $W_{Container}$ | Dry Soil after #200 Wash + $W_{Container}$ | $W_{Container}$ | Wt of soil passing # 200 sieve | Initial wt of dry soil | **Soil % passing 200 sieve** |
|---|---|---|---|---|---|---|---|---|---|
| | | | | g | g | g | g | g | **%** |
| B-2 | SS | 15-16.5 | Brown, Poorly Graded Sand with Silt (SP-SM) | 430.60 | 400.62 | 67.17 | 333.45 | 363.43 | **8.25** |
| B-2 | R | 20-21.5 | Brown, Poorly Graded Sand with Silt (SP-SM) | 403.47 | 363.98 | 67.80 | 296.18 | 335.67 | **11.76** |
| B-2 | SS | 35-36.5 | Light Brown, Poorly Graded Sand (SP) | 318.88 | 309.18 | 65.37 | 243.81 | 253.51 | **3.83** |
| B-2 | SS | 50-51.5 | Olive Brown, Silty Sand (SM) | 378.88 | 254.26 | 67.74 | 186.52 | 311.14 | **40.05** |

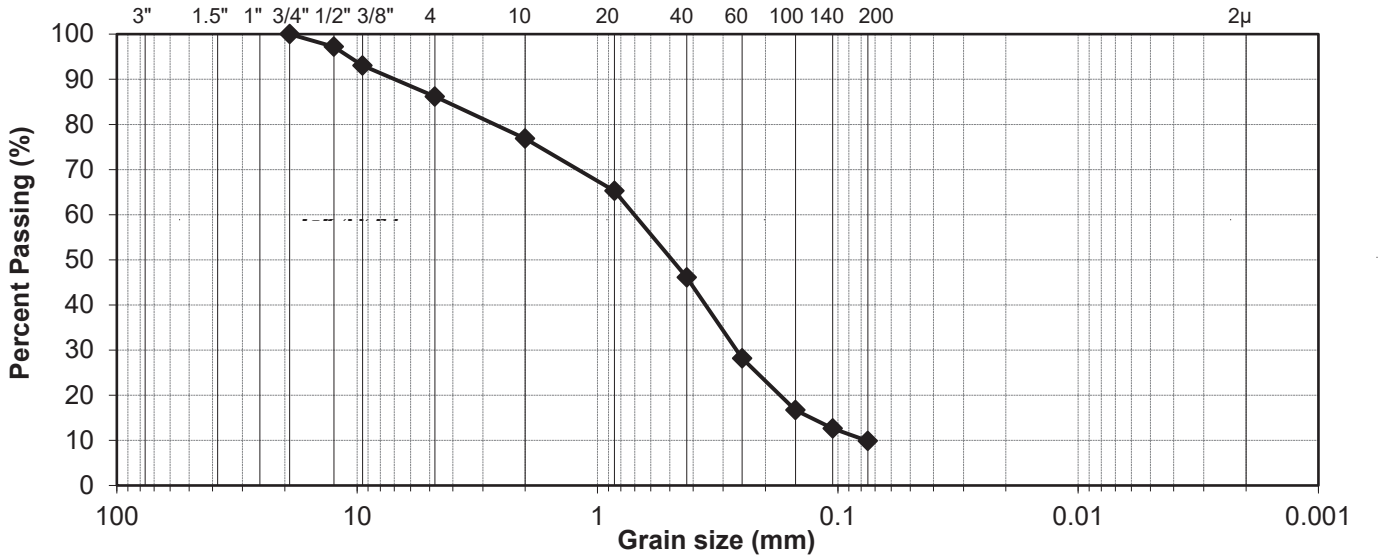
# PARTICLE-SIZE ANALYSIS OF SOILS

## ASTM D6913

| | | | |
|---|---|---|---|
| *Client:* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | GA |
| *Project No.:* | - | *Checked by:* | KL |
| *Boring No.:* | B-1 | *Date:* | 11/02/21 |
| *Sample No.:* | R | | |
| *Depth (ft):* | 7.5-9 | | |
| *Sample Description:* | Light Brown, Well Graded Sand with Silt (SW-SM) | | |

**Dry Weight (g)** **365.8**

| Sieve Size | Aperture | Weight Retained | % Retained | **% Passing** | **Project Specification** |
|---|---|---|---|---|---|
| | mm | g | % | **%** | **%** |
| 3" | 76.2 | 0.00 | 0.0 | **100.0** | **-** |
| 1.5" | 38.1 | 0.00 | 0.0 | **100.0** | **-** |
| 1" | 25.4 | 0.00 | 0.0 | **100.0** | **-** |
| 3/4 " | 19.1 | 0.00 | 0.0 | **100.0** | **-** |
| 1/2 " | 12.5 | 10.24 | 2.8 | **97.2** | **-** |
| 3/8 " | 9.5 | 15.27 | 4.2 | **93.0** | **-** |
| # 4 | 4.75 | 25.12 | 6.9 | **86.2** | **-** |
| # 10 | 2.00 | 33.93 | 9.3 | **76.9** | **-** |
| # 20 | 0.85 | 42.41 | 11.6 | **65.3** | **-** |
| # 40 | 0.425 | 70.23 | 19.2 | **46.1** | **-** |
| # 60 | 0.250 | 65.49 | 17.9 | **28.2** | **-** |
| # 100 | 0.150 | 41.97 | 11.5 | **16.7** | **-** |
| # 140 | 0.105 | 14.93 | 4.1 | **12.6** | **-** |
| # 200 | 0.075 | 10.07 | 2.8 | **9.9** | **-** |
| **Soil % passing 200 sieve (%)** | | 36.11 | 9.9 | **0.0** | **-** |




| | | | | | |
|---|---|---|---|---|---|
| Particle-Size Analysis | $D_{10}$ | 0.08 | % Gravel | % Sand | % Fines |
| | $D_{30}$ | 0.27 | 13.8 | 76.3 | 9.9 |
| | $D_{60}$ | 0.73 | Sample Description / USCS Classification | | |
| | $C_u$ | 9.60 | Light Brown, Well Graded Sand with Silt (SW-SM) | | |
| | $C_c$ | 1.28 | | | |

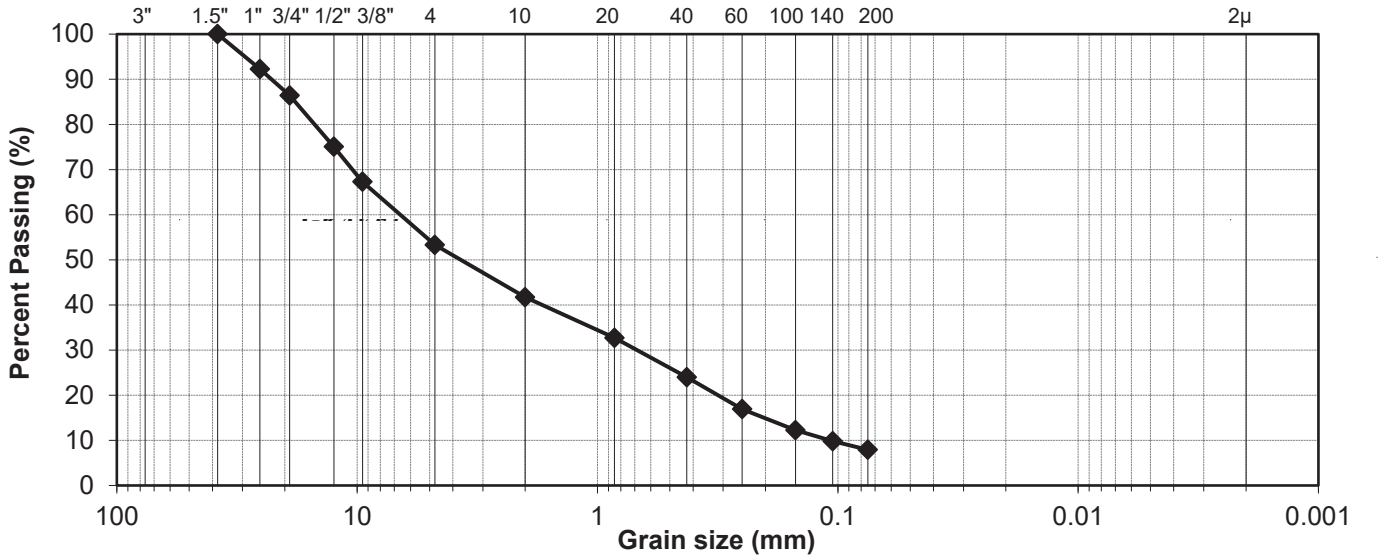
# PARTICLE-SIZE ANALYSIS OF SOILS

## ASTM D6913

| | | | |
|---|---|---|---|
| *Client:* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | GA |
| *Project No.:* | - | *Checked by:* | KL |
| *Boring No.:* | B-1 | *Date:* | 11/02/21 |
| *Sample No.:* | SS | | |
| *Depth (ft):* | 10-11.5 | | |
| *Sample Description:* | Grayish Brown, Poorly Graded Gravel with Silt and Sand (GP-GM) | | |

**Dry Weight (g)** **383.7**

| Sieve Size | Aperture | Weight Retained | % Retained | **% Passing** | **Project Specification** |
|---|---|---|---|---|---|
| | mm | g | % | **%** | **%** |
| 3" | 76.2 | 0.00 | 0.0 | **100.0** | - |
| 1.5" | 38.1 | 0.00 | 0.0 | **100.0** | - |
| 1" | 25.4 | 29.74 | 7.8 | **92.2** | - |
| 3/4 " | 19.1 | 22.45 | 5.9 | **86.4** | - |
| 1/2 " | 12.5 | 43.50 | 11.3 | **75.1** | - |
| 3/8 " | 9.5 | 29.78 | 7.8 | **67.3** | - |
| # 4 | 4.75 | 53.66 | 14.0 | **53.3** | - |
| # 10 | 2.00 | 44.53 | 11.6 | **41.7** | - |
| # 20 | 0.85 | 34.53 | 9.0 | **32.7** | - |
| # 40 | 0.425 | 33.42 | 8.7 | **24.0** | - |
| # 60 | 0.250 | 27.17 | 7.1 | **16.9** | - |
| # 100 | 0.150 | 17.91 | 4.7 | **12.3** | - |
| # 140 | 0.105 | 9.40 | 2.4 | **9.8** | - |
| # 200 | 0.075 | 7.22 | 1.9 | **7.9** | - |
| **Soil % passing 200 sieve (%)** | | 30.39 | 7.9 | **0.0** | - |




| | | | | | |
|---|---|---|---|---|---|
| Particle-Size Analysis | $D_{10}$ | 0.11 | % Gravel | % Sand | % Fines |
| | $D_{30}$ | 0.72 | 46.7 | 45.4 | 7.9 |
| | $D_{60}$ | 7.02 | Sample Description / USCS Classification | | |
| | $C_u$ | 64.62 | Grayish Brown, Poorly Graded Gravel with Silt and Sand (GP-GM) | | |
| | $C_c$ | 0.68 | | | |

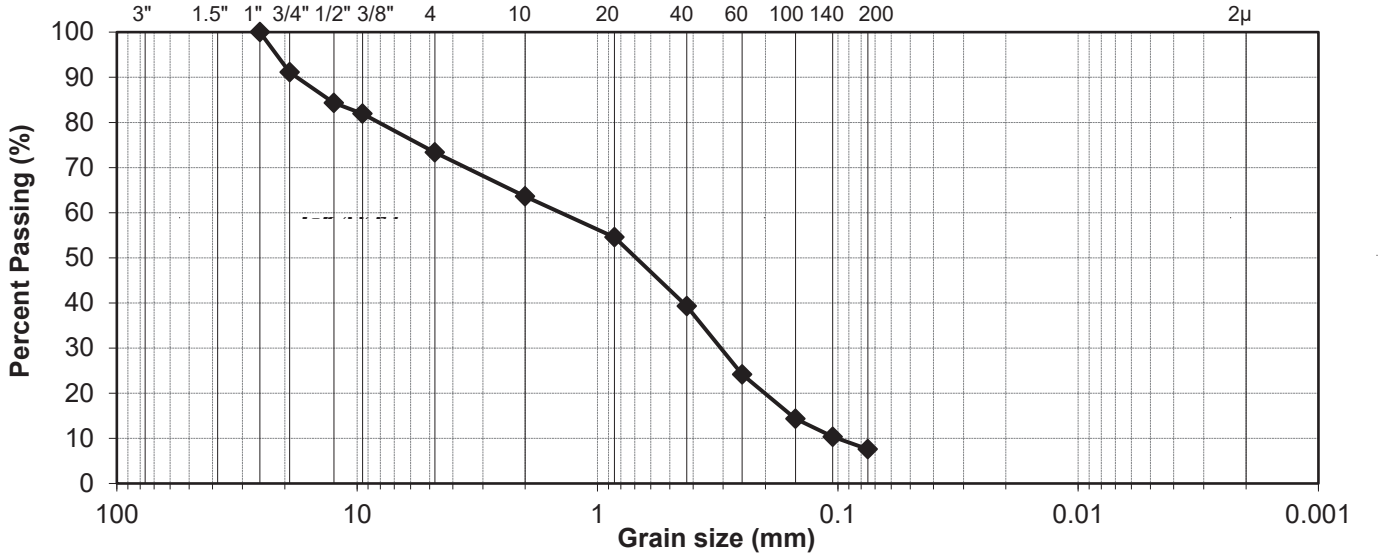
# PARTICLE-SIZE ANALYSIS OF SOILS

## ASTM D6913

| | | | |
|---|---|---|---|
| *Client:* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | BH |
| *Project No.:* | - | *Checked by:* | KL |
| *Boring No.:* | B-2 | *Date:* | 11/02/21 |
| *Sample No.:* | SS | | |
| *Depth (ft):* | 7.5-9 | | |
| *Sample Description:* | Light Brown, Poorly Graded Sand with Silt and Gravel (SP-SM) | | |

**Dry Weight (g)** **328.8**

| Sieve Size | Aperture | Weight Retained | % Retained | **% Passing** | **Project Specification** |
|---|---|---|---|---|---|
| | mm | g | % | **%** | **%** |
| 3" | 76.2 | 0.00 | 0.0 | **100.0** | - |
| 1.5" | 38.1 | 0.00 | 0.0 | **100.0** | - |
| 1" | 25.4 | 0.00 | 0.0 | **100.0** | - |
| 3/4 " | 19.1 | 29.26 | 8.9 | **91.1** | - |
| 1/2 " | 12.5 | 22.32 | 6.8 | **84.3** | - |
| 3/8 " | 9.5 | 7.83 | 2.4 | **81.9** | - |
| # 4 | 4.75 | 28.17 | 8.6 | **73.4** | - |
| # 10 | 2.00 | 32.09 | 9.8 | **63.6** | - |
| # 20 | 0.85 | 29.75 | 9.0 | **54.6** | - |
| # 40 | 0.425 | 50.21 | 15.3 | **39.3** | - |
| # 60 | 0.250 | 49.75 | 15.1 | **24.2** | - |
| # 100 | 0.150 | 32.31 | 9.8 | **14.3** | - |
| # 140 | 0.105 | 13.15 | 4.0 | **10.3** | - |
| # 200 | 0.075 | 9.01 | 2.7 | **7.6** | - |
| **Soil % passing 200 sieve (%)** | | 24.99 | 7.6 | **0.0** | - |




| | | | | | |
|---|---|---|---|---|---|
| Particle-Size Analysis | $D_{10}$ | 0.10 | % Gravel | % Sand | % Fines |
| | $D_{30}$ | 0.32 | 26.6 | 65.8 | 7.6 |
| | $D_{60}$ | 1.54 | Sample Description / USCS Classification | | |
| | $C_u$ | 15.22 | Light Brown, Poorly Graded Sand with Silt and Gravel (SP-SM) | | |
| | $C_c$ | 0.65 | | | |

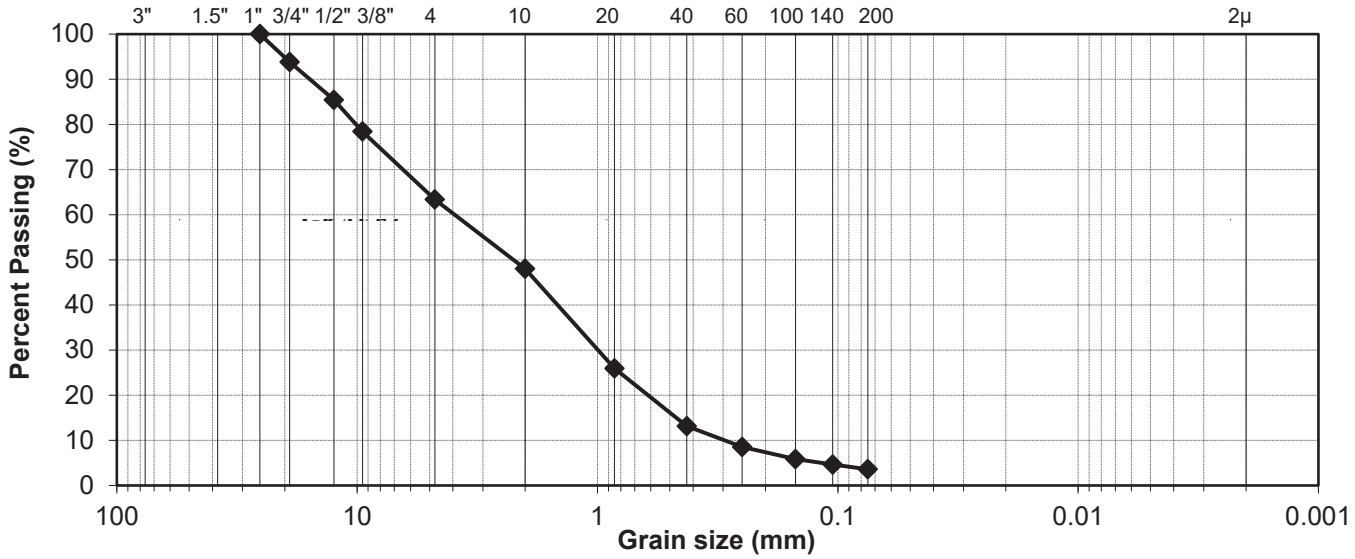
# PARTICLE-SIZE ANALYSIS OF SOILS

## ASTM D6913

| | | | |
|---|---|---|---|
| *Client:* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | GA |
| *Project No.:* | - | *Checked by:* | KL |
| *Boring No.:* | B-2 | *Date:* | 11/02/21 |
| *Sample No.:* | R | | |
| *Depth (ft):* | 10-11.5 | | |
| *Sample Description:* | Light Brown, Poorly Graded Sand with Gravel (SP) | | |

**Dry Weight (g)** **373.9**

| Sieve Size | Aperture | Weight Retained | % Retained | **% Passing** | **Project Specification** |
|---|---|---|---|---|---|
| | mm | g | % | **%** | **%** |
| 3" | 76.2 | 0.00 | 0.0 | **100.0** | **-** |
| 1.5" | 38.1 | 0.00 | 0.0 | **100.0** | **-** |
| 1" | 25.4 | 0.00 | 0.0 | **100.0** | **-** |
| 3/4 " | 19.1 | 23.10 | 6.2 | **93.8** | **-** |
| 1/2 " | 12.5 | 31.38 | 8.4 | **85.4** | **-** |
| 3/8 " | 9.5 | 26.20 | 7.0 | **78.4** | **-** |
| # 4 | 4.75 | 56.29 | 15.1 | **63.4** | **-** |
| # 10 | 2.00 | 57.41 | 15.4 | **48.0** | **-** |
| # 20 | 0.85 | 82.53 | 22.1 | **25.9** | **-** |
| # 40 | 0.425 | 47.85 | 12.8 | **13.1** | **-** |
| # 60 | 0.250 | 17.21 | 4.6 | **8.5** | **-** |
| # 100 | 0.150 | 10.11 | 2.7 | **5.8** | **-** |
| # 140 | 0.105 | 4.53 | 1.2 | **4.6** | **-** |
| # 200 | 0.075 | 3.89 | 1.0 | **3.6** | **-** |
| **Soil % passing 200 sieve (%)** | | 13.42 | 3.6 | **0.0** | **-** |




| | | | | | |
|---|---|---|---|---|---|
| Particle-Size Analysis | $D_{10}$ | 0.31 | % Gravel | % Sand | % Fines |
| | $D_{30}$ | 1.06 | 36.6 | 59.8 | 3.6 |
| | $D_{60}$ | 4.15 | Sample Description / USCS Classification | | |
| | $C_u$ | 13.58 | Light Brown, Poorly Graded Sand with Gravel (SP) | | |
| | $C_c$ | 0.89 | | | |

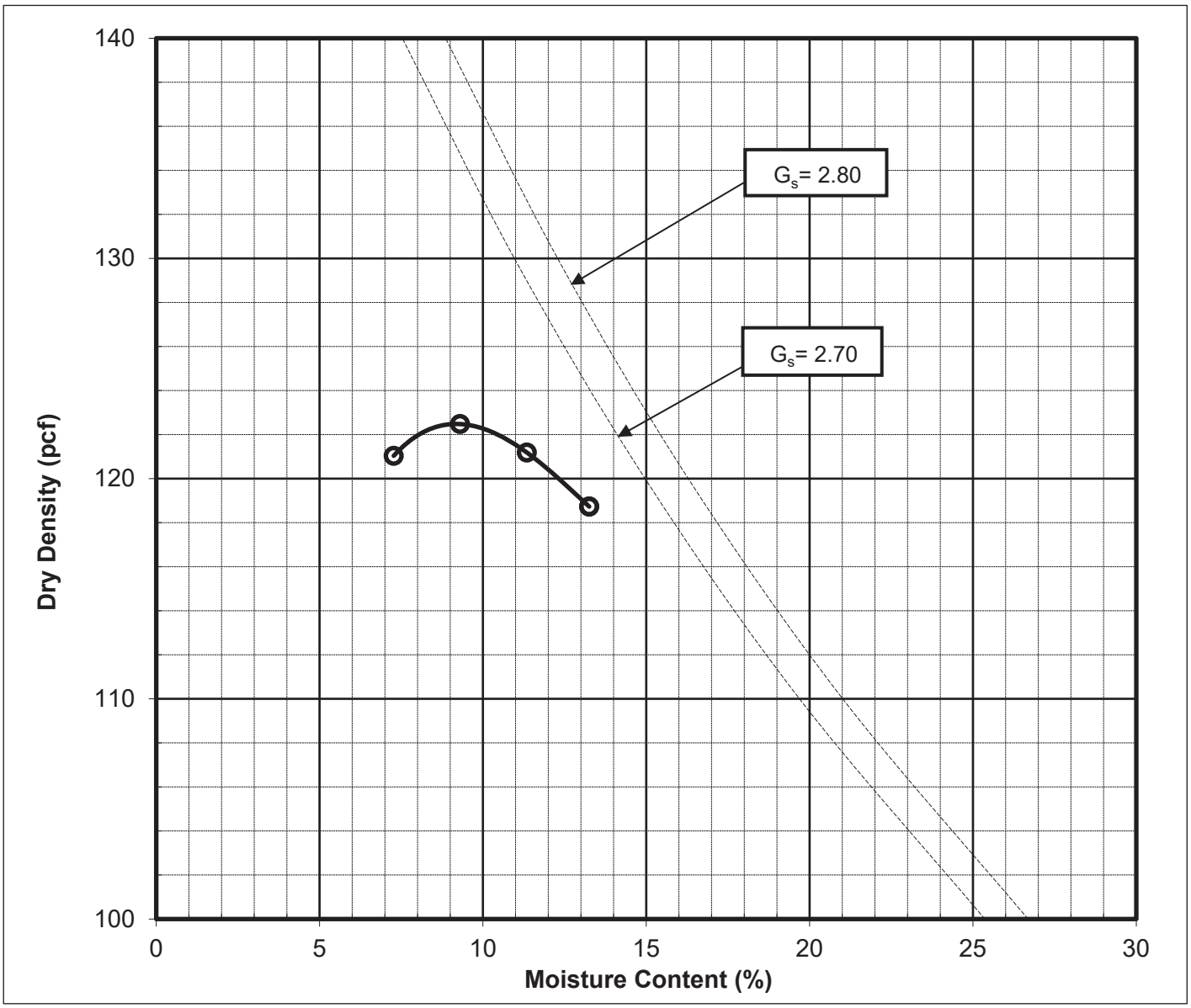
# Compaction Characteristics of Soils Using Modified Effort

## ASTM D1557

| | | | |
|---|---|---|---|
| *Client:* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project:* | KPBP - ED Expansion | *Tested by:* | GA |
| *Project No.:* | - | *Checked by:* | KL |
| *Boring Number:* | B-1 | *Date:* | 11/02/21 |
| *Sample Number:* | B | | |
| *Depth (ft) :* | 1-5 | | |
| *Soil Description:* | Brown, Silty Sand with Gravel (SM) | | |

| | |
|---|---|
| *Mold size (in)* | 4" |
| *Procedure* | B |
| *Weight Retained on:* | 16.2 |
| Remarks: | |

| | |
|---|---|
| **Maximum Dry Density (pcf)** | **122.5** |
| **Optimum Moisture Content (%)** | **9.2** |
| **Corrected Maximum Dry Density (pcf)** | **126.9** |
| **Corrected Optimum Moisture Content (%)** | **7.8** |



# EXPANSION INDEX

## ASTM D4829

| | | | |
|---|---|---|---|
| *Client:* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | AH |
| *Project No.:* | - | *Checked by:* | KL |
| *Boring No.:* | B-1 | *Date:* | 11/2/2021 |
| *Sample No.:* | B | | |
| *Depth (ft):* | 1-5 | *Apparatus No.:* | 1 |
| *Soil Description:* | Brown, Silty Sand with Gravel (SM) | | |

| **Intial Speciment Info** | | |
|---|---|---|
| Wt. of wet soil + cont. | 185.01 | g |
| Wt. of dry soil + cont. | 172.18 | g |
| Wt. of container | 24.76 | g |
| Wt. of water | 12.83 | g |
| Wt. of dry soil | 147.42 | g |
| **Moisture Content** | **8.7** | **%** |

| **Final Speciment Info** | | |
|---|---|---|
| Wt. of wet soil + cont. | 617.08 | g |
| Wt. of dry soil + cont. | 562.78 | g |
| Wt. of container | 190.77 | g |
| Wt. of water | 54.30 | g |
| Wt. of dry soil | 372.01 | g |
| **Moisture Content** | **14.6** | **%** |

| | | |
|---|---|---|
| Wt. of wet soil + ring | 596.73 | g |
| Wt. of ring | 190.77 | g |
| Wt. of wet soil | 405.96 | g |
| Wet density of soil | 123.2 | pcf |
| Dry density of soil | 113.4 | pcf |
| Specific gravity of soil | 2.68 | - |
| **Saturation** | **49.1** | **%** |

| **Date & Time** | **Elapsed Time (min)** | **Dial Reading** | **Δh, Expansion** |
|---|---|---|---|
| 11/4/2021 9:08 | 0 | 0 | 0 |
| 11/4/2021 9:18 | 10 | 0.0000 | 0 |
| **Add Distilled Water to Sample** | | | |
| 11/5/2021 9:08 | 1440 | 0.0006 | 0.0006 |

**Expansion Index =** **1** **Very Low**

HDNGEO C21-0415

HUSHMAND ASSOCIATES, INC.
Geotechnical and Earthquake Engineers

# DIRECT SHEAR TEST

## ASTM D3080

***HAI Project No.:*** HDN-21-003

***Tested by:*** GA

***Checked by:*** KL

***Date:*** 9/27/2021

***Client:*** HDNGEO

***Project Name:*** KPBP - ED Expansion

***Project Number:*** -

***Boring No.:*** B-1

***Sample No.:*** R

***Sample Type:*** Undisturbed Ring

***Depth (ft):*** 7.5-9

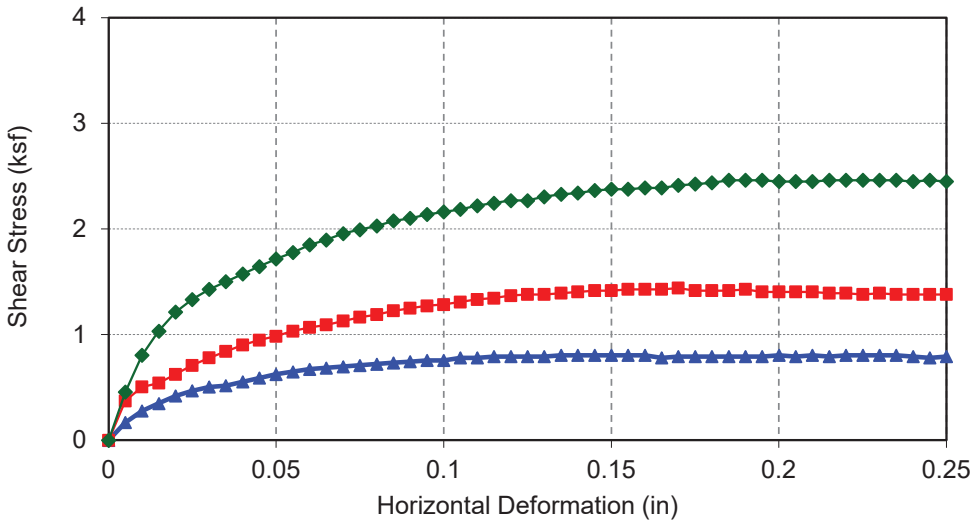
***Soil Description:*** Light Brown, Well Graded Sand with Silt (SW-SM)

***Type of test:*** **Consolidated, Drained**

| Test No. | 1 | 2 | 3 |
|---|---|---|---|
| Symbol | ▲ | ■ | ◆ |
| **Normal Stress (ksf)** | **1** | **2** | **4** |
| **Deformation Rate (in/min)** | **0.002** | **0.002** | **0.002** |

| | | | | |
|---|---|---|---|---|
| **Peak Shear Stress (ksf)** | **O** | **0.80** | **1.44** | **2.46** |
| **Shear Stress @ End of Test (ksf)** | **X** | **0.79** | **1.38** | **2.45** |

| | | | |
|---|---|---|---|
| Initial Height of Sample (in) | 1.000 | 1.000 | 1.000 |
| Height of Sample before Shear (in) | 0.9822 | 0.9763 | 0.9707 |
| Diameter of Sample (in) | 2.416 | 2.416 | 2.416 |
| **Initial Moisture Content (%)** | **4.5** | **4.5** | **4.5** |
| **Final Moisture Content (%)** | **14.6** | **15.0** | **14.0** |
| **Dry Density (pcf)** | **108.0** | **109.1** | **109.1** |



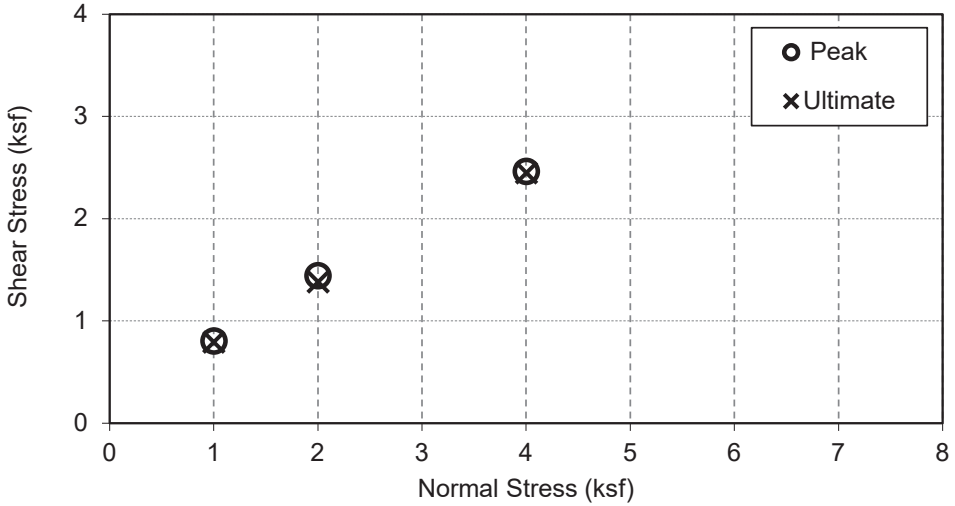




FIGURE C-13

HDNGEO C21-0415

HUSHMAND ASSOCIATES, INC.
Geotechnical and Earthquake Engineers

# DIRECT SHEAR TEST

## ASTM D3080

***HAI Project No.:*** HDN-21-003

***Tested by:*** GA

***Checked by:*** KL

***Date:*** 9/27/2021

***Client:*** HDNGEO

***Project Name:*** KPBP - ED Expansion

***Project Number:*** -

***Boring No.:*** B-2

***Sample No.:*** R

***Sample Type:*** Undisturbed Ring

***Depth (ft):*** 5-6.5

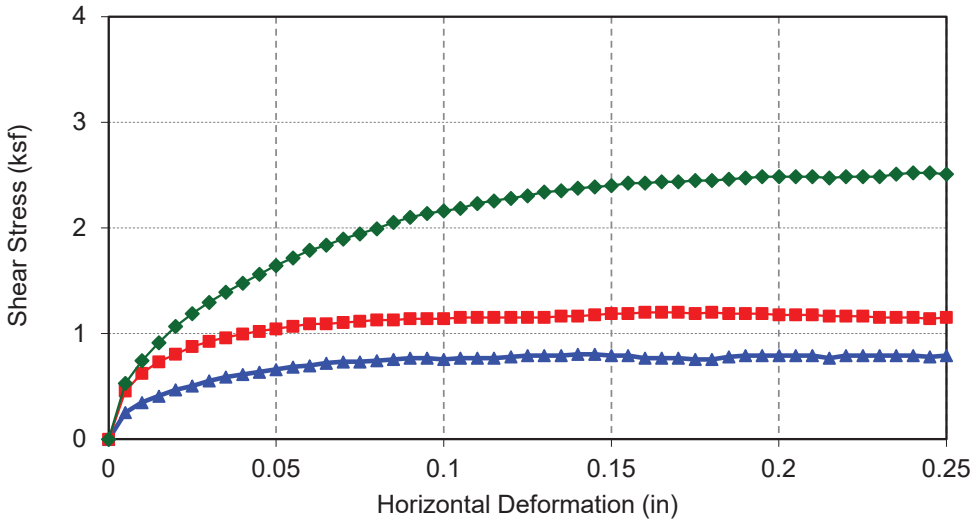
***Soil Description:*** Brown, Silty Sand with Gravel (SM)

***Type of test:*** **Consolidated, Drained**

| Test No. | 1 | 2 | 3 |
|---|---|---|---|
| Symbol | ▲ | ■ | ◆ |
| **Normal Stress (ksf)** | **1** | **2** | **4** |
| **Deformation Rate (in/min)** | **0.002** | **0.002** | **0.002** |

| | | | | |
|---|---|---|---|---|
| **Peak Shear Stress (ksf)** | **O** | **0.80** | **1.20** | **2.52** |
| **Shear Stress @ End of Test (ksf)** | **X** | **0.79** | **1.15** | **2.51** |

| | | | |
|---|---|---|---|
| Initial Height of Sample (in) | 1.000 | 1.000 | 1.000 |
| Height of Sample before Shear (in) | 0.9680 | 0.9667 | 0.9382 |
| Diameter of Sample (in) | 2.416 | 2.416 | 2.416 |
| **Initial Moisture Content (%)** | **1.9** | **1.9** | **1.9** |
| **Final Moisture Content (%)** | **18.4** | **18.7** | **16.1** |
| **Dry Density (pcf)** | **101.2** | **104.6** | **105.5** |



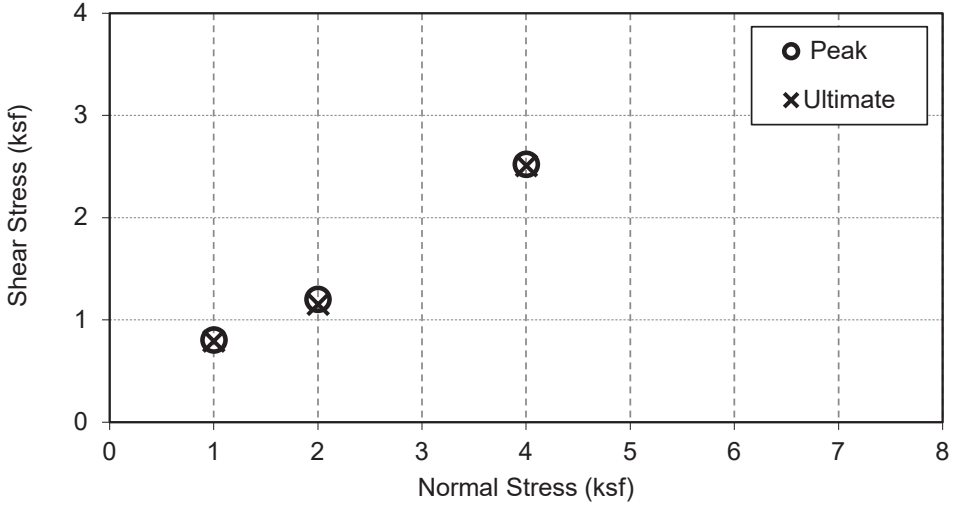




FIGURE C-14

HDNGEO C21-0415

HUSHMAND ASSOCIATES, INC.
Geotechnical and Earthquake Engineers

# DIRECT SHEAR TEST

## ASTM D3080

***HAI Project No.:*** HDN-21-003

***Tested by:*** GA

***Checked by:*** KL

***Date:*** 9/27/2021

***Client:*** HDNGEO

***Project Name:*** KPBP - ED Expansion

***Project Number:*** -

***Boring No.:*** B-2

***Sample No.:*** R

***Sample Type:*** Undisturbed Ring

***Depth (ft):*** 10-11.5

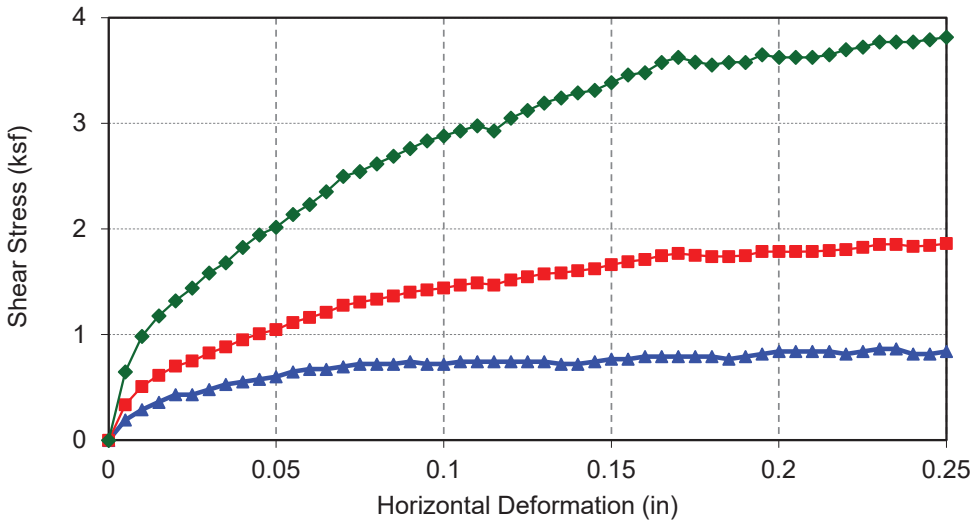
***Soil Description:*** Light Brown, Poorly Graded Sand with Gravel (SP)

***Type of test:*** **Consolidated, Drained**

| Test No. | 1 | 2 | 3 |
|---|---|---|---|
| Symbol | ▲ | ■ | ◆ |
| **Normal Stress (ksf)** | **1** | **2** | **4** |
| **Deformation Rate (in/min)** | **0.002** | **0.002** | **0.002** |

| | | | | |
|---|---|---|---|---|
| **Peak Shear Stress (ksf)** | **O** | **0.86** | **1.86** | **3.82** |
| **Shear Stress @ End of Test (ksf)** | **X** | **0.84** | **1.86** | **3.82** |

| | | | |
|---|---|---|---|
| Initial Height of Sample (in) | 1.000 | 1.000 | 1.000 |
| Height of Sample before Shear (in) | 0.9777 | 0.9693 | 0.9656 |
| Diameter of Sample (in) | 2.416 | 2.416 | 2.416 |
| **Initial Moisture Content (%)** | **3.8** | **3.8** | **3.8** |
| **Final Moisture Content (%)** | **16.3** | **12.7** | **15.8** |
| **Dry Density (pcf)** | **104.5** | **110.6** | **114.0** |



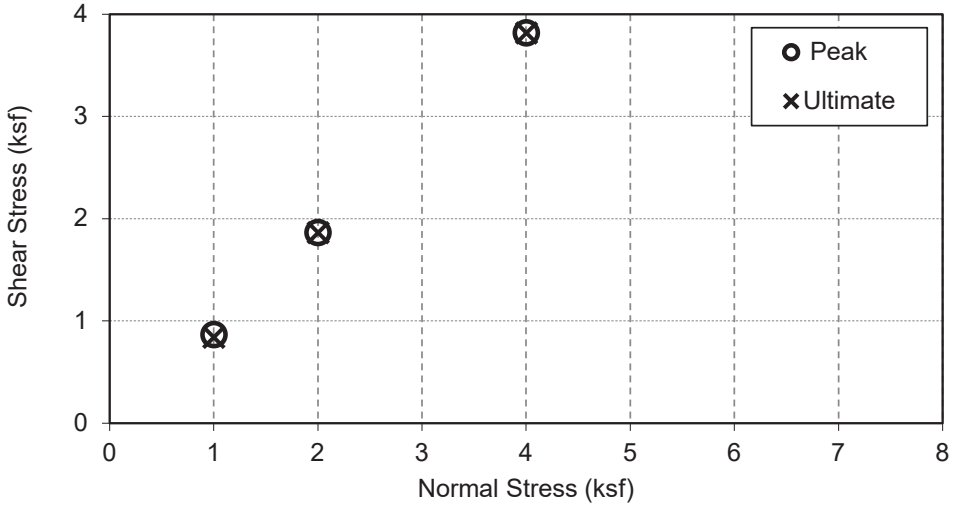




FIGURE C-15

# CONSOLIDATION TEST

## ASTM D2435

| | | | |
|---|---|---|---|
| *Client :* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | KL |
| *Project Number:* | - | *Checked by:* | SB |
| *Boring No.:* | B-1 | *Date:* | 11/02/21 |
| *Sample No.:* | R | | |
| *Type of Sample:* | Undisturbed Ring | | |
| *Depth (ft):* | 7.5-9 | | |
| *Soil Description:* | Light Brown, Well Graded Sand with Silt (SW-SM) | | |

| Initial Total Weight | Final Total Weight | Final Dry Weight |
|---|---|---|
| (g) | (g) | (g) |
| 131.53 | 140.66 | 123.36 |

| | | | Initial Conditions | Final Conditions |
|---|---|---|---|---|
| Height | H | (in) | 1.000 | 0.931 |
| Height of Solids | $H_s$ | (in) | 0.615 | 0.615 |
| Height of Water | $H_w$ | (in) | 0.109 | 0.230 |
| Height of Air | $H_a$ | (in) | 0.276 | 0.085 |
| **Dry Density** | | **(pcf)** | **102.5** | **118.3** |
| **Water Content** | | **(%)** | **6.6** | **14.0** |
| **Saturation** | | **(%)** | **28.2** | **73.0** |

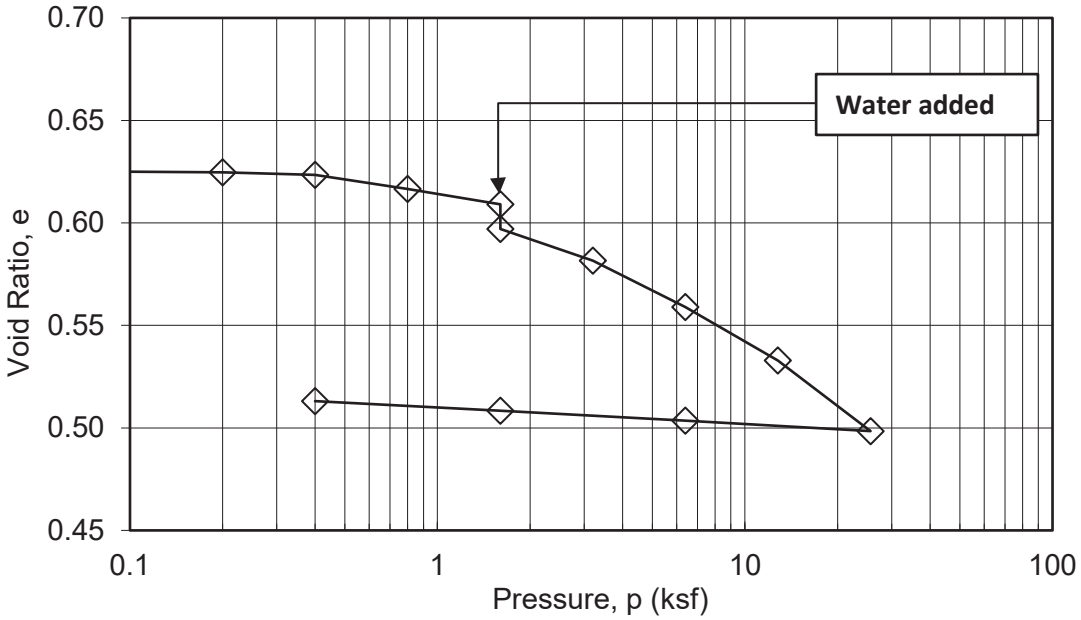
* Saturation is calcualted based on Gs= 2.67

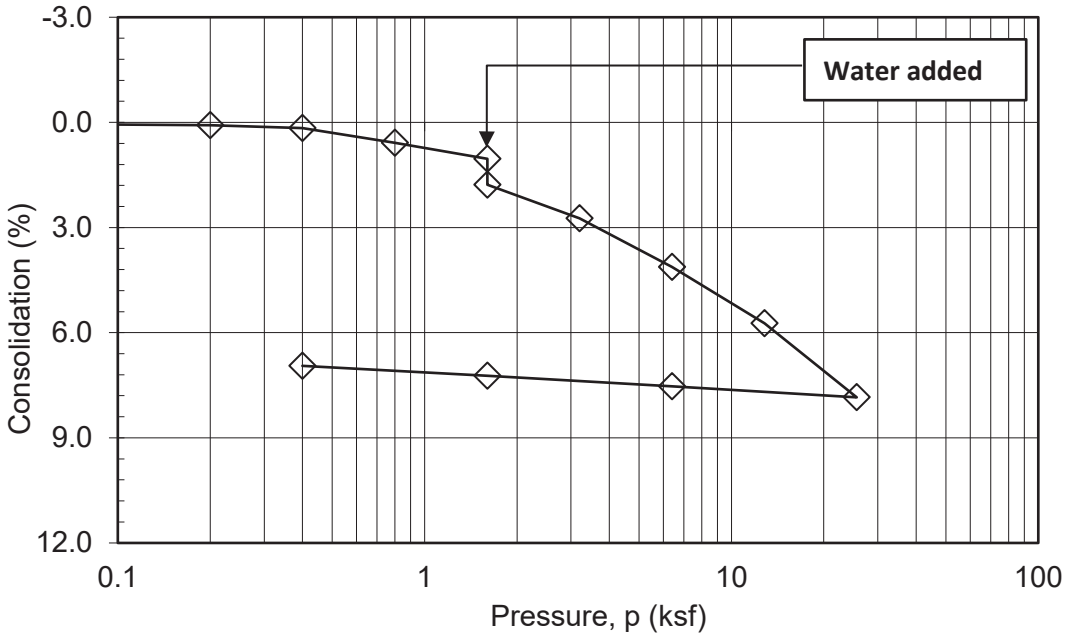
| Load (ksf) | δH (in) | H (in) | Voids (in) | e | Consol. (%) | $a_v$ ($ksf^{-1}$) | $M_v$ ($ksf^{-1}$) | Comment |
|---|---|---|---|---|---|---|---|---|
| 0.01 | ------- | 1.0000 | 0.385 | 0.626 | 0 | | | |
| 0.2 | 0.0009 | 0.9992 | 0.384 | 0.625 | 0.1 | 7.3E-03 | 4.5E-03 | |
| 0.4 | 0.0016 | 0.9984 | 0.383 | 0.623 | 0.2 | 6.1E-03 | 3.8E-03 | |
| 0.8 | 0.0058 | 0.9942 | 0.379 | 0.616 | 0.6 | 1.7E-02 | 1.1E-02 | |
| 1.6 | 0.0104 | 0.9896 | 0.375 | 0.609 | 1.0 | 9.2E-03 | 5.7E-03 | |
| 1.6 | 0.0178 | 0.9822 | 0.367 | 0.597 | 1.8 | Water Added | | |
| 3.2 | 0.0274 | 0.9727 | 0.358 | 0.582 | 2.7 | 9.7E-03 | 6.1E-03 | |
| 6.4 | 0.0413 | 0.9588 | 0.344 | 0.559 | 4.1 | 7.1E-03 | 4.5E-03 | |
| 12.8 | 0.0573 | 0.9427 | 0.328 | 0.533 | 5.7 | 4.1E-03 | 2.7E-03 | |
| 25.6 | 0.0785 | 0.9216 | 0.307 | 0.498 | 7.8 | 2.7E-03 | 1.8E-03 | |
| 6.4 | 0.0754 | 0.9247 | 0.310 | 0.503 | 7.5 | Unloaded | | |
| 1.6 | 0.0723 | 0.9277 | 0.313 | 0.508 | 7.2 | | | |
| 0.4 | 0.0695 | 0.9305 | 0.315 | 0.513 | 7.0 | | | |
| | | | | | | | | |

# CONSOLIDATION TEST

## ASTM D2435

| | | | |
|---|---|---|---|
| *Client :* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | KL |
| *Project Number:* | - | *Checked by:* | SB |
| *Boring No.:* | B-1 | *Date:* | 11/02/21 |
| *Sample No.:* | R | | |
| *Type of Sample:* | Undisturbed Ring | | |
| *Depth (ft):* | 7.5-9 | | |
| *Soil Description:* | Light Brown, Well Graded Sand with Silt (SW-SM) | | |



# CONSOLIDATION TEST

## ASTM D2435

| | | | |
|---|---|---|---|
| *Client :* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | KL |
| *Project Number:* | - | *Checked by:* | SB |
| *Boring No.:* | B-2 | *Date:* | 11/02/21 |
| *Sample No.:* | R | | |
| *Type of Sample:* | Undisturbed Ring | | |
| *Depth (ft):* | 5-6.5 | | |
| *Soil Description:* | Light Brown, Poorly Graded Sand with Silt and Gravel (SP-SM) | | |

| Initial Total Weight | Final Total Weight | Final Dry Weight |
|---|---|---|
| (g) | (g) | (g) |
| 134.65 | 147.16 | 129.71 |

| | | | Initial Conditions | Final Conditions |
|---|---|---|---|---|
| Height | H | (in) | 1.000 | 0.899 |
| Height of Solids | $H_s$ | (in) | 0.639 | 0.639 |
| Height of Water | $H_w$ | (in) | 0.066 | 0.232 |
| Height of Air | $H_a$ | (in) | 0.295 | 0.027 |
| **Dry Density** | | **(pcf)** | **107.7** | **133.4** |
| **Water Content** | | **(%)** | **3.8** | **13.5** |
| **Saturation** | | **(%)** | **18.2** | **89.7** |

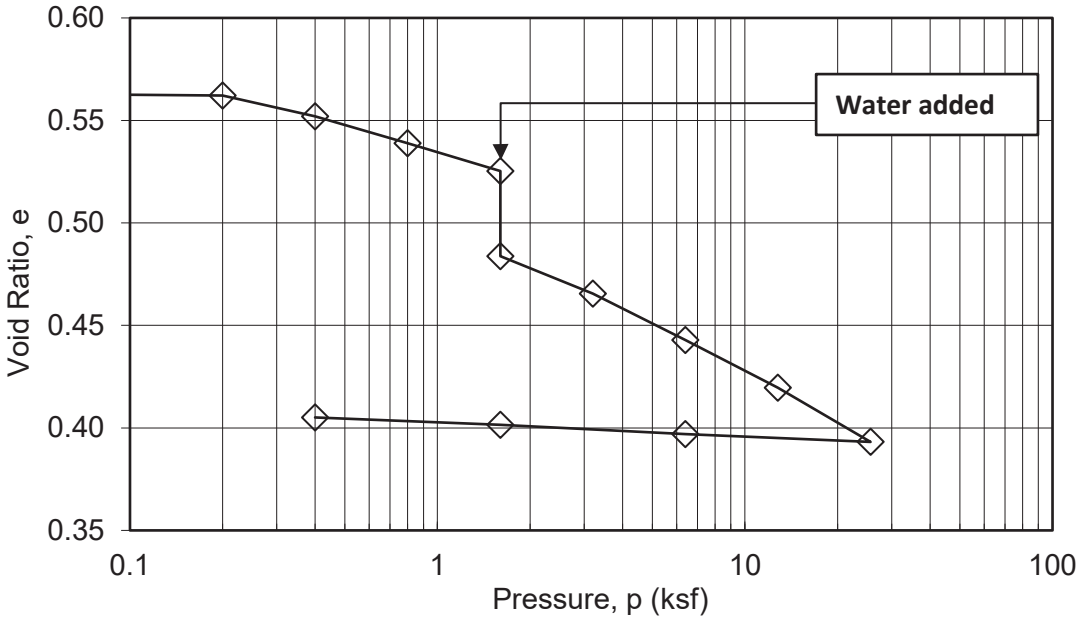
* Saturation is calcualted based on Gs= 2.70

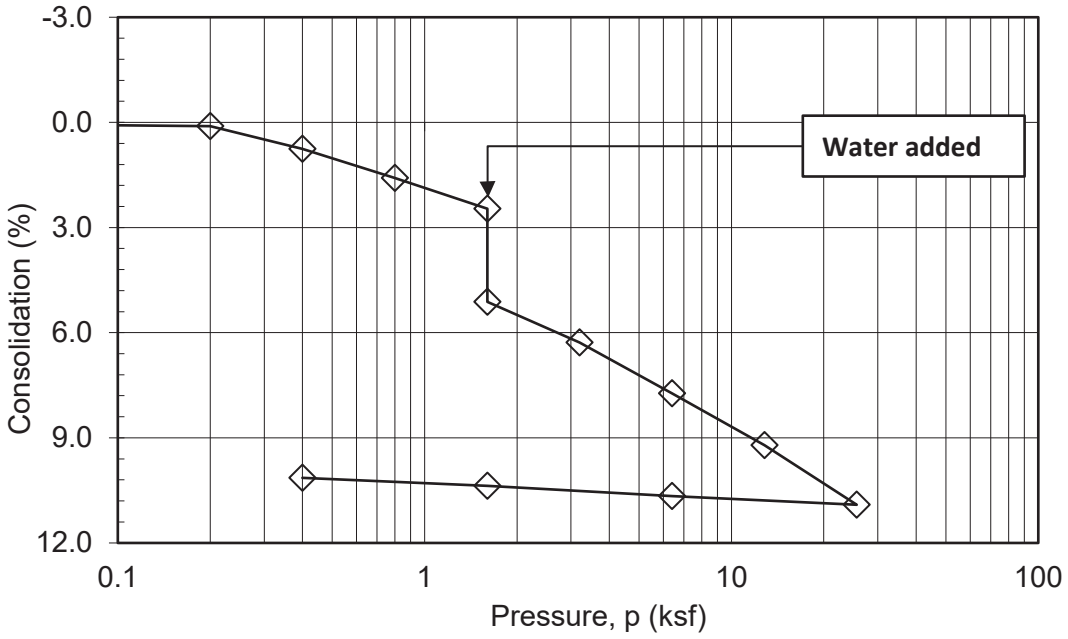
| **Load (ksf)** | **δH (in)** | **H (in)** | **Voids (in)** | **e** | **Consol. (%)** | **$a_v$ ($ksf^{-1}$)** | **$M_v$ ($ksf^{-1}$)** | **Comment** |
|---|---|---|---|---|---|---|---|---|
| 0.01 | ------- | 1.0000 | 0.361 | 0.564 | 0 | | | |
| 0.2 | 0.0010 | 0.9990 | 0.359 | 0.562 | 0.1 | 8.6E-03 | 5.5E-03 | |
| 0.4 | 0.0075 | 0.9925 | 0.353 | 0.552 | 0.8 | 5.1E-02 | 3.3E-02 | |
| 0.8 | 0.0159 | 0.9841 | 0.345 | 0.539 | 1.6 | 3.3E-02 | 2.1E-02 | |
| 1.6 | 0.0247 | 0.9754 | 0.336 | 0.525 | 2.5 | 1.7E-02 | 1.1E-02 | |
| 1.6 | 0.0512 | 0.9488 | 0.309 | 0.484 | 5.1 | Water Added | | |
| 3.2 | 0.0628 | 0.9372 | 0.298 | 0.466 | 6.3 | 1.1E-02 | 7.7E-03 | |
| 6.4 | 0.0774 | 0.9227 | 0.283 | 0.443 | 7.7 | 7.1E-03 | 4.9E-03 | |
| 12.8 | 0.0922 | 0.9079 | 0.268 | 0.420 | 9.2 | 3.6E-03 | 2.5E-03 | |
| 25.6 | 0.1091 | 0.8909 | 0.251 | 0.393 | 10.9 | 2.1E-03 | 1.5E-03 | |
| 6.4 | 0.1067 | 0.8934 | 0.254 | 0.397 | 10.7 | Unloaded | | |
| 1.6 | 0.1038 | 0.8963 | 0.257 | 0.402 | 10.4 | | | |
| 0.4 | 0.1015 | 0.8986 | 0.259 | 0.405 | 10.1 | | | |
| | | | | | | | | |

# CONSOLIDATION TEST

## ASTM D2435

| | | | |
|---|---|---|---|
| *Client :* | HDNGEO | *HAI Project No.:* | HDN-21-003 |
| *Project Name:* | KPBP - ED Expansion | *Tested by:* | KL |
| *Project Number:* | - | *Checked by:* | SB |
| *Boring No.:* | B-2 | *Date:* | 11/02/21 |
| *Sample No.:* | R | | |
| *Type of Sample:* | Undisturbed Ring | | |
| *Depth (ft):* | 5-6.5 | | |
| *Soil Description:* | Light Brown, Poorly Graded Sand with Silt and Gravel (SP-SM) | | |



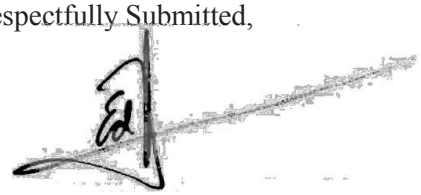
# Results Only Soil Testing for KPBP-ED Expansion

**November 8, 2021**

**Prepared for:**
**Kang Lin**
**HAI**
**250 Goddard**
**Irvine, CA 92618**
**kang@haieng.com**

**Project X Job#: S211104C**
**Client Job or PO#: HDN-21-003**

Respectfully Submitted,



Eduardo Hernandez, M.Sc., P.E.
Sr. Corrosion Consultant
NACE Corrosion Technologist #16592
Professional Engineer
California No. M37102
ehernandez@projectxcorrosion.com

## Soil Analysis Lab Results

Client: HAI
Job Name: KPBP-ED Expansion
Client Job Number: HDN-21-003
Project X Job Number: S211104C
November 8, 2021

| | Method | ASTM D4327 | | ASTM D4327 | | ASTM G187 | | ASTM D4972 |
|---|---|---|---|---|---|---|---|---|
| **Bore# / Description** | **Depth** | **Sulfates** $SO_4^{2-}$ | | **Chlorides** $Cl^-$ | | **Resistivity** As Rec'd \| Minimum | | **pH** |
| | (ft) | (mg/kg) | (wt%) | (mg/kg) | (wt%) | (Ohm-cm) | (Ohm-cm) | |
| B-2 Bulk | 0-5 | 99.6 | 0.0100 | 38.1 | 0.0038 | 24,790 | 8,040 | 10.1 |

Cations and Anions, except Sulfide and Bicarbonate, tested with Ion Chromatography
mg/kg = milligrams per kilogram (parts per million) of dry soil weight
ND = 0 = Not Detected | NT = Not Tested | Unk = Unknown
Chemical Analysis performed on 1:3 Soil-To-Water extract
PPM = mg/kg (soil) = mg/L (Liquid)

• ANALYSIS
• DESIGN

LaBelle • Marvin
PROFESSIONAL PAVEMENT ENGINEERING
A CALIFORNIA CORPORATION

• SOILS, ASPHALT
TECHNOLOGY

November 9, 2021

**Kang Chieh Lin**
**Hushmand Associates, Inc.**
250 Goddard
Irvine, California 92618

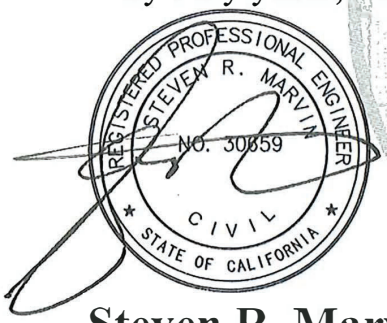
Project No. 47759

Attention: Kang Chieh Lin
Testing of the bulk soil sample delivered to our laboratory on 11/4/2021 has been completed.

| | |
|---|---|
| **P.N.:** | **HDN-21-003** |
| **Reference:** | **KPBP-ED Expansion** |
| **Sample:** | **B-1 Bulk @ 0'-5'** |

Data sheets are attached for your use and file. Any untested portion of the sample will be retained for a period of 60 days prior to disposal. The opportunity to be of service is sincerely appreciated and, should you have any questions, kindly call.

Very truly yours,




**Steven R. Marvin**
**RCE 30659**

SRM:tw
Enclosure

2700 S. GRAND AVENUE • SANTA ANA, CA 92705-5404 • (714) 546-3468 • FAX (714) 546-5841
INFO@LABELLEMARVIN.COM

# R - VALUE DATA SHEET

LaBelle Marvin

PROJECT No. 47759

DATE: 11/9/2021

BORING NO. B-1 Bulk @ 0'-5'

KPBP-ED Expansion

P.N. HDN-21-003

SAMPLE DESCRIPTION: Brown Gravelly Sand

| R-VALUE TESTING DATA \| CA TEST 301 | SPECIMEN ID | | |
|---|---|---|---|
| | a | b | c |
| Mold ID Number | 13 | 14 | 15 |
| Water added, grams | 52 | 62 | 55 |
| Initial Test Water, % | 8.6 | 9.6 | 8.9 |
| Compact Gage Pressure,psi | 350 | 350 | 350 |
| Exudation Pressure, psi | 560 | 143 | 294 |
| Height Sample, Inches | 2.60 | 2.58 | 2.59 |
| Gross Weight Mold, grams | 3128 | 3113 | 3111 |
| Tare Weight Mold, grams | 1966 | 1937 | 1941 |
| Sample Wet Weight, grams | 1162 | 1176 | 1170 |
| Expansion, Inches x 10exp-4 | 11 | 7 | 8 |
| Stability 2,000 lbs (160psi) | 13 / 24 | 17 / 29 | 14 / 25 |
| Turns Displacement | 4.78 | 4.88 | 4.83 |
| R-Value Uncorrected | 75 | 70 | 74 |
| R-Value Corrected | 76 | 72 | 75 |
| Dry Density, pcf | 124.6 | 126.1 | 125.7 |

**DESIGN CALCULATION DATA**

| | | | | |
|---|---|---|---|---|
| Traffic Index | Assumed: | 4.0 | 4.0 | 4.0 |
| G.E. by Stability | | 0.25 | 0.29 | 0.26 |
| G. E. by Expansion | | 0.37 | 0.23 | 0.27 |

| | | |
|---|---|---|
| **Equilibrium R-Value** | **74** by EXPANSION | Examined & Checked: 11 /9/ 21 |
| REMARKS: | Gf = 1.25<br>12.2% Retained on the 3/4" Sieve. | REGISTERED PROFESSIONAL ENGINEER STEVEN R. MARVIN NO. 30659 CIVIL STATE OF CALIFORNIA<br>Steven R. Marvin, RCE 30659 |

The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.

LaBelle Marvin

# R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 47759

DATE: 11 /9/ 2021

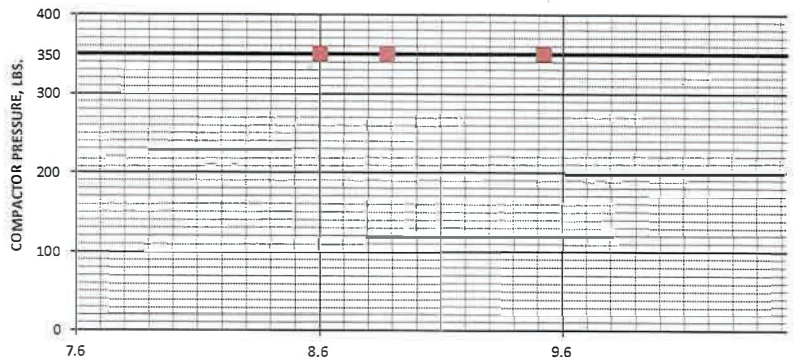
BORING NO. B-1 Bulk @ 0'-5'

KPBP-ED Expansion

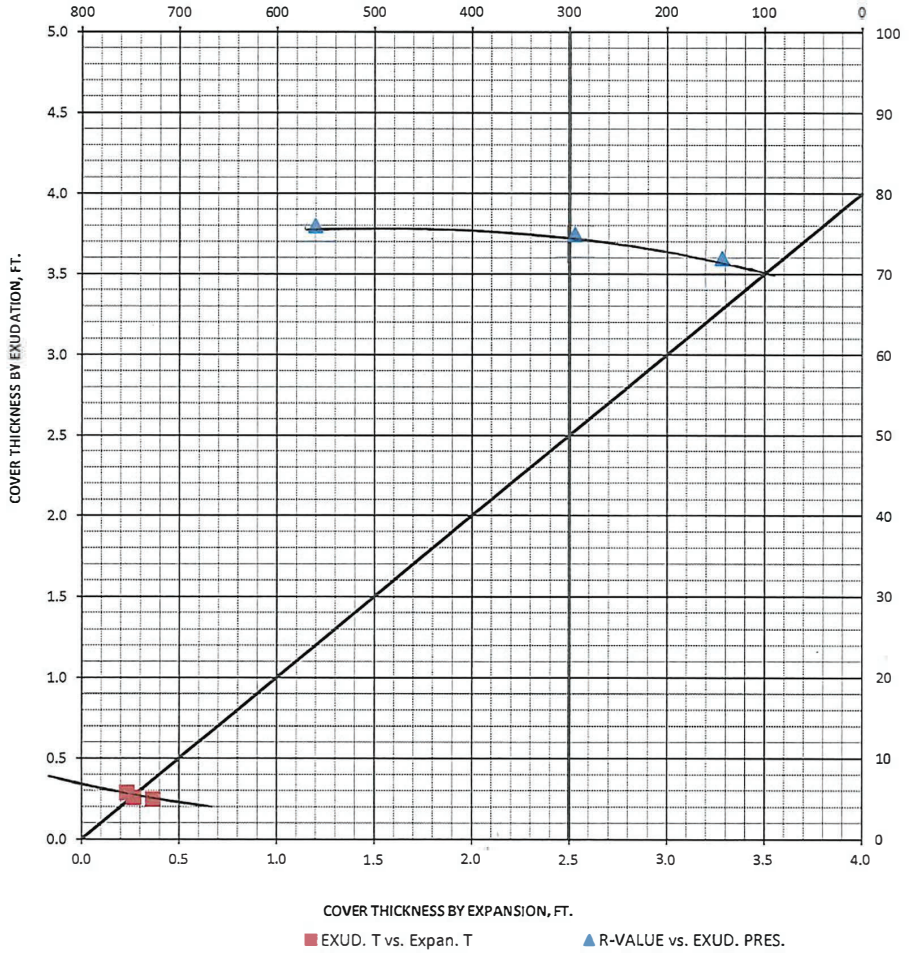
P.N. HDN-21-003

REMARKS:

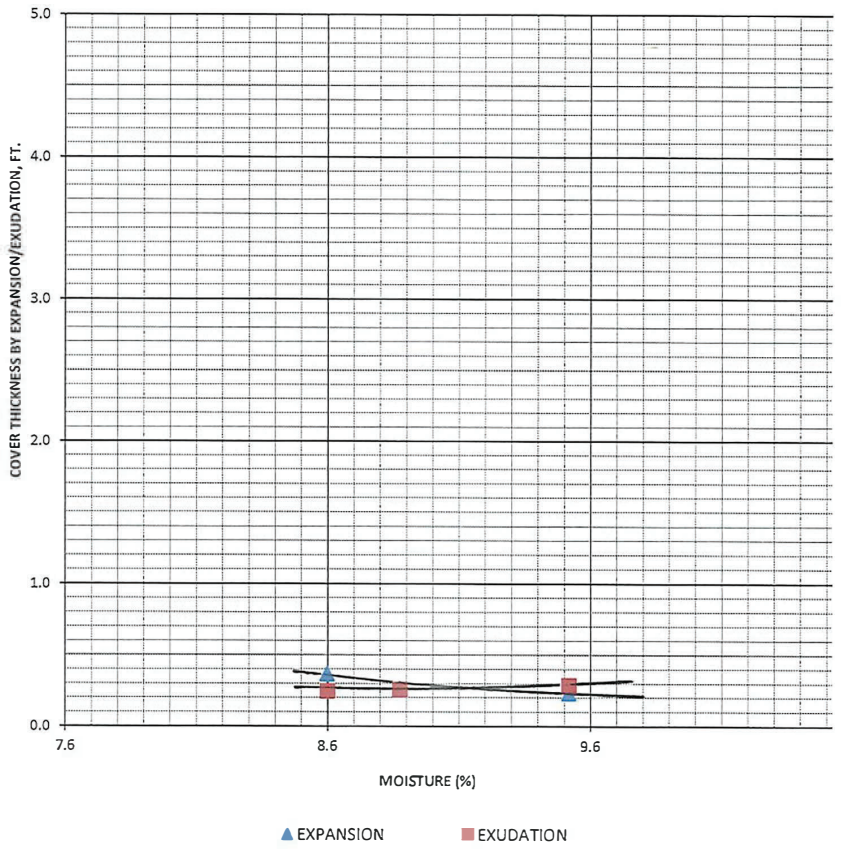
## COMPACTOR PRESSURE vs MOISTURE %

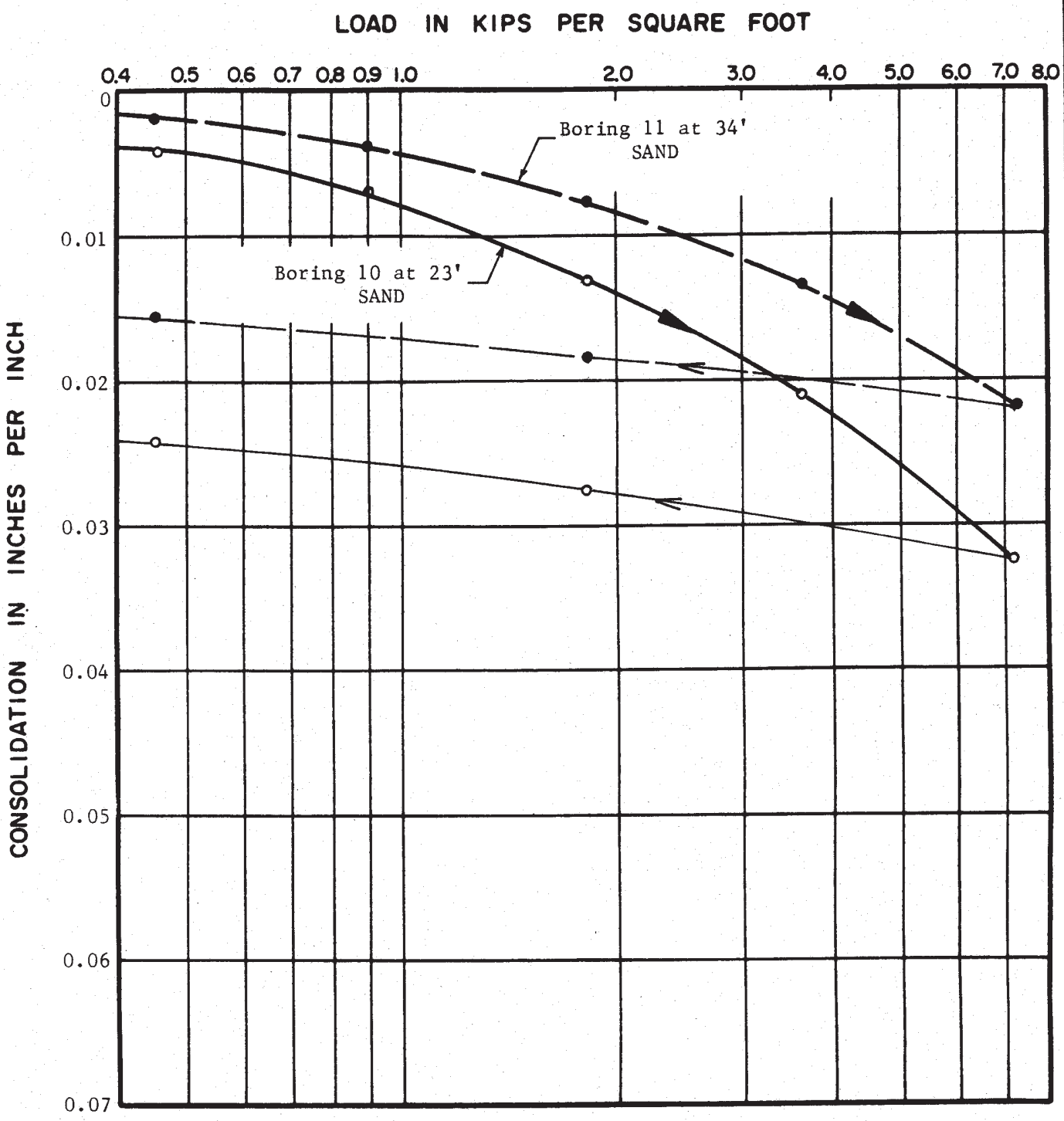



## COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION




## COVER THICKNESS vs MOISTURE %






NOTE: Samples tested at field moisture content.

## CONSOLIDATION TEST DATA

LeROY CRANDALL AND ASSOCIATES

# APPENDIX D

Figure D-1 Liquefaction-Induced Settlement Calculations and Plots

Figure D-2 Liquefaction-Induced Settlement Calculations and Plots

# LIQUEFACTION SEISMIC SETTLEMENT CALCULATIONS



Project Name: KPBP ED EXPANSION

Project No: C21-0415

Boring Location: B-1

**Input Parameters**

| | | | |
|---|---|---|---|
| Peak ground accel (g) = | 0.748 | Deagg | 0.748 0.808 |
| Earthquake magnitude, Mw = | 7.72 | Mode | |
| Magnitude Scaling Factor (MSF) Sand = | 0.94 | | |
| Magnitude Scaling Factor (MSF) Clay = | 0.99 | | |
| Design water table depth (m) = | 4.6 | 15.0 ft | |
| Measured Water table depth (m) = | 30.5 | 100.0 ft | |
| Average γ Above water table (kN/m³) = | 17.3 | 110.0 pcf | |
| Average γ Below water table (kN/m³) = | 18.1 | 115.0 pcf | |
| Hammer Energy Ratio, ER (%) = | 85 | 85 | |
| Borehole diameter (mm) = | 200 | 8.0 in | |
| Requires correction for sampler liners (Yes/No) = | | No | |
| Rod lengths stick up 5ft (1.5m) above ground | | Yes | |

$1 atm = 101.3 kPa
1 tsf = 95.76 kpa
2000 psf

| Depth (ft) | Depth (m) | Meas. Unit Weigh t (pcf) | Plastic Limit, PL | Liquid Limit, LL | In-Situ Water Content, $w_c$ | Undrained Shear Strength, Su (psf) | General Soil Type | Plastic Index, PI | Clay-like or Sand-like Behavior |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 1.52439 | | | | 5 | | CohesionlessCohesionless | | Sand-like |
| 7.5 | 2.3 | | | | 2 | | CohesionlessCohesionless | | Sand-like |
| 10.0 | 3.0 | | | | 6 | | CohesionlessCohesionless | | Sand-like |
| 15.0 | 4.6 | | | | 3 | | CohesionlessCohesionless | | Sand-like |
| 20.0 | 6.1 | | | | 5 | | CohesionlessCohesionless | | Sand-like |
| 25.0 | 7.6 | | | | 3 | | CohesionlessCohesionless | | Sand-like |
| 30.0 | 9.1 | | | | 6 | | CohesionlessCohesionless | | Sand-like |
| 35.0 | 10.7 | | | | 5 | | CohesionlessCohesionless | | Sand-like |
| 40.0 | 12.2 | | | | 4 | | CohesionlessCohesionless | | Sand-like |
| 45.0 | 13.7 | | | | 5 | | CohesionlessCohesionless | | Sand-like |
| 50.0 | 15.2 | | | | 5 | | Cohesionless | | |
| 55.0 | 16.8 | | | | | | | | |

**Fines Content Boreholes**

| | B-1 | B-2 | B-3 |
|---|---|---|---|
| | *10* | *7.6* | |
| | *10* | *7.6* | |
| | *8* | *3.6* | |
| | *13* | *8.3* | |
| | *4.7* | *11.8* | |
| | *3.7* | *5* | |
| | *7.1* | *5* | |
| | *5.3* | *3.8* | |
| | *7.6* | *5* | |
| | *3.2* | *5* | |
| | *16.1* | *40* | |
| | *7.7* | *40* | |

Equivalent # cycles
Nc = 17.301278
Zo = 100.0 ft

Dry sand friction angle 30 deg, at rest lateral earth pressure Ko = 0.5
friction angle =
**Ko =**

Idriss, I. M., and Boulanger, R. W. (2008). "Soil Liquefaction during Earthquakes." Earthquake Engineering Research Institute, MNO- 12.

0.04 + 0.04 **0.1** = Total

1.18 **1.2**

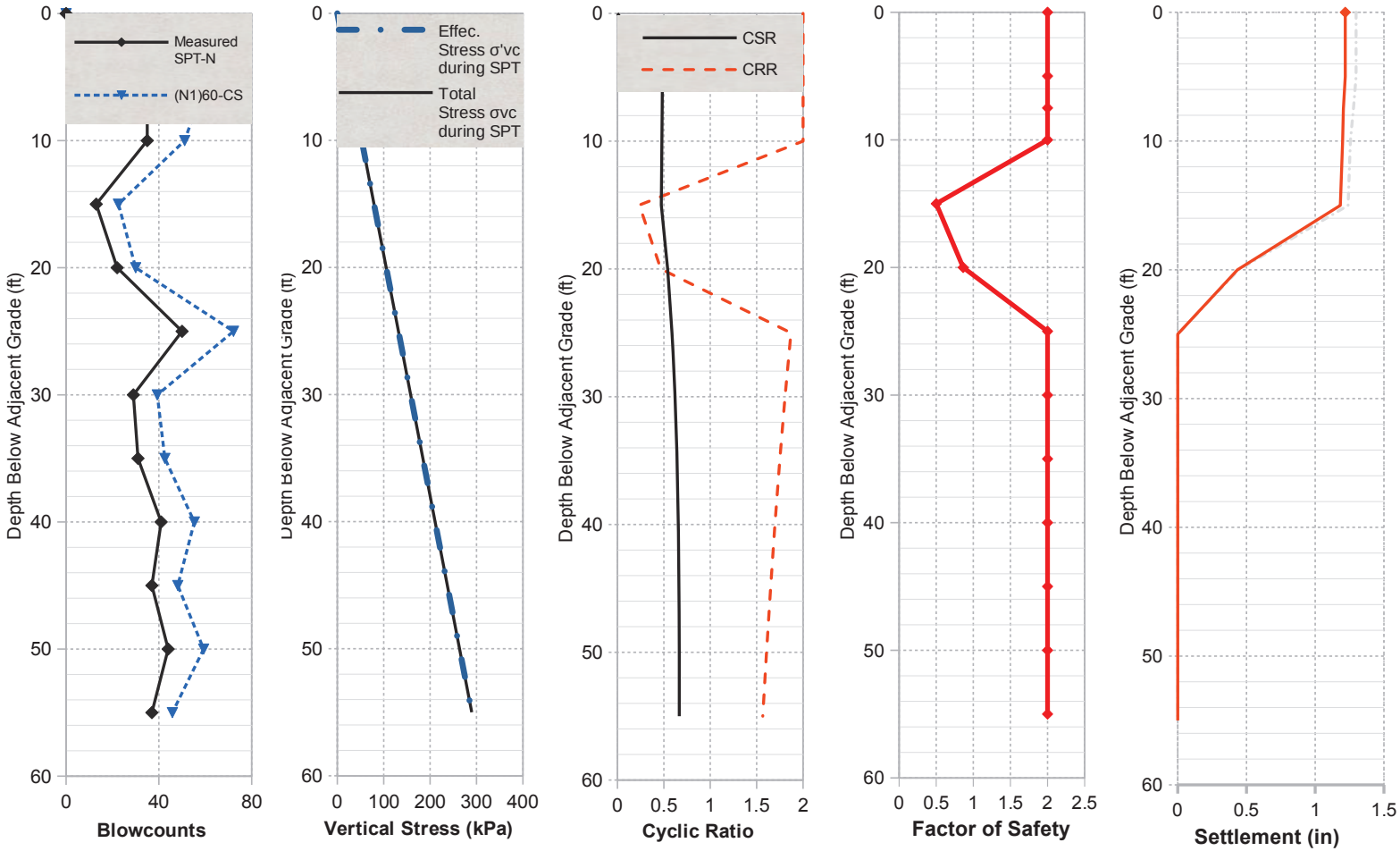
| Depth | Depth | Measured SPT-N | Soil Type | Flag "Clay" "Unsat" "Unreliable" | Fine Content | CE | CB | CR | CS | $N_{60}$ | Total Stress $\sigma_{vo}$ during SPT | | Effec. Stress $\sigma'_{vo}$ during SPT | | CN | $(N1)_{60}$ | ΔN for fines content | $(N1)_{60\text{-}CS}$ | Stress Reduction Coefficient, | Total Stress $\sigma_{vo}$ at design GWT | | Effective Stress $\sigma'_{vo}$ at design GWT | | CSR | $K_\sigma$ for sand | CRR M=7.5, $\sigma'_{vo}$=1 atm | CRR | **Factor of Safety** | Dry Sand Settlement | $\varepsilon_v$ for FS <=1.4 | Layer Settlement | Cumulative Settlement | Limiting shear strain | Parameter $F_\alpha$ | Maximum shear strain | $\Delta H_i$ (m) | $\Delta LDI_i$ (m) | Vertical Reconsol. Strain | $\Delta S_i$ (m) | $\Delta S_i$ (ft) | Liquefaction $\Delta S_i$ | Total Settlement | Depth of Base | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (ft) | (m) | bpf | (USCS) | | (%) | | | IB08 | | bpf | (kPa) | (tsf) | (kPa) | (tsf) | IB08 | bpf | | bpf | rd | (kPa) | (tsf) | (kPa) | (tsf) | | | | | $FS_{liq}$ | (in) | | δ (in) | Δ (in) | $\gamma_{lim}$ | | $\gamma_{max}$ | Interpret | | $\varepsilon_v$ (FS =<1.4) | | | | (in) | Δ (in) | (ft) | (m) |
| 0.0 | 0 | 0 | | Unsat | 0 | | | 0.75 | | | 0.0 | | 0.0 | | | | | 0 | 1.0 | | | | | 0 | | | 2 | 2 | | | | 1.3 | | | | 1.52 | | | | | | | **1.2** | 5 | 1.52 |
| 5 | 1.52 | 35 | SM | Unsat | 10 | 1.42 | 1.15 | 0.75 | 1 | 42.8 | 26.3 | 0.28 | 26.3 | 0.28 | 1.42 | 60.9 | 1.1 | 62.1 | 1.00 | 26.34 | 0.28 | 26.34 | 0.28 | 0.484 | 1.10 | 2.00 | 2.00 | 2 | 0.01 | 0.00 | 0.01 | 1.30 | 0.000 | -2.600 | 0.000 | 0.76 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 1.22 | 7.5 | 2.29 |
| 7.5 | 2.29 | 35 | SW-SM | Unsat | 10 | 1.42 | 1.15 | 0.75 | 1 | 42.8 | 39.5 | 0.41 | 39.5 | 0.41 | 1.28 | 54.7 | 1.1 | 55.9 | 0.99 | 39.52 | 0.41 | 39.52 | 0.41 | 0.482 | 1.10 | 2.00 | 2.00 | 2 | 0.01 | 0.00 | 0.02 | 1.28 | 0.000 | -2.075 | 0.000 | 0.76 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 1.21 | 10.0 | 3.05 |
| 10 | 3.05 | 35 | GP-GM | Unsat | 8 | 1.42 | 1.15 | 0.75 | 1 | 42.8 | 52.7 | 0.55 | 52.7 | 0.55 | 1.19 | 50.8 | 0.4 | 51.1 | 0.98 | 52.69 | 0.55 | 52.69 | 0.55 | 0.479 | 1.10 | 2.00 | 2.00 | 2 | 0.02 | 0.00 | 0.00 | 1.26 | 0.000 | -1.680 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 1.20 | 15.0 | 4.57 |
| 15 | 4.57 | 13 | SM | | 13 | 1.42 | 1.15 | 0.85 | 1 | 18.0 | 79.0 | 0.83 | 79.0 | 0.83 | 1.11 | 20.1 | 2.5 | 22.6 | 0.97 | 79.03 | 0.83 | 79.03 | 0.83 | 0.472 | 1.04 | 0.24 | 0.24 | 0.50084 | 0.00 | 2.21 | 0.80 | 1.24 | 0.119 | 0.376 | 0.119 | 0.91 | 0.109 | 0.021 | 0.019 | 0.06 | 0.75 | 1.18 | 18.0 | 5.49 |
| 20 | 6.10 | 22 | SP-SM | | 4.7 | 1.42 | 1.15 | 0.85 | 1 | 30.5 | 105.4 | 1.10 | 105.4 | 1.10 | 0.98 | 30.0 | 0.0 | 30.0 | 0.96 | 106.58 | 1.11 | 91.62 | 0.96 | 0.541 | 1.02 | 0.48 | 0.47 | 0.86279 | 0.00 | 0.92 | 0.44 | 0.44 | 0.046 | -0.089 | 0.046 | 1.22 | 0.056 | 0.009 | 0.011 | 0.04 | 0.43 | 0.43 | 22.0 | 6.71 |
| 25 | 7.62 | 50 | SP | | 3.7 | 1.42 | 1.15 | 0.95 | 1 | 77.4 | 131.7 | 1.38 | 131.7 | 1.38 | 0.93 | 72.2 | 0.0 | 72.2 | 0.94 | 134.12 | 1.40 | 104.21 | 1.09 | 0.588 | 0.99 | 2.00 | 1.87 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | -3.488 | 0.000 | 2.44 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 30.0 | 9.15 |
| 30 | 9.15 | 29 | SP-SM | | 7.1 | 1.42 | 1.15 | 0.95 | 1 | 44.9 | 158.1 | 1.65 | 158.1 | 1.65 | 0.87 | 39.2 | 0.2 | 39.3 | 0.92 | 161.66 | 1.69 | 116.80 | 1.22 | 0.620 | 0.96 | 2.00 | 1.81 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.010 | -0.754 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 35.0 | 10.67 |
| 35 | 10.67 | 31 | SP-SM | | 5.3 | 1.42 | 1.15 | 1 | 1 | 50.5 | 184.4 | 1.93 | 184.4 | 1.93 | 0.84 | 42.6 | 0.0 | 42.6 | 0.90 | 189.20 | 1.98 | 129.38 | 1.35 | 0.642 | 0.93 | 2.00 | 1.75 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.005 | -1.003 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 40.0 | 12.20 |
| 40 | 12.20 | 41 | SP-SM | | 7.6 | 1.42 | 1.15 | 1 | 1 | 66.8 | 210.8 | 2.20 | 210.8 | 2.20 | 0.82 | 55.0 | 0.3 | 55.3 | 0.88 | 216.74 | 2.26 | 141.97 | 1.48 | 0.656 | 0.90 | 2.00 | 1.70 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | -2.026 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 45.0 | 13.72 |
| 45 | 13.72 | 37 | GP | | 3.2 | 1.42 | 1.15 | 1 | 1 | 60.3 | 237.1 | 2.48 | 237.1 | 2.48 | 0.80 | 48.2 | 0.0 | 48.2 | 0.86 | 244.29 | 2.55 | 154.56 | 1.61 | 0.663 | 0.87 | 2.00 | 1.65 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.001 | -1.440 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 50.0 | 15.24 |
| 50 | 15.24 | 44 | SM | | 16.1 | 1.42 | 1.15 | 1 | 1 | 71.7 | 263.4 | 2.75 | 263.4 | 2.75 | 0.78 | 55.7 | 3.6 | 59.3 | 0.84 | 271.83 | 2.84 | 167.15 | 1.75 | 0.666 | 0.85 | 2.00 | 1.61 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | -2.364 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 55.0 | 16.77 |
| 55 | 16.77 | 37 | SP-SM | | 7.7 | 1.42 | 1.15 | 1 | 1 | 60.3 | 289.8 | 3.03 | 289.8 | 3.03 | 0.76 | 45.6 | 0.3 | 45.8 | 0.82 | 299.37 | 3.13 | 179.74 | 1.88 | 0.666 | 0.83 | 2.00 | 1.57 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.002 | -1.256 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 60.0 | 18.29 |
| 30 | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

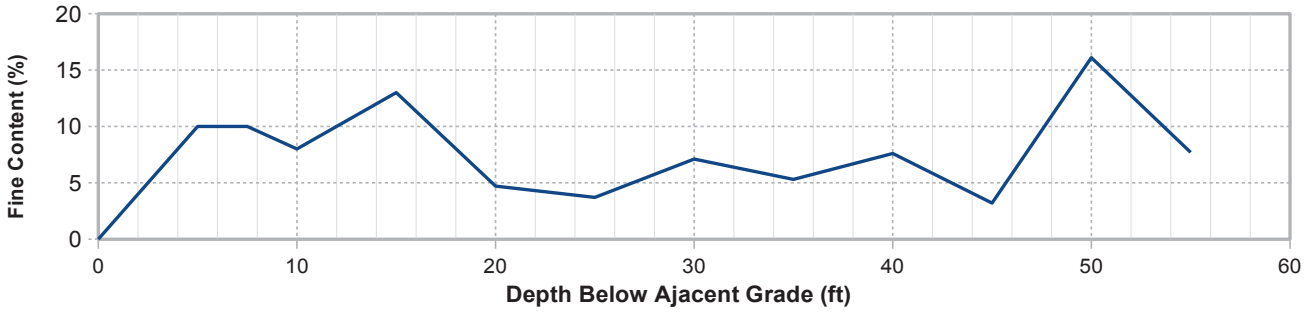
16.8

PRADEL 1998 – DRY SAND SETTLEMENT

| Depth of layer base(ft) | Layer thickness (ft) | Average layer depth (ft) | Eff layer stress (tsf) | N - field | SPT depth | CN | CE | N1-60 | FC(%) | alpha | beta | Ko | p (psf) | G-max (psf) | a | b | Tav (psf) | cyclic Shear Strain γ | epsln-15 | Vol Strain epsln-Nc | Settlement (in) | Cumulative settlement (inch) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.5 | 7.50 | 3.75 | 0.28 | 35 | 5 | 1.42 | 1.42 | 61 | 10 | 0.87 | 1.02 | 0.5 | 366.7 | ### | 0.131 | 0.014 | 400.1 | 2.66E-04 | 6.98E-05 | 7.45E-05 | 0.013 | 0.06 |
| 10 | 2.50 | 8.75 | 0.41 | 35 | 7.5 | 1.28 | 1.42 | 55 | 10 | 0.87 | 1.02 | 0.5 | 550.0 | ### | 0.135 | 0.011 | 531.8 | 2.99E-04 | 8.92E-05 | 9.52E-05 | 0.006 | 0.05 |
| 15 | 5.00 | 12.50 | 0.55 | 35 | 10 | 1.19 | 1.42 | 51 | 8 | 0.30 | 1.01 | 0.5 | 733.3 | ### | 0.138 | 0.010 | 794.3 | 3.96E-04 | 1.30E-04 | 1.38E-04 | 0.017 | 0.04 |
| 18 | 3.00 | 16.50 | 0.83 | 13 | 15 | 1.11 | 1.42 | 20 | 13 | 1.89 | 1.04 | 1.5 | 2200.0 | ### | 0.167 | 0.005 | 941.5 | 3.70E-04 | 3.68E-04 | 3.93E-04 | 0.028 | 0.03 |

## LIQUEFATION PLOTS




**Project Name:**

**KPBP ED EXPANSION**

**Project No:**
C21-0415

**Borehole ID**
**B-1**

**Borehole Diameter**
8 in

**Design GWT**
15.0 ft

**PGAM (g)**
0.748

**EQ Mag, Mw**
7.72

**MSF**
0.94

Idriss, I. M., and Boulanger, R. W. (2008). "Soil Liquefaction during Earthquakes." Earthquake Engineering Research Institute, MNO- 12.

# LIQUEFACTION SEISMIC SETTLEMENT CALCULATIONS



Project Name: KPBP ED EXPANSION

Project No: C21-0415

Boring Location: B-2

**Input Parameters**

| | | | |
|---|---|---|---|
| Peak ground accel (g) = | 0.748 | Deagg | 0.748 0.808 |
| Earthquake magnitude, Mw = | 7.72 | Mode | |
| Magnitude Scaling Factor (MSF) Sand = | 0.94 | | |
| Magnitude Scaling Factor (MSF) Clay = | 0.99 | | |
| Design water table depth (m) = | 4.6 | 15.0 ft | |
| Measured Water table depth (m) = | 30.5 | 100.0 ft | |
| Average γ Above water table (kN/m³) = | 17.3 | 110.0 pcf | |
| Average γ Below water table (kN/m³) = | 18.1 | 115.0 pcf | |
| Hammer Energy Ratio, ER (%) = | 85 | 85 | |
| Borehole diameter (mm) = | 200 | 8.0 in | |
| Requires correction for sampler liners (Yes/No) = | | No | |
| Rod lengths stick up 5ft (1.5m) above ground | | Yes | |

$1 atm = 101.3 kPa
1 tsf = 95.76 kpa
2000 psf

| Depth (ft) | Depth (m) | Meas. Unit Weight (pcf) | Plastic Limit, PL | Liquid Limit, LL | In-Situ Water Content, $w_c$ | Undrained Shear Strength, Su (psf) | General Soil Type | Plastic Index, PI | Clay-like or Sand-like Behavior |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 1.52439 | | | | 5 | | Cohesionless | Cohesionless | Sand-like |
| 7.5 | 2.3 | | | | 2 | | Cohesionless | Cohesionless | Sand-like |
| 10.0 | 3.0 | | | | 6 | | Cohesionless | Cohesionless | Sand-like |
| 15.0 | 4.6 | | | | 3 | | Cohesionless | Cohesionless | Sand-like |
| 20.0 | 6.1 | | | | 5 | | Cohesionless | Cohesionless | Sand-like |
| 25.0 | 7.6 | | | | 3 | | Cohesionless | Cohesionless | Sand-like |
| 30.0 | 9.1 | | | | 6 | | Cohesionless | Cohesionless | Sand-like |
| 35.0 | 10.7 | | | | 5 | | Cohesionless | Cohesionless | Sand-like |
| 40.0 | 12.2 | | | | 4 | | Cohesionless | Cohesionless | Sand-like |
| 45.0 | 13.7 | | | | 5 | | Cohesionless | Cohesionless | Sand-like |
| 50.0 | 15.2 | | | | 5 | | Cohesionless | | |
| 55.0 | 16.8 | | | | | | | | |

**Fines Content Boreholes**

| | B-1 | B-2 | B-3 |
|---|---|---|---|
| | *10* | *7.6* | |
| | *10* | *7.6* | |
| | *8* | *3.6* | |
| | *13* | *8.3* | |
| | *4.7* | *11.8* | |
| | *3.7* | *5* | |
| | *7.1* | *5* | |
| | *5.3* | *3.8* | |
| | *7.6* | *5* | |
| | *3.2* | *5* | |
| | *16.1* | *40* | |
| | *7.7* | *40* | |

Equivalent # cycles
Nc = 17.301278
Zo = 100.0 ft

Dry sand friction angle 30 deg, at rest lateral earth pressure Ko = 0.5
friction angle =
**Ko =**

Idriss, I. M., and Boulanger, R. W. (2008). "Soil Liquefaction during Earthquakes." Earthquake Engineering Research Institute, MNO- 12.

0.07 + 0.07 **0.1** = Total

1.94 **2.0**

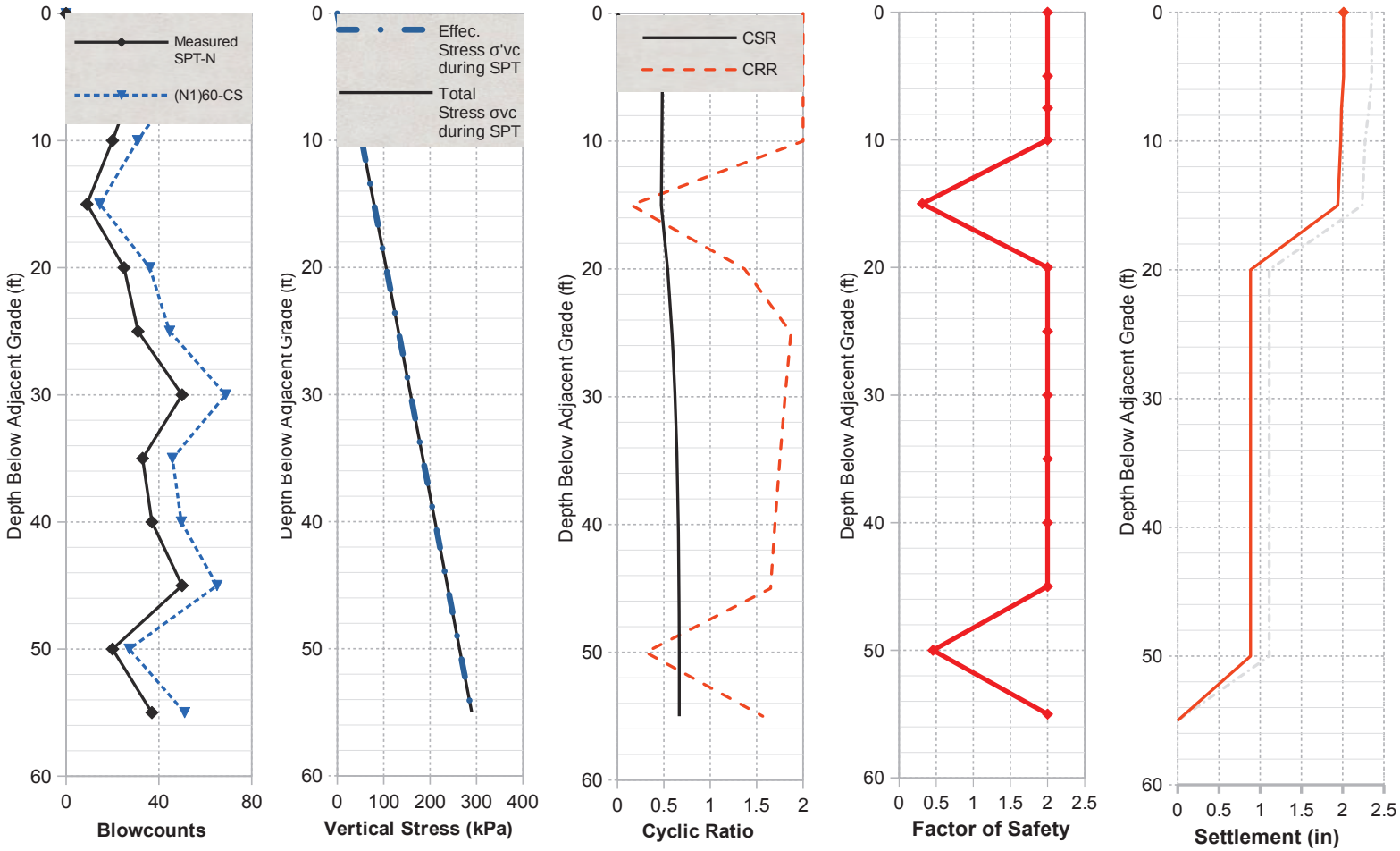
| Depth | Depth | Measured SPT-N | Soil Type | Flag "Clay" "Unsat" "Unreliable" | Fine Content | CE | CB | CR | CS | $N_{60}$ | Total Stress $\sigma_{vo}$ during SPT | | Effec. Stress $\sigma'_{vo}$ during SPT | | CN | $(N1)_{60}$ | ΔN for fines content | $(N1)_{60\text{-}CS}$ | Stress Reduction Coefficient, | Total Stress $\sigma_{vo}$ at design GWT | | Effective Stress $\sigma'_{vo}$ at design GWT | | CSR | $K_\sigma$ for sand | CRR $_{M=7.5,\ \sigma'_{vo}=1\ atm}$ | CRR | **Factor of Safety** | Dry Sand Settlement | $\varepsilon_v$ for FS <=1.4 | Layer Settlement | Cumulative Settlement | Limiting shear strain | Parameter $F_\alpha$ | Maximum shear strain | $\Delta H_i$ (m) | $\Delta LDI_i$ (m) | Vertical Reconsol. Strain | $\Delta S_i$(m) | $\Delta S_i$(ft) | Liquefaction $\Delta S_i$ | Total Settlement | Depth of Base | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (ft) | (m) | bpf | (USCS) | | (%) | | | IB08 | | bpf | (kPa) | (tsf) | (kPa) | (tsf) | IB08 | bpf | | bpf | rd | (kPa) | (tsf) | (kPa) | (tsf) | | | | | $FS_{liq}$ | (in) | | δ (in) | Δ (in) | $\gamma_{lim}$ | | $\gamma_{max}$ | Interpret | | $\varepsilon_v$ (FS =<1.4) | | | | (in) | Δ (in) | (ft) | (m) |
| 0.0 | 0 | 0 | | Unsat | 0 | | | 0.75 | | | 0.0 | | 0.0 | | | 0 | | 0 | 1.0 | | | | | 0 | | | 2 | 2 | | | 2.4 | | | | 1.52 | | | | | | | **2.0** | 5 | 1.52 |
| 5 | 1.52 | 22 | SM | Unsat | 7.6 | 1.42 | 1.15 | 0.75 | 1 | 26.9 | 26.3 | 0.28 | 26.3 | 0.28 | 1.49 | 40.1 | 0.3 | 40.4 | 1.00 | 26.34 | 0.28 | 26.34 | 0.28 | 0.484 | 1.10 | 2.00 | 2.00 | 2 | 0.03 | 0.00 | 0.01 | 2.35 | 0.008 | -0.831 | 0.000 | 0.76 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 2.01 | 7.5 | 2.29 |
| 7.5 | 2.29 | 25 | SW-SM | Unsat | 7.6 | 1.42 | 1.15 | 0.75 | 1 | 30.5 | 39.5 | 0.41 | 39.5 | 0.41 | 1.32 | 40.3 | 0.3 | 40.6 | 0.99 | 39.52 | 0.41 | 39.52 | 0.41 | 0.482 | 1.10 | 2.00 | 2.00 | 2 | 0.01 | 0.00 | 0.04 | 2.32 | 0.008 | -0.849 | 0.000 | 0.76 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 1.99 | 10.0 | 3.05 |
| 10 | 3.05 | 20 | GP-GM | Unsat | 3.6 | 1.42 | 1.15 | 0.75 | 1 | 24.4 | 52.7 | 0.55 | 52.7 | 0.55 | 1.26 | 30.8 | 0.0 | 30.8 | 0.98 | 52.69 | 0.55 | 52.69 | 0.55 | 0.479 | 1.10 | 0.54 | 2.00 | 2 | 0.04 | 0.00 | 0.00 | 2.27 | 0.041 | -0.145 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 1.98 | 15.0 | 4.57 |
| 15 | 4.57 | 9 | SM | | 8.3 | 1.42 | 1.15 | 0.85 | 1 | 12.5 | 79.0 | 0.83 | 79.0 | 0.83 | 1.13 | 14.1 | 0.5 | 14.5 | 0.97 | 79.03 | 0.83 | 79.03 | 0.83 | 0.472 | 1.03 | 0.15 | 0.15 | 0.31234 | 0.00 | 3.13 | 1.13 | 2.24 | 0.289 | 0.773 | 0.289 | 0.91 | 0.265 | 0.029 | 0.027 | 0.09 | 1.06 | 1.94 | 18.0 | 5.49 |
| 20 | 6.10 | 25 | SP-SM | | 11.8 | 1.42 | 1.15 | 0.85 | 1 | 34.6 | 105.4 | 1.10 | 105.4 | 1.10 | 0.99 | 34.1 | 2.0 | 36.1 | 0.96 | 106.58 | 1.11 | 91.62 | 0.96 | 0.541 | 1.03 | 1.41 | 1.37 | 2 | 0.00 | 0.00 | 0.00 | 1.11 | 0.018 | -0.516 | 0.000 | 1.22 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.88 | 22.0 | 6.71 |
| 25 | 7.62 | 31 | SP | | 5 | 1.42 | 1.15 | 0.95 | 1 | 48.0 | 131.7 | 1.38 | 131.7 | 1.38 | 0.93 | 44.6 | 0.0 | 44.7 | 0.94 | 134.12 | 1.40 | 104.21 | 1.09 | 0.588 | 0.99 | 2.00 | 1.87 | 2 | 0.00 | 0.00 | 0.00 | 1.11 | 0.003 | -1.162 | 0.000 | 2.44 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.88 | 30.0 | 9.15 |
| 30 | 9.15 | 50 | SP-SM | | 5 | 1.42 | 1.15 | 0.95 | 1 | 77.4 | 158.1 | 1.65 | 158.1 | 1.65 | 0.89 | 68.8 | 0.0 | 68.8 | 0.92 | 161.66 | 1.69 | 116.80 | 1.22 | 0.620 | 0.96 | 2.00 | 1.81 | 2 | 0.00 | 0.00 | 0.00 | 1.11 | 0.000 | -3.187 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.88 | 35.0 | 10.67 |
| 35 | 10.67 | 33 | SP-SM | | 3.8 | 1.42 | 1.15 | 1 | 1 | 53.8 | 184.4 | 1.93 | 184.4 | 1.93 | 0.85 | 45.9 | 0.0 | 45.9 | 0.90 | 189.20 | 1.98 | 129.38 | 1.35 | 0.642 | 0.93 | 2.00 | 1.75 | 2 | 0.00 | 0.00 | 0.00 | 1.11 | 0.002 | -1.258 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.88 | 40.0 | 12.20 |
| 40 | 12.20 | 37 | SP-SM | | 5 | 1.42 | 1.15 | 1 | 1 | 60.3 | 210.8 | 2.20 | 210.8 | 2.20 | 0.82 | 49.7 | 0.0 | 49.7 | 0.88 | 216.74 | 2.26 | 141.97 | 1.48 | 0.656 | 0.90 | 2.00 | 1.70 | 2 | 0.00 | 0.00 | 0.00 | 1.11 | 0.000 | -1.563 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.88 | 45.0 | 13.72 |
| 45 | 13.72 | 50 | GP | | 5 | 1.42 | 1.15 | 1 | 1 | 81.5 | 237.1 | 2.48 | 237.1 | 2.48 | 0.80 | 65.1 | 0.0 | 65.1 | 0.86 | 244.29 | 2.55 | 154.56 | 1.61 | 0.663 | 0.87 | 2.00 | 1.65 | 2 | 0.00 | 0.00 | 0.00 | 1.11 | 0.000 | -2.862 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.88 | 50.0 | 15.24 |
| 50 | 15.24 | 20 | SM | | 40 | 1.42 | 1.15 | 1 | 1 | 32.6 | 263.4 | 2.75 | 263.4 | 2.75 | 0.66 | 21.6 | 5.6 | 27.2 | 0.84 | 271.83 | 2.84 | 167.15 | 1.75 | 0.666 | 0.91 | 0.35 | 0.30 | 0.45621 | 0.00 | 1.85 | 1.11 | 1.11 | 0.067 | 0.093 | 0.067 | 1.52 | 0.103 | 0.015 | 0.022 | 0.07 | 0.88 | 0.88 | 55.0 | 16.77 |
| 55 | 16.77 | 37 | SP-SM | | 40 | 1.42 | 1.15 | 1 | 1 | 60.3 | 289.8 | 3.03 | 289.8 | 3.03 | 0.76 | 45.6 | 5.6 | 51.1 | 0.82 | 299.37 | 3.13 | 179.74 | 1.88 | 0.666 | 0.83 | 2.00 | 1.57 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | -1.681 | 0.000 | 1.52 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 60.0 | 18.29 |
| 30 | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

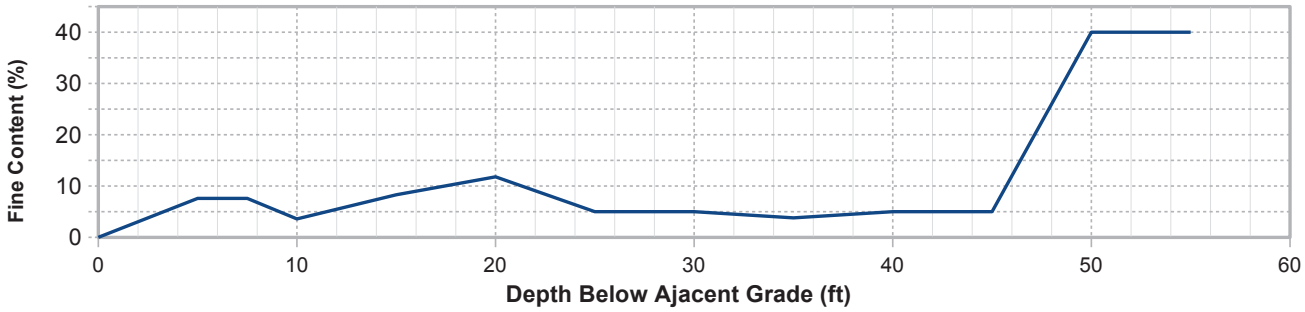
16.8

PRADEL 1998 – DRY SAND SETTLEMENT

| Depth of layer base(ft) | Layer thickness (ft) | Average layer depth (ft) | Eff layer stress (tsf) | N - field | SPT depth | CN | CE | N1-60 | FC(%) | alpha | beta | Ko | p (psf) | G-max (psf) | a | b | Tav (psf) | cyclic Shear Strain γ | epsln-15 | Vol Strain epsln-Nc | Settlement (in) | Cumulative settlement (inch) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.5 | 7.50 | 3.75 | 0.28 | 22 | 5 | 1.49 | 1.42 | 40 | 8 | 0.22 | 1.01 | 0.5 | 366.7 | ### | 0.131 | 0.014 | 400.1 | 3.05E-04 | 1.33E-04 | 1.41E-04 | 0.025 | 0.12 |
| 10 | 2.50 | 8.75 | 0.41 | 25 | 7.5 | 1.32 | 1.42 | 40 | 8 | 0.22 | 1.01 | 0.5 | 550.0 | ### | 0.135 | 0.011 | 531.8 | 3.31E-04 | 1.43E-04 | 1.52E-04 | 0.009 | 0.09 |
| 15 | 5.00 | 12.50 | 0.55 | 20 | 10 | 1.26 | 1.42 | 31 | 4 | 0.00 | 1.00 | 0.5 | 733.3 | ### | 0.138 | 0.010 | 794.3 | 4.68E-04 | 2.78E-04 | 2.97E-04 | 0.036 | 0.08 |
| 18 | 3.00 | 16.50 | 0.83 | 9 | 15 | 1.13 | 1.42 | 14 | 8 | 0.37 | 1.01 | 1.5 | 2200.0 | ### | 0.167 | 0.005 | 941.5 | 4.16E-04 | 6.34E-04 | 6.76E-04 | 0.049 | 0.05 |

## LIQUEFATION PLOTS




**Project Name:**

**KPBP ED EXPANSION**

**Project No:**
C21-0415

**Borehole ID**
**B-2**

**Borehole Diameter**
8 in

**Design GWT**
15.0 ft

**PGAM (g)**
0.748

**EQ Mag, Mw**
7.72

**MSF**
0.94

Idriss, I. M., and Boulanger, R. W. (2008). "Soil Liquefaction during Earthquakes." Earthquake Engineering Research Institute, MNO- 12.

# Appendix B

Built Environment Inventory and Evaluation Report

# Built Environment Inventory and Evaluation Report

# Kaiser Baldwin Park Medical Center Project, City of Baldwin Park, California

**AUGUST 2022**

*Prepared for:*

**KAISER FOUNDATION HOSPITALS**
Capital Projects/Baldwin Park Service Area
4900 Rivergrade Rd., Suite C110
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DUDEK

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Printed on 30% post-consumer recycled material.

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# Executive Summary

Dudek was retained by Top Commercial Realty, Inc. to prepare a Built Environment Inventory and Evaluation Report for the proposed Kaiser Baldwin Park Medical Center Project in the City of Baldwin Park, California (proposed Project). This report evaluates two connected buildings located at 1022-1026 Leorita Street. The building at 1026 Leorita Street (APN 8559-008-005) was constructed in 1976, and the building at 1022-1024 Leorita Street (APN 8559-008-011) was completed in 1986 (note that the original building permit was pulled in 1984; this report uses the date of completion, 1986, for clarity). The buildings appear to have been connected circa 1995 per aerial photographs (NETR 2022). Because the buildings are connected and housed the same business, the Broken Horn Saddlery, since their respective construction dates, they are evaluated in this report as a single property (subject property). This report includes the results of a California Historical Resources Information System (CHRIS) records search; an intensive-level survey of the proposed Project site and its vicinity (Project site) by a qualified architectural historian; building development and archival research; development of an appropriate historic context for the Project site; and recordation and evaluation of one built environment resource over 45 years old for historical significance and integrity in consideration of National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and City of Baldwin Hills local designation criteria and integrity requirements. This report was prepared in conformance with California Environmental Quality Act (CEQA) Guidelines Section 15064.5 for historical resources, 21083.2 for archaeological resources, and all applicable local guidelines and regulations.

A CHRIS records search was completed by staff at the South Central Coastal Information Center (SCCIC) on July 11, 2022. Three of these previous investigations overlap with the Project site, but these studies do not include the subject property. No cultural resources were identified within the Project site. The built environment survey was conducted on April 19, 2022. The survey was conducted on foot and involved surveying the subject property and its surroundings and recording the subject property with notes and photographs.

As a result of Dudek's archival research, field survey, record search, and property significance evaluations, the subject property is recommended ineligible as a designated resource in Baldwin Park, for the CRHR, and the NRHP due to a lack of significant historical associations and architectural merit. Therefore, the subject property is not considered a historical resource for the purposes of CEQA. The finding for built environment cultural resources for the proposed Project under CEQA is No Impact. As the proposed Project would have no impact on historical resources, no further study is required.

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# 1 Introduction

Dudek was retained by Top Commercial Realty, Inc. to prepare a Built Environment Inventory and Evaluation Report for the proposed Kaiser Baldwin Park Medical Center Project in the City of Baldwin Park, California (proposed Project). This report includes the results of a California Historical Resources Information System (CHRIS) records search; an intensive-level survey of the subject property by a qualified architectural historian; building development and archival research; development of an appropriate historic context for the subject property; and recordation and evaluation of the subject property for historical significance and integrity in consideration of National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and City of Baldwin Park landmark designation criteria and integrity requirements. This report was prepared in conformance with California Environmental Quality Act (CEQA) Guidelines Section 15064.5 for historical resources.

The subject property consists of two connected commercial buildings that total approximately 23,040 square feet: 1022-1024 Leorita Street, completed in 1986, and 1026 Leorita Street, constructed in 1976, and associated concrete parking lots. Until 2021, the subject property was occupied by the Broken Horn Saddlery, a commercial business. The subject property is adjacent to the existing Kaiser Permanente Baldwin Park Medical Center facilities. The proposed Project proposes to demolish the existing buildings on the property and construct a new approximately 33,000 square foot medical office building. The proposed Project would be physically and functionally connected to the Kaiser Permanente Baldwin Park Medical Center.

## 1.1 Project Location and Description

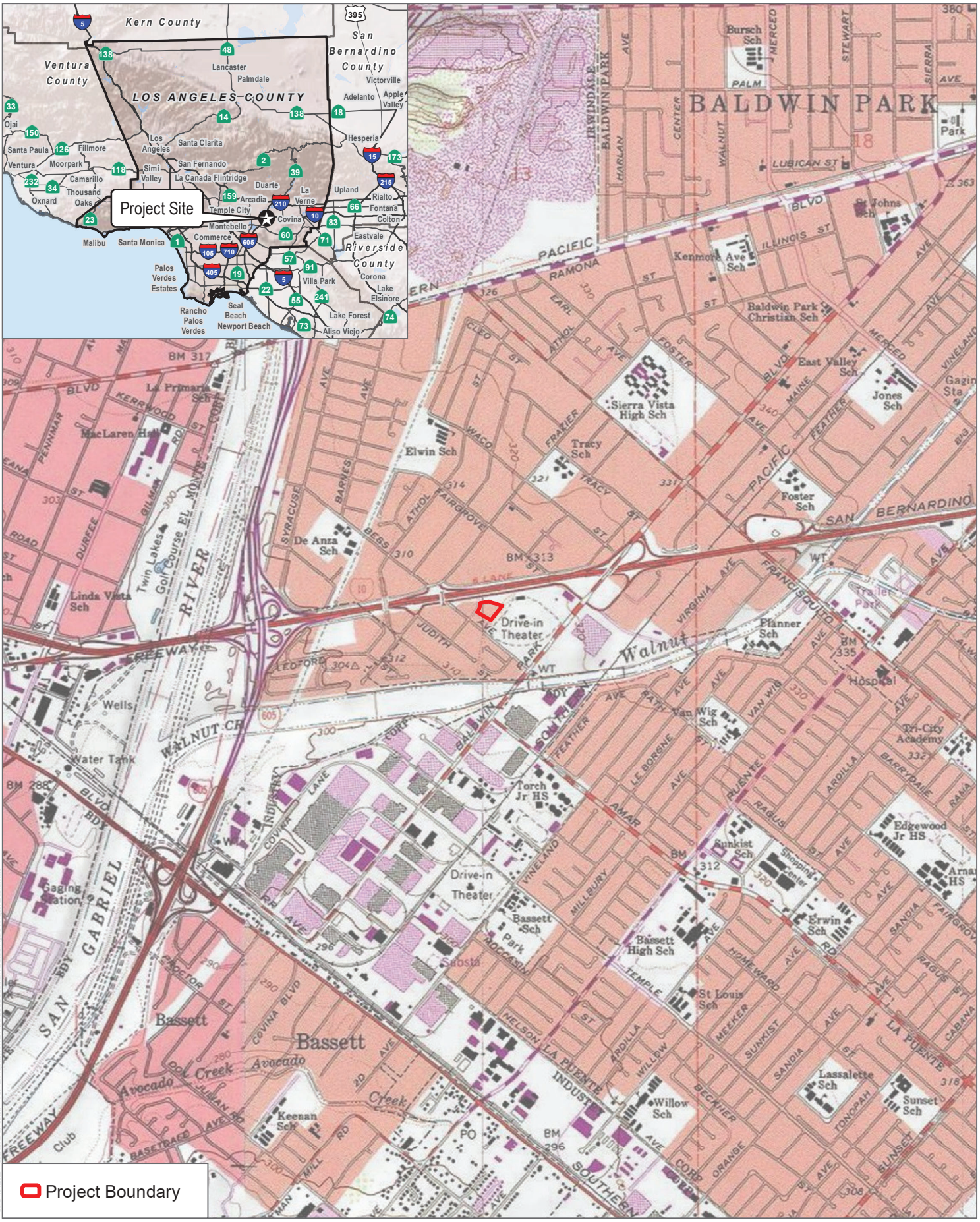
### Project Location

The subject property is comprised of two parcels: 1022-1024 Leorita Street (APN 8559-008-011) and 1026 Leorita Street (APN 8559-008-005) on a total of approximately 1.53 acres of land. The two buildings are connected and are considered a single resource for the purposes of this report. The subject property is located in a mixed-use area at the northern terminus of Leorita Street's intersection with Dalwood Street, approximately 150 feet south of the I-10 San Bernadino Freeway in the City of Baldwin Park, California (Figures 1 and 2). The Kaiser Permanente Baldwin Park Medical Center and associated three-story parking garages abut the subject property to the east and south. Further east, the neighborhood primarily consists of industrial and commercial uses. The area to the west and south of the subject property is primarily residential in character with a mix of single and multi-family residences. There are one to two-story single-family residences located directly west across Leorita Street from the subject property.

### Project Description

The proposed Project includes the development of a two-phased project at the Kaiser Baldwin Park Medical Campus. The first phase is the construction of an expansion to the emergency department which is part of an existing hospital tower on the south end of the Kaiser campus. Expansion of the emergency department would add approximately 23,000 square feet to the existing emergency department, expand the number of existing treatment bays from 38 to 60, a new ambulance canopy, and include additional improvements to the existing emergency department. The expansion and improvement of the emergency department would allow for better functionality within the emergency department.

The second phase of the project would consist of the construction and operation of an approximately 33,000-square-foot medical office building (MOB). This component would expand the boundary of the medical campus to include the parcel currently adjacent to the medical campus to the west. Development of this site (referred to as the "Broken Horn" site) would require the demolition of an existing retail building.




SOURCE: USGS 7.5-Minute Series Baldwin Park Quadrangle
Township 1S; Range 11W; Section 24

DUDEK

0 1,000 2,000 Feet

**FIGURE 1**

Project Location

Kaiser Baldwin Park

INTENTIONALLY LEFT BLANK

SOURCE: Bing Imagery 2021, Open Street Map 2019

DUDEK

0 50 100 Feet

**FIGURE 2**

Project Site

Kaiser Baldwin Park

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## 1.2 Project Personnel

Dudek Architectural Historian Claire Cancilla, MSHP prepared this report and associated property significance evaluations with contributions from Dudek Architectural Historian Caitlin Greeley, MA. Architectural Historian Andrew Bursan, MCRP completed the fieldwork. This report was reviewed for quality assurance/quality control by Dudek Senior Architectural Historian Allison Lyons, MSHP, and Historic Built Environment Lead Sarah Corder, MFA. Resumes for all key personnel are provided in Appendix A.

## 1.3 Regulatory Setting

### Federal

#### National Register of Historic Places

While there is no federal nexus for this project, 5261 Arlington Avenue was evaluated in consideration of NRHP designation criteria. The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, "How to Apply the National Register Criteria," as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (NPS 1997). NRHP guidance further asserts that properties be completed at least 50 years ago to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" (criteria consideration to be considered for listing).

## State

### California Register of Historical Resources

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code Section 5020.1(j)). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code Section 5024.1(a)). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to California Public Resources Code Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

### California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- California Public Resources Code Section 21083.2(g) defines "unique archaeological resource."
- California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource." It also defines the circumstances when a project would materially impair the significance of an historical resource.
- California Public Resources Code Section 21074(a) defines "tribal cultural resources."

- California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(b).) If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code Section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1); California Public Resources Code Section 5020.1(q)). In turn, CEQA Guidelines section 15064.5(b)(2) states the significance of an historical resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a Project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in

an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (California Public Resources Code Section 21083.2[a], [b], and [c]).

California Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (California Public Resources Code section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as tribal cultural resource (California Public Resources Code Section 21074(c), 21083.2(h)), further consideration of significant impacts is required. CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in California Public Resources Code Section 5097.98.

## Local

### City of Baldwin Park

The City of Baldwin Park addresses historic resources in their municipal code at the individual level, through historic designation, and at the neighborhood level, through historic overlay zones. Applicable information from the City's municipal code pertaining to historical resources are excerpted below.

#### Subchapter 153.080 - Historic Overlay Zone

*§ 153.080.010 - Intent and Purpose*

The Historic Overlay Zone is established to recognize, protect and ensure proper utilization of historic resources in the interest of public, health, safety, prosperity, social and cultural enrichment, and general welfare. The purpose of the Historic Overlay is as follows.

(A) *Cultural history.* Safeguard the heritage of the city by protecting designated buildings and structures which reflect the city's cultural history.

(B) *Public involvement.* Encourage public understanding and involvement in the unique heritage of the city.

(C) *Civic pride.* Strengthen civic pride in the beauty and notable accomplishments of the past.

(D) *City attractions.* Protect and enhance the city's attractions to residents and visitors and to support and stimulate business and industry.

(E) *Aesthetic character.* Enhance the visual and aesthetic character of the city.

(F) *Promote use.* Promote the use of historic buildings, structures and historic districts.

(G) *Property rights.* Protect and safeguard the property rights of the owners whose property is declared to be historic or is located in an area designated as a historic district.

*§ 153.080.020 - Applicability*

(A) Historic Overlay Zone creation. Historic Overlay zones shall be applied in the same manner as property is reclassified from one zone classification to another, as set forth in subchapter 153.210, Part 15 - Zoning Code Text and Zoning Map Amendments. When a Historic Overlay Zone has been created, it shall be designated upon the zoning map of the city as an overlay zone. At the time the Historic Overlay Zone is created, a specific set of development and design standards shall be adopted by the City Council, in addition to those applicable to the underlying zone classification, identifying the allowable uses, improvements, accessory uses, signs and other development standards which are determined to be necessary to maintain integrity of the district while allowing reasonable use of the properties therein.

(B) Historic designation where applied to an individual building, structure or place, such application may be referred to as a "Historic Designation".

(C) Historic structure work permit. No work shall be done on any building or structure located within a Historic Overlay Zone or designated as historic unless a work permit is issued pursuant to subchapter 153.210, Administrative Procedures.

(D) Historic structure demolition permit. No demolition shall be done on any building or structure located within a Historic Overlay Zone or designated as historic unless a demolition permit is issued pursuant to subchapter 153.210, Administrative Procedures.

(E) Unsafe or dangerous exception. None of the provisions of this chapter shall be construed to prevent any work or demolition necessary to correct or eliminate any unsafe or dangerous condition of any building or structure located in a historic district, where such condition has been declared unsafe or dangerous by the city and where the work is necessary to correct or eliminate such condition, and has been ordered by the city.

*§ 153.080.030 – Property Maintenance*

The owner or occupant of a building, structure or place designated as historic or located within a Historic Overlay Zone shall maintain all exterior and interior portions of such buildings, structures and places in good repair to prevent deterioration, decay or excessive wear and tear.

*§ 153.080.040 – Local Official Register*

Resolutions adopting a historic designation of a building, structure or place shall collectively be known as the Local Official Register of Historic Resources. The Local Official Register shall be kept on file with the Secretary of the Historic Resources Advisory Committee, who shall transmit copies to the City Clerk, the Director of Community Development and the County Librarian.

*§ 153.080.050 - Agreements by the City of Baldwin Park*

The provisions of a disposition and development agreement or owner participation agreement, approved and entered into by the City of Baldwin Park, may contain provisions superseding the provisions of this subchapter.

## Part 10. Historic Designation

The City of Baldwin Park's historic designation process is established to recognize, protect and ensure proper utilization of the historic resources in the city.

*§ 153.210.520 - Applicability*

Applications for historic designation may be submitted by a property owner or authorized agent of the property owner. The City Council may also initiate proceedings to designate a building, structure or place as historic, with or without the consent of the owner, by resolution.

*§ 153.210.530 - Proceedings*

*(A) Historic Resources Advisory Committee recommendation.* The Historic Resources Advisory Committee shall convene to review an application, consider the determinations detailed in § 153.210.540, and draft a recommendation to approve or deny the application for the historic designation.

*(B) City Council decision.* The City Council shall conduct a public hearing to consider the Historic Resources Advisory Committee's recommendation, and grant, grant with modifications or deny the designation by resolution

*§ 153.210.540 - Determination*

Historic designation shall be granted to a proposed building, structure or place when the City Council finds one or more of the following conditions to exist, based on the recommendation of the Historic Resources Advisory Committee.

(A) *Historical representation*. The building or structure is particularly representative of a distinct historical period, type, style, region or way of life.

(B) *Connection to important personality*. The building or structure was connected with someone renowned, important or who was a local personality.

(C) *Connection to rare business*. The building or structure is connected with a business or use which was once common but is now rare.

(D) *Master work*. The building or structure represents the work of a master builder, engineer, designer, artist or architect.

(E) *Historic event*. The building or structure is the site of an important historic event or is associated with events that have made a meaningful contribution to the nation, state or city.

(F) *Particular architectural style*. The building or structure exemplifies a particular architectural style.

(G) *Best remaining*. The building or structure exemplifies the best remaining architectural type of a neighborhood.

(H) *Outstanding design*. The construction materials or engineering methods used in the building or structure embody elements of outstanding architectural or engineering design, detail, material or craftsmanship.

# 2 Background Research

## 2.1 CHRIS Records Search

On July 11, 2022, staff at the South Central Coast Information Center (SCCIC), located on the campus of California State University, Fullerton, provided the results of a CHRIS records search for the proposed Project site and a 1-mile radius. Due to COVID-19, the SCCIC notified researchers that they are only able to provide data for Los Angeles County that has already been digitized. As such, not all available data known to CHRIS may be provided in the records search. The search included digitized mapped prehistoric and historic archaeological resources as well as historic built-environment resources; Department of Parks and Recreation (DPR) site records; technical reports; archival resources; and the Office of Historic Preservation's Built Environment Resources Directory (BERD). For the purposes of this report, only records relevant to historic built environment resources with the potential to be impacted by the proposed Project are discussed in this report. See the Archaeological Resources Assessment, prepared by Dudek in 2022 for the full records search results, including all archaeological records.

### Previously Conducted Cultural Resources Studies

Results of the cultural resources records search indicate that 39 previous cultural resource studies have been conducted within 1-mile of the proposed Project site between 1979 and 2013; eighteen (18) of these studies appear to contain information on historic built environment resources. Note that not all 39 reports were digitized at the SCCIC and only three of these previous reports were provided to Dudek by the SCCIC; as a result, the presence of historic built environment information in these reports is based upon SCCIC-provided data that broadly categorizes the report types.

Three (3) of these studies overlap the proposed Project site; LA-10190, -10883, and -11784 and include information on historic built environment resources (noted with gray shading on Table 1). Table 1, below, details all 18 previous cultural resources studies followed by a brief summary of the available reports overlapping the proposed Project site. See the Archaeological Resources Assessment, prepared by Dudek in 2022 for the full records search results, including all archaeological records.

**Table 1. Previous Technical Studies Within a 1-Mile Radius of the Proposed Project Site**

| SCCIC Report No. (LA-) | Authors | Date | Title | Proximity to Proposed Project Site |
|---|---|---|---|---|
| 04596 | Duke, Curt | 1999 | Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 951-01, County of Los Angeles, California | Outside |
| 06112 | Bonner, Wayne H. | 2001 | Cultural Resources Assessment of Baldwin Park Site, Los Angeles County, California | Outside |
| 06276 | Duke, Curt | 2001 | Cultural Resource Assessment Cingular Wireless Facility No. VY 126-01 Los Angeles County, California | Outside |
| 06282 | Duke, Curt | 2001 | Cultural Resource Assessment for AT & T Fixed Wireless Services Facility Number LA_156_A, County of Los Angeles, California | Outside |

**Table 1. Previous Technical Studies Within a 1-Mile Radius of the Proposed Project Site**

| SCCIC Report No. (LA-) | Authors | Date | Title | Proximity to Proposed Project Site |
|---|---|---|---|---|
| 06310 | Duke, Curt | 2002 | Cultural Resource Assessment at & T Wireless Services Facility No. 11015A-01 Los Angeles County, California | Outside |
| 08670 | Bonner, Wayne H. and Kathleen A. Crawford | 2007 | Cultural Resources Records Search and Site Visit Results for Royal Street Communications, LLC Candidate LA2314A (Ramona SCE), Intersection of Ramona and I-605, El Monte, Los Angeles County, California | Outside |
| 09375 | Bonner, Wayne H. | 2007 | Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate IE25756 (Award Metals), 1450 Virginia Avenue, Baldwin Park, Los Angeles County, California | Outside |
| 09705 | Anonymous | 2007 | Cultural Resources Inventory of the Southern California Edison Company Tehachapi Renewable Transmission Project, Kern, Los Angeles and San Bernardino Counties, California. ARR #05-01-01046 | Outside |
| 10190 | Harbert, Claudia | 2002 | Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA | Overlaps |
| 10384 | Bonner, Wayne H. and Kathleen A. Crawford | 2009 | Direct APE Historic Architectural Assessment for T-Mobile USA Candidate IE25750B (Bonsai), 13300 Amar Rd., City of Industry, Los Angeles County, California. | Outside |
| 10532 | Landis, Daniel G. | 1993 | A Preliminary Cultural Resources Overview for the Proposed San Gabriel Valley Reclamation Program, Los Angeles County, California | Outside |
| 10641 | Tang, Bai "Tom" | 2010 | Preliminary Historical/Archaeological Resources Study, San Bernadino Line Positive Train Control Project, Southern California Regional Rail Authority, Counties of Los Angeles and San Bernadino | Outside |
| 10883 | Stewart, Noah M. | 2008 | Finding of no adverse effect - Interstate Route 10-605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA:245400 | Overlaps |
| 11512 | Perez, Don | 2011 | Cultural Resources Analysis, IE750 Bonsai/2 CA32303CI. 13300 Amar Road City of Industry, Los Angeles County, California 91746 | Outside |
| 11784 | Stewart, Noah | 2012 | Supplemental Finding of No Adverse Effect, Interstate Route 10-605 Interchange Improvement | Overlaps |

**Table 1. Previous Technical Studies Within a 1-Mile Radius of the Proposed Project Site**

| SCCIC Report No. (LA-) | Authors | Date | Title | Proximity to Proposed Project Site |
|---|---|---|---|---|
| 11851 | Long, Michelle and Holson, John | 2010 | Archaeological Survey and National Register of Historic Places and California Register of Historical Resources Evaluation of 07-H-002 and 07-H-003, Strawberry Contractor Yard, for the Southern California Edison Company Tehachapi Renewable Transmission Pro | Outside |
| 11990 | Wetherbee, Matthew, Jackson, Thomas, and Tinsley-Becker, Wendy | 2010 | Supplemental Cultural Resources Survey Report for the Southern California Edison Tehachapi Renewable Transmission Project Segment 7 Rio Hondo-Amador-Jose-Mesa 66kv Line Relocation, Los Angeles County, California | Outside |
| 12272 | Unknown | 2013 | Cultural Resource Assessment Class I Inventory Verizon Wireless Services Emery CJ Facility City of Baldwin Park, Los Angeles, County, California | Outside |

### Report No. LA-10190

*Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA (Harbert 2002),* documents the results of a historic property survey report consisting of an archival record search, and literature review, as well as an archaeological survey report as an appendix. The area of study overlaps approximately 30% of the proposed Project site. The study was conducted to determine the presence or absence of historic properties within the area of study and immediate vicinity. No cultural materials were identified within the current proposed Project site as a result of the investigation. Based on the study's findings, no mitigation measures or further action were recommended.

### Report No. LA-10883

*Finding of No Adverse Effect Interstate Route 10 – 605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA: 245400* (Stewart 2008), documents the results of a historic property survey report consisting of archival record search, literature review, and pedestrian survey. The study was conducted to determine the effects the project would have on historic properties. No cultural materials were identified within the current proposed Project site as a result of the investigation. Based on the study's findings, no mitigation measures or further action were recommended.

### Report No. LA-11784

*Supplemental Finding of No Adverse Effect Interstate Route 10 – 605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA: 245400* (Stewart 2012) documents the results of a historic property survey report in response to study changes. The study was conducted to determine the effects the updated project design would have on historic properties. No cultural materials were identified within the current proposed Project site as a result of the investigation. Based on the study's findings, no mitigation measures or further action were recommended.

## Previously Recorded Cultural Resources

The SCCIC records indicate that 31 cultural resources have been previously recorded within 1-mile of the Project site, none of which overlap or are adjacent to the Project site. Of these, one (1) is a prehistoric-era archaeological site, one (1) is a historic-era archaeological site, and the remaining 29 are historic built environment resources. Table 2 below summarizes only the 29 historic built environment resources. None of these previously recorded resources are located within the boundaries of the proposed Project site. See the Archaeological Resources Assessment, prepared by Dudek in 2022 for the full records search results, including all archaeological records

**Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site**

| Primary Number | Description | Recording Events | CHRIS Status Code | Proximity to Proposed Project Site |
|---|---|---|---|---|
| P-19-186571 | Built Environment: Bassett Elementary School | 1983 (B. Revele) | Point of Historical Interest No. 34<br>7L: Needs to be reevaluated using current standards | Outside |
| P-19-187085 | Built Environment: The Mojave Road | 1989 (S. Elder); 2014 (Marc Beherec) | CA Historical Landmark No. 963<br>7L: Needs to be reevaluated using current standards | Outside |
| P-19-188523 | Built Environment: Commercial modern-style building located at 13300 Amar Road and constructed in 1956. | 2009 (K.A. Crawford) | 6Y: Determined ineligible for NR by consensus through Section 106 process | Outside |
| P-19-188913 | Built Environment: Multi-family property located at 12836 Dalewood Street and originally constructed in 1938. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188914 | Built Environment: Multi-unit apartment complex located at 12901 Dalewood Street and constructed in 1948. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188915 | Built Environment: Single-family residence located at 819 Frazier Street and constructed in 1948. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |

## Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site

| Primary Number | Description | Recording Events | CHRIS Status Code | Proximity to Proposed Project Site |
|---|---|---|---|---|
| P-19-188916 | Built Environment: Multi-family property with 3 single-family homes located at 807-811 Frazier Street, the first of which was originally constructed in 1948. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188917 | Built Environment: Multi-family property located at 805 Frazier Street and originally constructed in 1947. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188918 | Built Environment: Commercial building and single-family residence located at 12957 Garvey Avenue and originally constructed in 1938. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188919 | Built Environment: Multi-family property with three structures located at 12961 Garvey Avenue and constructed in 1948. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188920 | Built Environment: Single-family residence located at 13057 Garvey Avenue and constructed in 1953. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188921 | Built Environment: Two single-family ranch-style residences located at 13003 Judith Street, the first of which was originally constructed in 1936. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188922 | Built Environment: Single-family ranch-style residence located at 13013 Judith Street and originally constructed in 1950. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |

## Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site

| Primary Number | Description | Recording Events | CHRIS Status Code | Proximity to Proposed Project Site |
|---|---|---|---|---|
| P-19-188923 | Built Environment: Single-family ranch-style residence located at 13019 Judith Street and originally constructed in 1950. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188924 | Built Environment: Single-family ranch-style residence located at 13025 Judith Street and originally constructed in 1952. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188925 | Built Environment: Commercial building located at 13079 Garvey Avenue and constructed in 1948. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188926 | Built Environment: Multi-unit motel located at 13109 Garvey Avenue and was constructed in 1948. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188927 | Built Environment: Mexican-style commercial building located at 13127 Garvey Avenue, currently operating as Taxcos Restaurant, and constructed in 1946. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188928 | Built Environment: Commercial building located at 13247 Garvey Avenue currently operating as a Nextel, and constructed in 1946. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188929 | Built Environment: Single-family residence located at 1609 Vineland Avenue and constructed in 1950. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |

## Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site

| Primary Number | Description | Recording Events | CHRIS Status Code | Proximity to Proposed Project Site |
|---|---|---|---|---|
| P-19-188930 | Built Environment: Single-family residence located at 1619 Vineland Avenue and constructed in 1950. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188932 | Built Environment: Single-family residence located at 1741 Big Dalton Avenue, constructed in 1926. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188933 | Built Environment: Single-family Spanish-style residence located at 1747 Big Dalton Avenue and constructed in 1927. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188983 | Built Environment: LADWP Boulder Transmission Lines constructed between 1933 and 1963. | 1999 (Stephen Van Wormer); 2008 (Noah M. Stewart); 2013 (Heather Gibson and Marc Beherec); 2018 (Jessica B. Feldman); 2020 (A. Canoff) | 2B: Determined eligible for NR as an individual property and as a contributor to an eligible district in a federal regulatory process. Listed in the CR | Outside |
| P-19-190504 | Built Environment: SCE Rio Hondo-Amador-Jose-Mesa-Narrows 66kV Transmission Line constructed in 1951. | 2010 (Wendy L. Tinsley Becker); 2018 (Audrey von Ahrens) | 6Z: Found ineligible | Outside |
| P-19-190508 | Built Environment: SCE Walnut-Hillgen-Industry-Mesa-reno 66kV Transmission Line constructed in 1954. | 2010 (Wendy L. Tinsley Becker); 2018 (Audrey von Ahrens) | 6Z: Found ineligible | Outside |
| P-19-192581 | Built Environment: SCE Antelope-Mesa 220 kV Transmission Line constructed in 1949. | 2010 (Wendy L. Tinsley); 2010 (Wendy L. Tinsley); 2014 (Daniel Leonard); 2017 (Audry Williams); 2018 (Audrey von Ahrens); 2019 (Audry Williams) | 6Z: Found ineligible | Outside |

**Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site**

| Primary Number | Description | Recording Events | CHRIS Status Code | Proximity to Proposed Project Site |
|---|---|---|---|---|
| P-19-192819 | Built Environment: A series of 3 industrial warehouse buildings located at 12424, 12432, and 12440 Exline Street, and constructed in 1966. | 2017 (Allison Lyons) | 6Y: Determined ineligible for NR by consensus through Section 106 Process, 6Z: Found ineligible | Outside |
| P-19-192820 | Built Environment: Mid-Century Modern commercial building located at 12955 Perez Place and constructed in 1967. | 2017 (Allison Lyons) | 6Y: Determined ineligible for NR by consensus through Section 106 Process, 6Z: Found ineligible | Outside |

## 2.2 Building Development and Archival Research

Building development and archival research were conducted for the subject property in an effort to establish a thorough and accurate historic context for the significance evaluations, and to confirm the building development history of the Project site.

### City of Baldwin Park Building and Safety

Dudek viewed and photographed building permits for the subject property in-person at the City of Baldwin Park Building and Safety department on July 14, 2022. The City of Baldwin Park did not allow photography of the building permits and information from the building permits was recorded at the time of the site visit. Permits were available from 1976 to 2007. Dudek reviewed all available permits, and all information obtained was used in the preparation of the historic context and significance evaluations. Original building permits for both the original 1976 portion of the subject property and the 1986 expansion were included in this review.

### Los Angeles County Assessor

Dudek obtained assessor data for the Project site on July 1, 2022. This assessor data provided information about construction dates, square footage, tract number, and current owners of the subject property.

### Baldwin Park Historical Society and Museum

Dudek emailed the Baldwin Park Historical Society and Museum for information about the subject property on July 8th, 2022, and received no response. Dudek called the Baldwin Park Historical Society and Museum on July 12th, 2022, and was told to visit in person on Tuesdays or Thursdays between 9 am and 4 pm. Dudek visited the Baldwin Park Historical Society and Museum on the afternoon of Thursday, July 14, 2022, but the Historical Society and Museum was closed. Dudek sent a final follow-up email on July 20, 2022, and received a response

from Stanley S. Thornton on July 26, 2022. Mr. Thornton sent a link to a 2021 *Baldwin Park News* article about the subject property that had already been located by Dudek's research and is used in the historic context and significance evaluations. Mr. Thornton stated that the Historical Society and Museum did not have additional information on the property.

### Baldwin Park Library

Dudek visited the Baldwin Park Public Library located at 4181 Baldwin Park Boulevard on July 14, 2022. The Baldwin Park Library's local history collection included books that documented the history of Baldwin Park. All available information obtained from the library was used in the preparation of the historic context and significance evaluations

### Historical Newspaper Review

Dudek reviewed historical newspapers from Baldwin Park and surrounding cities to understand the development of the City of Baldwin Park and the subject property. These documents were used in the preparation of the historic context, history of the subject property, and significance evaluations.

### Sanborn Fire Insurance Maps

A review of historical Sanborn Map Company fire insurance maps covering the City of Baldwin Park was conducted as part of the archival research on the Project site from the years 1925, 1928, and 1931 but research revealed there was no Sanborn coverage for the subject property (Sanborn Map Company 1925, 1928, 1931).

### Historical Aerial Photographs

A review of historical aerial photographs was conducted as part of the archival research effort for the following years: 1938, 1948, 1952, 1964, 1972, 1980, 187, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2003, 2004, 2005, 2009, 2010, 2012, 2014, 2016, and 2018. Table 3 discusses the development of the areas surrounding the Project site (NETR 2022; UCSB 2022).

## 2.3 Additional Documentation

The City of Baldwin Park's municipal code (§ 153.080.040) states that designated resources in the City are included on the Local Official Register of Historic Resources; however, it does not appear that the City maintains a publicly-available list of designated resources. The City of Baldwin Park does not have a city-wide historic context or historic resources survey. A July 1, 2022 search of the Built Environment Resource Directory (BERD) maintained by the California Office of Historic Preservation (OHP) showed that the subject property had not been previously recorded. Additional searches for previous evaluations of the subject property, including through the City of Baldwin Hills website and CEQA net, also did not identify previous recordation or evaluation of the subject property.

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# 3 Historic Context

## 3.1 Historical Overview of the City of Baldwin Park

Baldwin Park, colloquially known as the “hub of the San Gabriel Valley” due to its central geographic location in the Valley, is situated approximately 17 miles east of Los Angeles and five miles north of the San Gabriel Mountains. At the beginning of the 19th century, the land comprising modern-day Baldwin Park consisted of cattle grazing land that was owned by the San Gabriel Mission. This land was part of two ranchos: the Rancho Azusa de Dalton and the Rancho La Puente. By 1860, the community was known as Pleasant Grove. The small community grew in the subsequent decades, but remained largely agrarian, supporting agriculture, vineyards, and cattle ranching.

Pleasant Grove was renamed Vineland in 1880, a reflection of the many vineyards that flourished in the area. At this time, a severe drought precipitated the gradual decline of cattle ranching, and the land formerly used by cattle ranches, to the north of present-day Ramona Boulevard, was consequently settled and built up by squatter farmers. While still primarily agricultural, by this time the built environment began to expand, with the first residence constructed on present-day Los Angeles Street by Austin Brown. Soon, a business center developed around the community’s general store, located at present-day Los Angeles and La Rica Streets.

In 1890, the Vineland School District was established. The establishment of a school district serving the area also necessitated the construction of a two-room schoolhouse in 1890, which served the dual purpose of educational facility and general community meeting space. Between 1892 and 1895, the present-day Main and Los Angeles Streets were the center of the community’s activity, due in part to being part of the frequently traveled stagecoach line to San Jose. Although the community was expanding, water shortage continued to be a major challenge, with farmers forced to haul water from the San Gabriel River. Farmers in the area at this time largely did not use irrigation, so all crops depended on groundwater, wells, and water from rainfall.

In 1906, prolific and influential real estate speculator Elias "Lucky" Baldwin proposed the establishment of a new city to be called “Baldwinville” near the existing Vineland settlement. At this time, Baldwin owned the land south of present-day Ramona Street. The establishment of an adjacent community posed a potential threat to the economy and development of Vineland, as locals believed the establishment of a nearby city would fuel competition for already-scarce water. Citizens of Vineland invited Baldwin to discuss his proposal. Baldwin agreed, and he arrived at Shultis’ Grocery, run by local businessman D.J. Shultis. When he arrived, the octogenarian Baldwin tripped and nearly fell over, but was saved from the tumble by Mrs. Shultis, the wife of the store’s proprietor. Baldwin was reportedly so grateful for this that he agreed not to follow through with his plans for Baldwinville, instead lending his name to the Vineland community, which was renamed Baldwin Park.

Baldwin Park continued to expand in subsequent years, facilitated the Pacific Electric Railroad laying tracks in the center of town in 1912, which improved Baldwin Park’s accessibility and allowed residents to navigate Baldwin Park and the surrounding areas more easily. The Pacific Electric Railroad served Baldwin Park until 1951. Community organizations grew rapidly, with both the Chamber of Commerce and the Baldwin Park Women’s Club starting in 1906. In 1913, the community’s first newspaper, the *Baldwin Park Bulletin*, was established.

While Baldwin Park maintained its semi-rural character for the first half of the 20th century, new educational and civic facilities, businesses, and residences were constructed through the 1920 and 1930s. The first automobile shop and garage, E.F. Tice, for example, was constructed in 1923, and the Steel Furniture Manufacturing Company opened its doors in 1927. Investment into the city's educational system and outdoor space accelerated in this period as well, with the completion of the Margaret Heath School (which initially served as a primary school) in 1924 and the creation of Morgan Park in 1931. Like communities throughout the United States, Baldwin Park's economy pivoted to primarily war-related activities when the United States entered World War II in 1941.

The city developed rapidly in the post-World War II years, as a population boom in the Los Angeles area turned the region into a megalopolis. Suburbs exploded outside Los Angeles, engulfing farmland. As suburbs grew, automobile-oriented development did as well. This was particularly apparent in Baldwin Park, which is home to California's first drive-through restaurant: In-N-Out, which was established in Baldwin Park in 1948. Although the original hamburger stand is no longer extant, the company still maintains a presence in the city. Like other communities outside of Los Angeles, residential development and the construction of freeways quickly changed the area's previously semi-rural character into a more suburbanized community.

The 1950s were of rapid development and change in Baldwin Park, which saw the groundbreaking of a new reservoir in 1950 and the opening of several commercial businesses and financial institutions, including Bank of America, which also opened in 1950. Baldwin Park became an incorporated city in 1956, as the 47th General Law City in California. The I-10 San Bernardino Freeway was completed the next year, in 1957, providing easy access to Baldwin Park.

While the process of suburbanization began in the immediate post-war years, it accelerated further after Baldwin Park's incorporation as the city's population and built environment expanded and farmers and ranchers moved further away from the rapidly developing city. The population in Baldwin Park reportedly rose by about one-third in the six years after its incorporation, increasing from 28,000 to close to 37,000. This is in marked contrast to the 1940s when the population stayed steadily around 9,000. The large lots that formerly supported agriculture were subdivided into smaller lots for residential development in the years after the City's incorporation. In 1961, for example, permits were issued for 26 new subdivisions and nine more were issued in the first nine months of 1962. In 1960, the city's first hospital, Baldwin Park Community Hospital, opened its doors.

The 1970s were a period of slower growth and development than the previous decades. A 1979 article in the *Los Angeles Times* outlined the challenges facing Baldwin Park in the 1970s, noting that housing prices in the city were low relative to other nearby communities, freeway access and circulation remained difficult, and the City had recently experienced political turmoil that resulted in a recall election of several city officials. In this period, Baldwin Park's per capita income was approximately $1,000 less than neighboring communities such as West Covina.

Commercial development in this period also appeared to have stalled; in 1966, there were 231 businesses in Baldwin Park; by 1979 that number had only risen by 56 for a total of 287 businesses. The *Los Angeles Times* article further stated that approximately $30.4 million worth of shopping was being done by Baldwin Park citizens in other cities due to the city's lack of commercial options. The City, in conjunction with the Chamber of Commerce, launched a concreted advertising campaign to bring business to the City. This effort had mixed success; some new businesses opened in this period, such as the Broken Horn Saddlery (1976) and several financial institutions, including the Golden State Sanwa Bank (1973) and Crocker Bank (1974), but the city still reportedly faced a dearth of commercial development overall. The City also invested in the construction of its new Baldwin Park Civic Center (1978) which housed City Hall and City Council Chambers, among other functions.

In response to the city's challenges, the City Council approved the creation of the Baldwin Park Community Redevelopment Agency which considered urban renewal efforts in so-called "blighted" areas, focusing on the downtown commercial retail section of the city. The Redevelopment Agency was controversial from its inception, with many community members opposing efforts to redevelop parts of Baldwin Park.

The 1980s saw an uptick in residential housing construction, the fastest period of residential development in Baldwin Park since the 1960s. This housing was primarily multi-family residential construction, which outpaced single-family residential construction by five to one. This pace of construction slowed by the 1990s, in part because the City faced serious economic problems caused by budget cuts which necessitated the reduction of the police force among other services. According to a 1991 *Los Angeles Time*s article, Baldwin Park also struggled to draw new business despite available open land and prices that were lower than surrounding communities. Today, Baldwin Park continues to be a mixed-use community of commercial, residential, and industrial buildings. (Garber 2018; City of Baldwin Park 2015; Benbow 2011; City of Baldwin Park Community Development Department: 2005; City of Baldwin Park Department of Planning 2002: I-1; Los Angeles Times 1991; Pinheiro et. al 1981; Birkinshaw 1979; Duncan et. al 1962.)

## 3.2 History of the Subject Property

The subject property is located approximately 150 feet south of the 1-10 San Bernadino Freeway, adjacent to the Kaiser Permanente Baldwin Park Medical Center, and bounded by Leorita Street to the west, Dalewood Street to the north, and Bess Avenue to the south. The subject property consists of two connected commercial buildings, one constructed in 1976 (1026 Leorita Street) and one constructed in 1986 (1022-1024 Leorita Street). The buildings were connected circa 1995 based on aerial photographs (NETR 2022). The following table provides a development history of the subject property since the first available aerial image in 1938:

**Table 3. Historical Aerial Photograph Review of Subject Property and Environs**

| Photograph Year | Observations and Findings |
|---|---|
| 1938 | The earliest aerial photograph of the Project site dates to 1938. The Project site appears as two neighboring residential buildings side by side surrounded by farmland. Leorita Street does not yet appear. The Walnut Creek Wash, located immediately south of the Project site, was not channelized at this point. The surrounding neighborhood is largely undeveloped farmland. |
| 1948 | The 1948 aerial image shows one building on site. The surrounding area of the property is farmland. |
| 1952 | The 1952 aerial image shows two buildings on site. The surrounding area is developed with residential tracts located to the southwest of the property. The north, south, and east of the subject property is relatively undeveloped. |
| 1964 | The 1964 aerial image shows two buildings on site. East of the property is undeveloped land with one building. The San Bernardino Freeway has been developed north of the property. To the north, south, and east of the property are developed with residential tracts. The Edgewood Drive-In Movie Theater is located to the direct east of the future site of the subject property, at the present location of the Kaiser Permanente Baldwin Park Medical Center. |
| 1972 | By the 1972 aerial image, one of the buildings on site is demolished. Besides the demolition, the remainder of the Project site and surrounding neighborhood looks as it did in 1964. |
| 1980 | By 1980, the commercial building at 1026 Leorita Street appears on site with a paved parking lot and a lawn with trees. The area surrounding the subject property is fully developed. |

**Table 3. Historical Aerial Photograph Review of Subject Property and Environs**

| Photograph Year | Observations and Findings |
|---|---|
| 1987 | The 1987 aerial shows both commercial buildings comprising the subject property are extant on the Project site with paved parking lots. To the east of the property, a building has been demolished and the lot is vacant. |
| 1992 | The 1992 aerial shows an addition of a shed structure in front of the buildings on site. To the southeast of the property, the Kaiser Permanente Baldwin Park Medical Center is under construction. |
| 1993 | The 1993 aerial shows the building located at 1026 Leorita Street on site has an addition to the primary elevation. The neighboring parcel to the southeast shows further development of the medical center. |
| 1994 | The 1994 aerial image indicates no discernible changes on site. Further construction occurs to the neighboring parcel to the east of the subject property. |
| 1995 | The 1995 aerial image shows an addition to adjoin the two commercial buildings on site on the side and rear elevations. Further construction occurs to the neighboring medical center to the east of the property. No other changes to the surrounding area. |
| 1996, 1997, 1998, 1999, 2000, 2003. 2004, 2005 | No discernible changes to the Project site. |
| 2009 | No discernible changes to the Project site. A paved parking lot has been added south of the subject property. |
| 2010, 2012, 2014, 2016 | No discernible changes to the Project site. |
| 2018 | No discernible changes to the Project site. Further medical center development occurred with the addition of a parking garage located south of the Project site. |

## History of The Broken Horn Saddlery

From its construction in 1976 (and subsequent expansion in 1986) until 2021, the subject property was occupied by the Broken Horn Saddlery, described as the “West’s largest tack store” (Pernokas 2017). The subject property consists of two connected structures: 1026 Leorita Street, which was constructed in 1976, and 1022-1024 Leorita Street, which was constructed in 1986 to provide additional retail and manufacturing space for the Broken Horn. The two portions of the building appear to be haven connected circa 1995, per aerial photographs (NETR 2022). In 2021, the Broken Horn Saddlery vacated the subject property and re-opened in 2022 under new ownership at 4120 Maine Avenue in downtown Baldwin Park (Baldwin Park News 2022). Prior to the construction of the subject property, aerial photographs indicate that there was a residential structure on each lot now occupied by the subject property (Figure 3).

**Figure 3.** 1964 aerial photograph showing the Edgewood Drive-In, located at the current site of Kaiser Permanente Baldwin Park Medical Center. The approximate boundary of the future site of the subject property is outlined in red. View to the north. (Source: Howard D. Kelly, Los Angeles Public Library)

The Broken Horn Saddlery was founded in 1956 by Charlie Nuzzo and his wife Mattie Nuzzo and remained a family-run operation until 2021. In the early 1950s, Nuzzo worked for United Tent and Awning, which built tents for clients including the military. While in this position, Nuzzo met a wealthy boat owner who asked him to make him a cover for his boat to prevent weathering. Nuzzo agreed, making a cover out of tent material, reportedly an innovative approach to boat coverings at the time. The customer was satisfied, and Nuzzo was soon inundated with additional requests for boat covers, eventually forming a side business constructing boat covers in his basement.

Soon, the original boat owner came to Nuzzo with another request: a horse blanket, also made out of tent material. Nuzzo agreed and soon his horse blankets and day sheets became a popular product. At this time, the Los Angeles area had a flourishing postwar recreational horse industry and Nuzzo capitalized on this by taking his blankets to horsing events. Nuzzo's products were wildly popular, prompting him to formalize his business with his brother-in-law. This partnership was short-lived, however, as Nuzzo's brother-in-law was keeping two sets of books. Nuzzo consequently forayed into business on his own, opening the earliest iteration of Broken Horse Saddlery in Alhambra in 1956 with his wife Mattie.

Broken Horn Saddlery began by manufacturing and selling wholesale blankets and sheets, eventually adding a retail component. This growth prompted a move to a new building at 1022 Leorita Street in 1976. At this time, the Broken Horn Saddlery continued to manufacture blankets and pads but had also expanded to leather tack, largely at the behest of Charlie Nuzzo's son, Joe Nuzzo. The Broken Horn Saddlery also had an in-house silver department. By the time the Broken Horn Saddlery opened at the subject property, approximately 77% of their business was manufacturing. The business expanded its operations in 1986 with the addition of the building at 1022-1024 Leorita Street, which was built by Charlie Nuzzo according to its original building permit. Manufacturing at the Broken Horn Saddlery included leather tack, silver, boot repair, and saddle production with in-house departments producing these goods.

By 2007, Broken Horn Saddlery pivoted away from in-house manufacturing. As of 2017, the only manufacturing component that remained under the control of Broken Horn Saddlery was leather tack; the silver department became an in-house but independent business (Mario Solis's Silver Shop), as did the Broken Horn's two saddle shops (Sal's Custom Saddles, run by Salvador Gomez and another shop run by Galdino Gomez, Salvador's brother). This change in business format allowed for increased flexibility in a changing market where demand for saddles and silver declined; the Broken Horn Saddlery could access these products as needed but did not need to maintain the individual business operations. In 2017, there was also an in-house independent boot repair shop run by Felipe De Santiago. The individuals running these in-house businesses were all longtime employees of the Broken Horn, many working at the store for decades.

The Broken Horn Saddlery remained a family-run business, with Joe Nuzzo, Charlie Nuzzo's son, most recently serving as president. Jerry Nuzzo, Charlie's grandson, also served as vice president, and Charlie's daughter, Rosalie Nuzzo, served as secretary and treasurer. For 65 years, Broken Horn was a destination for equestrian enthusiasts from Baldwin Park and around the globe, with customers reportedly coming from Asia, Europe, Australia, the Middle East, and Africa. The Broken Horn Saddlery closed its doors at the subject property in 2021; the business, under new ownership, reopened in Downtown Baldwin Park at 4120 Maine Avenue in 2022 (Pernokas 2017; Baldwin Park News 2021; Baldwin Park News 2022).

## 3.3 Architectural Styles in the Project Site

The subject property is a nondescript commercial building with no discernable style. Although the subject property does not appear to embody the features of a particular style or typology, it does have some stylistic references to the Western, Hacienda, and ranching traditions that connect the exterior of the building to the goods being sold at the Broken Horn Saddlery. These details include tile-clad overhangs and arches on the west elevation of the 1986 portion of the building (1022-1024 Leorita Street), that reference the goods being sold when the property as occupied by the Broken Horn Saddlery.

### Architects and Builders

The original building permit for the 1976 portion of the building (1026 Leorita Street) from 1976 does not list an architect or builder but lists the building's contractor as John Barr. The research did not identify additional information on John Barr. The original building permit for the 1986 portion of the building (1022-2024 Leorita Street) lists the owner and founder of the Broken Horn Saddlery, Charles Nuzzo, as the building's constrictor. There is no architect or builder listed on the permit.

# 4 Field Survey

## 4.1 Methods

### Built Environment Survey

Architectural historian Andrew Bursan, MCRP, conducted an intensive survey of the subject property on April 19, 2022. Mr. Bursan meets the Secretary of the Interior's Professional Qualification Standards for architectural history. The survey entailed walking around the building exterior of the subject property and its site and documentation with notes and photographs, specifically noting character-defining features, spatial relationships, observed alterations, and any historic landscape features. The survey did not include the interior of the subject property.

## 4.2 Results

The subject property consists of two attached buildings: 1026 Leorita Street, constructed in 1976, and 1022-1024 Leorita Street, which was constructed in 1986. The buildings appear to have been connected circa 1995, per aerial photographs (NETR 2022). The subject property housed the same business, the Broken Horn Saddlery, from 1976 until 2021 when the business vacated the subject property and moved to a new location. The subject property is currently vacant. Although 1022-10244 Leorita Street is not over 45-years in age, the buildings are evaluated as a single property due to their shared history and physical connection.

As a result, the subject property consisting of 1022-1026 Leorita Street was identified as requiring recordation and evaluation for historical significance. This property is described and evaluated for historical and architectural significance in Section 5. Significance Evaluations. A State of California Department of Parks and Recreation Series 523 (DPR) form for the subject property is located in Appendix B. DPR forms.

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# 5 Significance Evaluations

In order to determine if the proposed Project will impact historical resources under CEQA, all buildings or structures over 45 years in age within or immediately adjacent to the Project site were evaluated for historical significance and integrity in consideration of NRHP, CRHR, and City of Baldwin Park designation criteria and integrity requirements.

## 5.1 Broken Horn Saddlery, 1022-1024 Leorita Street (APN 8559-008-011) and 1026 Leorita Street (APN 8559-008-005)

### Property Description

The subject property is a one-story nondescript commercial building with some references to the western tradition that ties to the goods sold there. The subject property is composed of two connected structures, each with a rectangular plan: the original 1976 portion of the building (1026 Leorita Street), which occupies the northern portion of the Project site, and a 1986 expansion (1022-1024 Leorita Street), which occupies the southern portion of the Project site. These two sections of the building were connected circa 1995. The subject property is surrounded by large concrete parking lots with scattered palm trees. There is an ancillary shed outside the west elevation of the 1986 portion of the building that was added circa 1992 per aerial photographs, and a stepped concrete block wall separating the subject property's lot from the adjacent Kaiser parking garages at the south end of the lot. The subject property has a flat roof and is constructed of concrete block; most elevations do not have fenestration and consist of uninterrupted walls of painted concrete block. There are three primary entrances to the building: one on the west elevation and one on the north elevation of the 1976 portion of the building, and one on the primary west elevation of the 1986 portion of the building.

The west elevation of the 1976 portion of the building (1026 Leorita Street) has two large rectangular bays that were covered with a metal roll-up door at the time of the site visit. The northern bay features a trapezoidal overhang clad in red tile; the other bay is uncovered. The north elevation of the 1976 portion of the building has a metal frame double door at the center of the elevation, covered with a metal security gate, with a red tile-clad overhang. The elevation has no additional fenestration, consisting of painted concrete blocks interrupted at regular intervals by nine brick pilasters. A sign on the roof, added circa 1998 per building permits, reads "Broken Horn Western Store" and is readily visible from the nearby I-10 freeway. Outside the elevation is a freestanding sign reading "English & Western Saddlery." The east elevation has one door single-leaf door at its center and is otherwise unornamented.

The primary (west) elevation of the 1986 portion of the building (1022-1024 Leorita Street) is nine bays across, consisting of three arches flanked by three rectangular bays covered with metal roll-up doors on either side. The rectangular bays are recessed slightly behind the arches and all bays are separated by brick piers. This elevation is clad in painted brick; the remainder of the subject property is constructed of concrete blocks. The middle arch, located at the center of the elevation, contains the building's primary entrance, an arched metal frame glass double door covered with a decorative cast iron privacy gate. All bays are covered with an overhang clad in red tile and supported by large wood brackets. Above, the words "Broken Horn" are painted at the center of the building's elevation. The remainder of the elevations consist of uninterrupted concrete with a single-leaf door at the center of the south elevation.

**Figure 4.** Overall view of the subject property's west (primary) elevation, view to the east. The 1976 portion of the building is on the left (north) and the 1986 portion is on the right (south) (IMG_1376)

**Figure 5.** View of the 1986 portion (1022-1024 Leorita Street) of the subject property's primary west elevation, view to the east (IMG_1405)

**Figure 6.** South elevation of the subject property, view to the northeast. This is part of the 1986 portion of the subject property. The structures to the east and the south (right) are Kaiser Permanente parking structures (IMG_1395)

**Figure 7.** View of the 1976 portion (1026 Leorita Street) of the subject property's primary west elevation, view to the east (IMG_1460)

**Figure 8.** view of the subject property's north elevation, view to the south. This elevation is part of the 1976 portion of the subject property (IMG_1493)

**Figure 9.** Rear north elevation of the subject property, view to the south. This elevation is part of the 1976 portion of the subject property (IMG_1471)

**Figure 10.** Parking lot and ancillary structure located outside the primary west elevation of the subject property, view to the east (IMG_1479)

## Building Permits and Identified Alterations

The following list of known alterations was compiled through archival research of Baldwin Park permits. The City of Baldwin Park does not allow photography of building permits; a Dudek architectural historian recorded the information in Table 4 while in person at the City's Building and Safety department. The below table includes mechanical, sewage, and electrical permits in addition to building permits.

### Table 4. Building Permits for 1022-1026 Leorita Street

| Associated Address | Permit Number | Date | Description of Work | Owner | Architect (A)/ Builder (B)/ Contractor (C) | Cost |
|---|---|---|---|---|---|---|
| 1026 Leorita Street | None listed | 7/15/1976 | The new concrete block retail store building with a concrete panel roof | Chas Nuzzo | John Barr (C) | $190,080 |
| 1026 Leorita Street | None listed | 12/15/1976 | 30-foot partition wall to ceiling | Chas Nuzzo | John Barr (C) | $500 |

## Table 4. Building Permits for 1022-1026 Leorita Street

| Associated Address | Permit Number | Date | Description of Work | Owner | Architect (A)/ Builder (B)/ Contractor (C) | Cost |
|---|---|---|---|---|---|---|
| 1026 Leorita Street | None listed | 1/14/1977 | Freestanding sign | Broken Horn | Look New (C) | $1,480 |
| 1026 Leorita Street | None listed | 2/3/1977 | 6’ tall concrete block retaining wall | Chas Nuzzo | Owner (C) | $1,296 |
| 1026 Leorita Street | None listed | 5/23/1977 | Install 2 12’x16’ interior walls and wrought iron work | Chas Nuzzo | John Barr (C) | $1,300 |
| 1026 Leorita Street | None listed | 12/18/1979 | Add mezzanine addition to existing industrial building (north side only on footing 3x3 deep) | Charles Nuzzo | Owner (C) | $12,000 |
| 1022 Leorita Street | None listed | 10/24/1983 | Demolish 1-bedroom house (associated with new construction) | Broken Horn | None listed | $1,500 |
| 1022 Leorita Street | None listed | 7/19/1983 | Removal of foundation | Charles Nuzzo | None listed | $500 |
| 1022 Leorita Street | None listed | 4/30/1984 | Construct a new 13,457 square foot building of concrete block, asphalt roof. Commercial, retail, and storage, -story with mezzanine | Charles Nuzzo | Owner (C) | $692,554 |
| 1022 Leorita Street | None listed | 5/30/1984 | Grading | Charles Nuzzo | Owner (C) | $47,400 |
| 1022 Leorita Street | None listed | 2/12/1985 | Plumbing permit for a new building | Charles Nuzzo | Owen Brothers Plumbing, Inc (C) | None listed |
| 1022 Leorita Street | None listed | 2/21/1985 | New electricity installation for addition | Broken Horn | Elite Electric (C) | None listed |

**Table 4. Building Permits for 1022-1026 Leorita Street**

| Associated Address | Permit Number | Date | Description of Work | Owner | Architect (A)/ Builder (B)/ Contractor (C) | Cost |
|---|---|---|---|---|---|---|
| 1022 Leorita Street | None listed | 8/23/1985 | Sewer permit for a new building | Charles Nuzzo | AW Baker (C) | None listed |
| 1022 Leorita Street | None listed | 11/4/1985 | Electrical permit for a new building | Charles Nuzzo | Bowmen of Arcadia (C) | None listed |
| 1026 Leorita Street | B9953 | 1/8/1993 | Fire sprinkler system | Broken Horn | Inland Automatic Fire Sprinkler (C) | $2,376 |
| 1026 Leorita Street | E98-0037 | 2/17/1998 | Electrical permit for exterior sign | Charles & Mattie Nuzzo Trust | Success Sign (C) | None listed |
| 1026 Leorita Street | B98-0081 | 2/17/1998 | Wall sign | Charles & Mattie Nuzzo Trust | Success Sign (C) | $3,000 |
| 1026 Leorita Street | B98-0128 | 2/26/1998 | Second sign to be added per plan | Charles & Mattie Nuzzo Trust | Success Sign (C) | $4,500 |
| 1022 Leorita Street | M00-000-262 | 1/29/2001 | Replacing Four combination air conditioners and heaters | Nuzzo Family Limited Partnership | AAA Granger A/C (C) | None listed |
| 1022 Leorita Street | M00-000-292 | 2/22/2001 | Replace 3 air conditioners | Nuzzo Family Limited Partnership | AAA Granger A/C (C) | None listed |
| 1026 Leorita Street | B00-012-484 | 12/3/2007 | Re-roof | Charles & Mattie Nuzzo Trust | South Coast and Valley Roofing (C) | $20,000 |

## NRHP/CRHR Statement of Significance

The property at 1022 Leorita Street does not meet any of the criteria for listing in the NRHP, CRHR, or City of Baldwin Hills historical designation as part of an existing historic district, as demonstrated below.

### Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research indicated that the Broken Horn Saddlery's first building at 1026 Leorita Street was constructed in 1976 with a subsequent expansion completed in 1986. The two portions of the subject property appear to have been connected circa 1995, per aerial photographs (NETR 2022). Both portions of the subject property were built as commercial, manufacturing, and storage space specifically for the Broken Horn Saddlery. At the time it was constructed, the area directly surrounding the subject property to the west and south was primarily residential,

although there was already some commercial development in the neighborhood, including the Edgewood Drive-In (1964) located adjacent to the subject property to the east at the present site of the Kaiser Permanente Baldwin Hills Medical Center (1992). There was additional commercial development elsewhere in the neighborhood, notably on Baldwin Park Boulevard, approximately 0.20-mile southeast of the subject property.

By the 1960s, Baldwin Park's rural character had changed due to increased development resulting from the post-World War II population boom in Southern California that expanded Los Angeles' suburbs outwards. As a result of this expansion, Baldwin Park saw an intensive period of residential construction and accompanying commercial development. By the 1970s, however, the post-World War II development boom subsided and Baldwin Park faced various significant challenges in drawing business and residents to the city. A 1979 *Los Angeles Times* article, for example, noted that commercial growth was minimal in the period from 1966 to 1979, with the number of businesses in the city growing from 231 to 287 (Birkinshaw 1979). Challenges bringing new businesses to the city continued into the 1980s when the subject property expanded (Los Angeles Times 1991).

The subject property thus appears to have been constructed in a period of relatively stagnant commercial growth in Baldwin Park citywide, when much of the city had already been developed. It does not seem to have been part of a broader pattern development and was neither the first nor last nondescript commercial structure to be constructed in the neighborhood, Baldwin Park, the greater Los Angeles area, or Southern California at large. The neighborhood in which the subject property sits was mixed-use prior to the subject property's construction, with primarily residential structures to the west and south of the subject property and commercial buildings primarily to the east and south of the subject property. The subject property appears to follow an already-established pattern of development in Baldwin Park and does not appear to represent any particular period of development or historical pattern in the city.

The property is not known to be directly associated with events that have made a significant contribution to the history of Baldwin Park, California, or the United States. Therefore, the property does not appear eligible under NRHP Criterion A or CRHR Criterion 1.

### Criterion B/2: That are associated with the lives of persons significant in our past.

To be found eligible under Criterion B/2 the property must be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. Archival research did not indicate any such direct association between individuals that are known to be historic figures at the national or state, level. From its construction in 1976 (and expansion in 1986) until 2021, the subject property was occupied by the Broken Horn Saddlery, Baldwin Park's only tact store. The Broken Horn Saddlery was owned and operated by the Nuzzo family. The business itself was founded by Charlie Nuzzo in 1956 and was run by the Nuzzo family until 2021. The Broken Horn Saddlery moved to 4120 Maine Avenue in downtown Baldwin Park in 2022 under new ownership.

While the Nuzzo family undoubtedly contributed substantially to the equestrian community of Baldwin Park and beyond through the Broken Horn Saddlery, research did not identify information that would indicate the association of members of the Nuzzo family with the subject property would rise to the threshold of significance required for eligibility. Therefore, the subject property does not appear eligible under NRHP Criterion B or CRHR Criterion 2.

### Criterion C/3/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The subject property is a nondescript commercial building composed of two attached structures: one built in 1976 and one built in 1986. Based on aerial photographs, the structures appear to have been connected circa 1995. While the subject property does have some elements that appear to reflect Western, hacienda, and ranching influences tying the exterior of the building to the goods it sold as the Broken Horn Saddlery, such as its tile-clad overhangs and the arches on the primary west elevation of the 1986 portion of the building, the building does not embody any discernable architectural style.

The subject property does not embody distinctive characteristics of a type, period or method of construction. It is a typical example of a 1970s-1980s nondescript commercial building. There is nothing notable or unique about its design; it does not possess the distinctive characteristics of any particular style and is executed in common materials. The subject property appears to have been constructed through already well-documented and common construction techniques and methods. It is not a rare example of its type in Baldwin Park; there is another similar commercial building that features similar design elements such as tile overhangs, for example, located approximately 0.20-mile southeast of the subject property at 927 Baldwin Park Boulevard (constructed 1973 per the Los Angeles County Assessor).

Research further did not identify the subject property as being designed by a master architect, builder, or contractor. The 1976 portion of the building was built by contractor John Barr, according to the original building permit. Research did not identify information on Barr that would indicate he was a master builder. The 1986 portion of the subject property was built by Charlie Nuzzo, the business owner, according to its original building permit. The property further does not appear to possess high artistic values by articulating a particular concept of design to the extent that it expresses an aesthetic ideal.

The last component of Criterion C, representing a significant and distinguishable entity whose components may lack individual distinction, is the most applicable to districts. The subject property does not appear likely to contribute to a potential historic district. Therefore, the subject property does not appear eligible under NRHP Criterion C or CRHR Criterion 3.

### Criterion D/4/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The subject property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies.

## Integrity Discussion

To be eligible for listing in the NRHP or CRHP, properties must retain their physical integrity from the period in which they gained significance. In the case of architecturally significant properties, the period of significance is normally the date of construction. For historically significant properties, the length of the historic associations usually measures the period of significance.

The subject property is composed of two connected buildings, one that was constructed in 1976 and one that was constructed in 1986. Since the subject property has not been moved, the property retains integrity of location. Building permit research and site survey information identified only minor alterations to the building and it appears to consequently retain integrity of design, materials, and workmanship. While some of the building's signage advertising the Broken Horn Saddlery has been removed, the building still retains signage reading "Broken Horn Saddlery" on its primary west elevation, as well as signage on its north elevation and consequently still retains its integrity of feeling, as it still is readily identifiable as a commercial space that was occupied by the Broken Horn Saddlery. The subject property retains only marginal integrity of setting; since the subject property's construction, the Kaiser Permanente Baldwin Hills campus was constructed in 1991 to the south and east of the subject property, replacing the Edgewood Drive-In that was extant at the time of the subject property's construction. The medical facilities are directly adjacent to the subject property and introduced new building typologies and a larger scale to the neighborhood. While the Nuzzo family, who founded Broken Horn Saddlery, were notable local businesspeople, their significance and association with the subject property does not appear to rise to the level of significance required for eligibility. Thus, research did not reveal that the property has an association with significant people or events in Baldwin Park, thus it does not retain integrity of association. In conclusion, subject property retains integrity of location, design, materials, workmanship, feeling, and association, but only retains marginal integrity of setting.

## City of Baldwin Hills Statement of Significance

The property at 1022 Leorita Street does not meet any of the criteria for City of Baldwin Hills historical designation or as part of an existing historic district, as demonstrated below.

### (A) Historical Representation: The building or structure is particularly representative of a distinct historical period, type, style, region or way of life.

The subject property is a 1976 (with 1986 addition) nondescript commercial building with some minimal Western influences and was occupied by the Broken Horn Saddlery until 2021. Similar buildings are ubiquitous in Baldwin Park and the greater Southern California region. The subject property is a typical building of its period and does not appear to represent a distinct historical period, type, style, region, or way of life. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion A.

### (B) Connection to important personality: The building or structure was connected with someone renowned, important or who was a local personality.

As discussed in NRHP / CRHP Criterion B/2, the subject property was the home of the Broken Horn Saddlery from its construction in 1976 (and subsequent 1986 expansion) until 2021. The Broken Horn Saddlery was founded by Charlie Nuzzo, and remained a family-run operation until 2021, when the business vacated the subject property. The Broken Horn Saddlery re-opened under new ownership at 4120 Maine Avenue in 2022 (Baldwin Park News 2022). While the Broken Horn Saddlery was, and remains, an important local business serving the equestrian community of Baldwin Park and beyond, and while the Nuzzo family were important family stewards of this legacy business, it does not appear that the building or structure is connected to someone renowned, important, or who was a local personality that would rise to the level required for designation. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion B.

### (C) Connection to rare business: The building or structure is connected with a business or use which was once common but is now rare.

The subject property was occupied by the Big Horn Saddlery from its construction in 1976 until 2021, when the business moved to downtown Baldwin Park (Baldwin Park News 2022). It appears that Big Horn Saddlery is the only tack shop in the City of Baldwin Park and has historically been the primary source for tack and saddles in the city. While this is a rare business type in the city, it was never a common business as it appears to have been the only store of its type in Baldwin Hills. The business is still in operation in Baldwin Park today, albeit in a new location. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion C.

### (D) Master work: The building or structure represents the work of a master builder, engineer, designer, artist or architect.

As discussed in NRHP/CRHR Criterion C/3, the subject property was not designed by a master builder, engineer, designer, artist, or architect. According to its original building permit, the building at 1026 Leorita Street was constructed by John Barr; research did not identify information on John Barr that would indicate he is a master builder. The original building permits for 1022-1024 Leorita Street lists the owner of the Broken Horn Saddlery, Charlie Nuzzo, as the contractor. No architect was listed on either permit. There is no indication the property is the work of an architect, builder, engineer, designer, or artist of major importance. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion D.

### (E) Historic event: The building or structure is the site of an important historic event or is associated with events that have made a meaningful contribution to the nation, state or city.

As discussed in NRHP/CRHR Criterion A/1, archival research did not reveal that the subject property was related to historical events significant to the City of Baldwin Park and does not reflect elements associated with a historic event having major significance to the City of Baldwin Park, Los Angeles County, the State of California or the United States. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion H.

### (F) Particular architectural style: The building or structure exemplifies a particular architectural style.

As discussed in NRHP / CRHR Criterion C/3, the subject property is a nondescript commercial building with no discernable style. While the subject property has some design elements that appear to reference Western, hacienda, and ranching traditions, such as overhangs clad in tiles and arches on the primary (west) elevation of the 1986 portion of the building, it does not embody most of the character-defining features of the stye. Rather, it is a functional building constructed for functional purposes and does not exemplify any particular architectural style. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion F.

### (G) Best remaining: The building or structure exemplifies the best remaining architectural type of a neighborhood.

The subject property is not the best remaining architectural type in its neighborhood. The subject property is not a rare example of a nondescript commercial building constructed in the 1970s in the neighborhood or Baldwin Park at large. One of many examples of a comparable commercial building in the neighborhood is the building at 927

Baldwin Park Boulevard (constructed 1973 per the Los Angeles County Assessor). Therefore, the subject property does not appear eligible under City of Baldwin Park Criteria G.

### (H) Outstanding design: The construction materials or engineering methods used in the building or structure embody elements of outstanding architectural or engineering design, detail, material or craftsmanship.

As discussed in NRHP/CRHR Criteria C/3, the subject property does not appear to embody elements of outstanding architectural or engineering design, detail, material or craftsmanship. It is a typical example of a common and widespread 1970s commercial structure. Therefore, the subject property does not appear eligible under City of Baldwin Park Criteria H.

# 6 Findings and Conclusions

## 6.1 Summary of Findings

The subject property appears ineligible as a historical resource as a result of extensive archival research, field survey, and the property significance evaluation. Findings are summarized below in Table 5. Therefore, the subject property is not considered historical resources for the purposes of CEQA.

**Table 5. Historic Built Environment Findings**

| Address | Date Constructed | NRHP/ CRHR/ City of Baldwin Park Designation Criteria | Previous CHRS code (if applicable) | Assigned California Historical Resource Status code | CEQA Finding |
|---|---|---|---|---|---|
| 1022 Leorita Street<br>1024-1026 Leorita Street | 1976<br>1986 | Not eligible | Not applicable | 6Z: Found ineligible for NR, CR or local designation through survey evaluation | Not considered a historical resource for the purposes of CEQA |

## 6.2 Recommendations

The subject property appears ineligible as a historical resource at the local, state, and federal level. No historical resources were identified within the Project site as a result of extensive archival research, a SCCIC records search, field survey, and property evaluations of significance. The subject property is not currently designated or listed under any national, state, or local landmark programs. The subject property has further not been identified as eligible for local designation by any historical resources surveys.

Dudek evaluated subject property in accordance with Section 15064.5 (a)(2)-(3) of California Environmental Quality Act (CEQA) Guidelines and using the criteria outlined in Section 5024.1 of the California Public Resources Code. Dudek concludes that the building does not appear to be eligible for listing in the NRHP, CRHR, or for historical designation in the City of Baldwin Park due to a lack of significance. As such, the subject property does not appear to be a historical resource under CEQA. The recommended California Historical Resources Status Code for the subject property is 6Z. The finding for built environment cultural resources for the proposed Project under CEQA is No Impact. As the proposed Project would have no impact on historical resources, no further study is required.

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# 7 Bibliography


Baldwin Park News. 2021. "Broken Horn Saddlery which has been in operation for 65 years set to relocate and close its Baldwin Park location this Sunday." July 12, 2021. https://baldwinparknewsonline.com/broken-horn-saddlery-which-has-been-in-operation-for-65-years-set-to-relocate-and-close-its-baldwin-park-location-this-sunday/. Accessed July 2022.

Baldwin Park News. 2022. "Broken Horn Saddlery reopened in Baldwin Park's Downtown Area." April 4, 2022. https://baldwinparknewsonline.com/broken-horn-saddlery-reopened-in-baldwin-parks-downtown-area/. Accessed July 2022.

Benbow, Bob, and Lorraine O'Brien. 2011. *Images of America: Baldwin Park*. Mount Pleasant, South Carolina: Arcadia Publishing.

Birkinshaw, Jack. 1979. "Baldwin Park, at Valley's Hub, Tries to Get Off Dead Center." *Los Angeles Times.* November 4, 1979.

City of Baldwin Park Department of Planning. 2002. "2020 General Plan." Prepared for the City of Baldwin Park. https://www.baldwinpark.com/online-documents/community-development/planning/general-plan-individual-elements/1943-introduction/file/. Accessed July 2022.

City of Baldwin Park Community Development Department. 2005. "City of Baldwin Park: Consolidated Plan, 2005-2010." City of Baldwin Park. Adopted May 4, 2005. https://www.baldwinpark.com/docssidemenu/community-development/redevelopment/cdbg/97-consolidated-plan-1/file. Accessed July 2022.

City of Baldwin Park. 2015. "Historical Society and Museum." https://www.baldwinpark.com/2015-01-24 22-56-10. Accessed July 2022.

Duncan, Ray and Dirk Werkman. 1962. "Baldwin Park Gains in Stature: Population Soars, Values Rise in 6-Year Old City." Newspapers.com: *Pasadena Independent*. November 29, 1962.

Garber, Scott. 2018. "Neighborhood Spotlight, Baldwin Park: Unassuming City, Modest Prices." Newspapers.com: *Los Angeles Times*. September 8, 2018.

Harbert, Claudia. 2002. *Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA.* On File at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

Los Angeles Times. 1991. "City Looks for Way to Ease Crunch." Newspapers.com: *Los Angeles Times*. July 14, 1991.

NETR (Nationwide Environmental Title Research LLC). 2022. Historic Aerial Photographs of 1022-1026 Leorita Street, Baldwin Park dating from 1948, 1952, 1964, 1972, 1980, 187, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2003, 2004, 2005, 2009, 2010, 2012, 2014, 2016, and 2018. Accessed July, 2022. https://www.historicaerials.com/viewer

NPS (National Park Service). 1995. “How to Apply the National Register Criteria for Evaluation.” National Register Bulletin 15. Accessed December 27, 2021. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf

Pernokas, Nick. 2017. "Broken Horn Saddlery: How the West’s Largest Tack Store Successfully Adapted to a Changing Environment." *Shop Talk Magazine*. June 15, 2017. Accessed July 2022.

Pinheiro, Aileen F. and Lena Taylor. 1981. *The Heritage of Baldwin Park*. Baldwin Park, California: Baldwin Park Historical Society.

Stewart, Noah. 2008. *Finding of No Adverse Effect Interstate Route 10 – 605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA: 245400.* On File at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

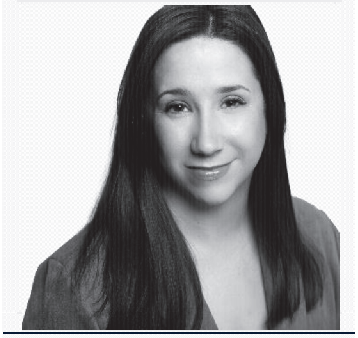
Stewart, Noah. 2012. *Supplemental Finding of No Adverse Effect Interstate Route 10 – 605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA: 245400.* On File at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

UCSB (University of California, Santa Barbara). 2021. Historic Aerial Photographs of 1022-1026 Leorita Street, Baldwin Park, California dating from 1938. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource. Accessed July 2022. http://mil.library.ucsb.edu/ap_indexes/FrameFinder.

# Appendix A
Preparer's Qualifications

# Claire Cancilla, MSHP

**ARCHITECTURAL HISTORIAN**



Claire Cancilla (KLAIR *Kan-sil-uh; she/her*) is an Architectural Historian with 3 years' professional experience that encompasses a wide variety of project types in varied geographic locations, including Los Angeles, Laguna Beach, Agoura Hills, Baldwin Park, Poway, Riverside, San Diego, Glendale, Pasadena, Sequoia National Park, New York City, and Venice, Italy. She has completed historic significance evaluations in consideration of the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), and local designation criteria for single-family residences, commercial properties, educational institutions, warehouse and industrial properties, and municipal facilities. Additional project experience includes writing national register and local register nominations, conducting historic archival research, performing conditions assessments and reconnaissance surveys, conducting CEQA impacts analyses, preparing environmental impact report (EIR) sections, and conducting design reviews under the Secretary of the Interior's Standards. She meets the Secretary of the Interior's Professional Qualification Standards for Architectural History.

***Education***

*Columbia University*
*MS, Historic Preservation, 2020*

*Occidental College*
*BA, History, 2016*

## Dudek Project Experience

**Los Angeles County Metro Area Plan Project, Los Angeles County, California.** Dudek was retained by the County of Los Angeles Department of Regional Planning to prepare a Historic Context Statement (HCS) in support of the Metro Area Plan (MAP) project. The goal of the HCS component of the project is to inform, enhance, and streamline the larger MAP project as it pertains to historical resources. The communities included within the MAP HCS include East Los Angeles, East Rancho Dominguez, Florence–Firestone, Walnut Park, West Athens–Westmont, West Rancho Dominguez–Victoria, and Willowbrook. The HCS documents the development history of the communities from the rancho period to the present; identifies important themes, events, and patterns of development; and describes the different property types, styles, builders, and architects associated with these important periods and themes. The document will also provide registration requirements and recommendations for future study/action by the County of Los Angeles to facilitate and streamline the historic preservation program. Responsibilities include report section preparation and archival research. (2021–Present)

**Kaiser Baldwin Park Medical Center Project, Top Commercial Realty, Baldwin Park California**. Dudek was retained to complete a Built Environment Inventory and Evaluation Report for a proposed project involving the development of the Kaiser Baldwin Park Medical Center. Ms. Cancilla co-authored a Built Environment Inventory and Evaluation Report for a 1970s vernacular commercial building. (2022).

**Arlington Avenue Historic Resources Technical Report, Foulger Pratt, Riverside, California**. Dudek was retained to complete a Historic Resources Technical Report on a Mid-Century Modern former Sears Department Store in the city of Riverside, California for a proposed redevelopment. Ms. Cancilla contributed to the significance evaluation and historic contexts for the technical report. (2022).

**Oak Knoll Road, Poway, San Diego County, California.** Dudek was retained to complete a historical resources evaluation for a residential development project in the City of Poway. The Project proposes the development of the 10.72-acre property into a residential development within an existing residential neighborhood. As an architectural historian, Ms. Cancilla contributed to the significance evaluation and historic contexts for the technical report. (2022)

## Relevant Previous Experience

**Mayfield Junior School Historic Resource Assessment, City of Pasadena, California.** Primary author of a historic resource assessment (HRA) for two mid-century educational buildings on the Mayfield Junior School campus. Work involved archival research, survey and documentation of the buildings and campus, and an evaluation of both buildings' eligibility under local, state, and federal criteria. (2022)

**Silver Lake Reservoir Complex Master Plan EIR, City of Los Angeles, California.** Conducted a site survey of the Silver Lake Reservoir, documenting character-defining features of the complex and conducting a direct, indirect, and cumulative impacts analysis for a proposed master plan. Work involved identifying all previously recorded historic built environment resources within 0.25-mile of the complex's perimeter for the impacts analysis. (2022)

**Project Crossings Redevelopment HRA and EIR Section, Apple Inc., Los Angeles and Culver City, California.** Primary author of an HRA for three industrial buildings, located on the boundary between Los Angeles and Culver City. All buildings were evaluated under both cities' local evaluation criteria. Conducted a direct, indirect, and cumulative impacts analysis, analyzing potential effects of the proposed redevelopment on adjacent built environment resources and prepared an EIR section for the project (2021–2022)

**Heritage Park Rehabilitation Project, City of San Diego, California.** Conducted research and updated Department of Parks and Recreation (DPR) forms for seven Victorian-era buildings located in San Diego's Heritage Park in anticipation of a forthcoming rehabilitation project. The residences were moved to the park in the 1970s and 1980s due to their impending demolition. (2022)

**446 26th Street DPR Form, San Diego Unified School District, San Diego California.** Conducted research and completed DPR forms for a 1970 vacant former hospital facility in San Diego. Documented the history of the building and its various owners and functions and analyzed the building within the context of the federal Model Cities Program, which provided funding for the building's original construction. (2022)

**2720 Monte Mar Terrace Historical Consulting Services, Confidential Client, Los Angeles, California.** Conducted research on the history and development of 1920s Tudor Revival residence and provided consulting services to the homeowners to help guide a potential new addition to the residence. (2022)

**7 Oakmont Drive Character-Defining Features Analysis, Confidential Client, Los Angeles, California.** Conducted a site visit at the Paul Revere Williams Los Angeles Historic-Cultural Monument (LAHCM) residence, photographically documenting all elevations to identify character-defining features of the residence. Compiled a table of character-defining features and provided preservation recommendations and treatments in anticipation of a rehabilitation and exterior addition to the residence. (2021)

**Kun House II LAHCM, Confidential Client, Los Angeles, California.** Co-authored an LAHCM nomination for a Richard Neutra-designed residence. Kun House II is located across the street from Kun House I, another Neutra-deigned home for the same client. Work involved conducting archival research at the University of California Los Angeles, surveying the residence, and contextualizing the home within the body of Neutra's residential work to argue for the home being an excellent example of Neutra's small-scale residential design. (2021)

**989 Cliff Drive HRA and Impacts Analysis, Confidential Client, Laguna Beach, California.** Authored an HRA for a 1920s Mediterranean Revival beach house that was identified in Laguna Beach's historic resources survey. Research involved an extensive alteration history using plans from renovations and historic photographs, a site visit, and research on the development of the area and the house's inhabitants. Further conducted a direct and indirect impacts analysis for a proposed garage renovation and addition on the project site. (2021)

**28307 Agoura Road HRA and HABS III Documentation, Confidential Client, Agoura Hills, California.** Authored an HRA on a 1940s vernacular commerical property in Agoura Hills. Researched the rural character and history of Agoura Hills, conducted research at the Agoura Hills Library and Bulding Division, identified occupants, and assessed eligiblity. Upon completion of the HRA, assisted HABS III documentation for the property prior to its redevelopment. (2021)

**Marine Drive HRA and Impacts Analysis, Confidential Client, Laguna Beach, California.** Authored an HRA for a single-family 1920s Craftsman residence on Marine Drive. Researched the original property owner, who was a founder of the Orange County Register, and the early beachfront development of Laguna Beach, and conducted an integrity analysis of the home using historic photographs and on-site observation. (2021)

**Edgemont Street Los Angeles Historic Cultural Monument Nomination, Confidential Client, Los Angeles, California.** Drafted an LAHCM nomination for an American Colonial Revival courtyard garden apartment complex located on the boundary between Los Feliz and East Hollywood. Contextualized the apartment complex within the courtyard apartment typology and as an example of the work of a prolific construction company that designed several other courtyard apartment buildings in Los Angeles. (2021).

**5654 Fountain Avenue HRA, Confidential Client, Los Angeles, California.** Primary author of an HRA for an American Colonial Revival residential duplex in Hollywood constructed in 1919. Documented the building's history; conducted extensive reserach on the building, its site, and neighbohrood development; and analyzed the building's material and design integirty. (2021)

**Powers Street Mosque National Register Nomination, Williamsburg, Brooklyn, New York.** Authored a National Register nomination for the Powers Street Mosque, the oldest extant mosque in New York City. The mosque, originally constructed as an Episcopalian church, was founded in 1931 by the American Mohammed Society, formed by Lipka Tatar Muslims, many of whom immigrated to Brooklyn from Lithuania. Researched the property's history, both before its use as a mosque and after; interviewed the mosque's caretaker whose family was involved in the mosque's founding; and conducted photographic documentation. (2020)

**Victoria Theatre Historic Resource Report, Confidential Client, Harlem, New York.** Authored a historic resource report documenting the development history of the Victoria Theatre, located on 125th Street in Harlem, New York and designed by architect Thomas Lamb. Conducted research trips to archival repositories to document the theater's history, analyzed the theater within the context of Harlem's historical development, and identified additional theaters in the area designed by Lamb. The report provided the basis for an interpretive exhibit in the theater's lobby. (2020)

## Awards

Zabar Family Scholarship, Preservation League of New York State, 2020.

Cleo and James Marston Fitch Prize, Columbia University Preservation Alumni, 2019.

Avery Scholarship, Columbia University Graduate School of Architecture, Planning, and Preservation, 2018–2020.

# Caitlin Greeley, MA

**ARCHITECTURAL HISTORIAN**

Caitlin Greeley (*she/her*) is an architectural historian with 2 years' professional experience. As part of her cultural resources management work, Ms. Greeley has conducted archival research, performed fieldwork, and authored multiple historic context statements. She also has experience preparing and contributing to California Department of Parks and Recreation (DPR) 523 forms. She has experience with consultation for Section 106 of the National Historic Preservation Act, Area of Potential Effect maps, Historic Resource Evaluation Reports, Historical Resource Inventories, Historic American Building Survey photography, reconnaissance and intensive-level surveys, and archival research.

Ms. Greeley meets the Secretary of the Interior's Professional Qualification Standards for both Architectural History and History. She has experience preparing environmental compliance documentation in support of projects that fall under the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act.

Prior to joining Dudek, Ms. Greeley gained extensive experience working in multicultural and multilingual environments. She has experience photographing historic buildings and writing conservation management statements for preservation and proposals for adaptive reuse of historic buildings.

***Education***

*New York University (London)*
*MA, Historical and Sustainable Architecture, 2017*

*The College of Saint Scholastica,*
*BA, Humanities, 2014*

***Specialized Training***

*Historic American Building Survey/Historic American Engineering Record/Historic American Landscapes Survey Photography Training*

## Dudek Project Experience

**Cultural Resources Inventory and Evaluation Report for the Elephant Hill Project, City of Pomona, Los Angeles County, California.** Dudek was retained by City of Pomona to prepare an inventory and evaluation report for the Elephant Hill Project, which proposes to develop a 228-unit single and multi-family housing development on the western face of Elephant Hill. The proposed project activities intersected or were immediately adjacent to one previously listed City of Pomona Designated Historical Landmark: Spadra Cemetery; and one previously unidentified property over 50 years in age: a segment of Brea Canyon Road. Preparation of the report involved intensive level survey of both properties including documentation of the cemetery according to National Register Bulletin 41 guidelines, archival research, historic context development, developing a significance evaluation for resources under NRHP, CRHR, and local criteria. Dudek recommended that Brea Canyon Road was ineligible; however, Spadra Cemetery was already considered a historical resource under CEQA and an impacts analysis and mitigation measures were prepared. (2022 - ongoing)

**As-Needed Historic Research Consultant, City of Coronado, California.** Dudek is currently working with the City of Coronado Community Development Department to provide historic preservation services on an as-needed basis. Services scoped under the current contract include historic resources surveys; archival research; preparation of evaluation reports in consideration of the National Register of Historic Places (NRHP), the California Register of

Historical Resources, and City of Coronado designation criteria; attendance at Historic Resource Commission and City Council hearings; and review of projects for conformance with the Secretary of the Interior's Standards for Rehabilitation. Ms. Greeley serves as an architectural historian for the task orders and is responsible for archival research and reporting. (2022 - ongoing)

**SB2 Planning Grant Project, San Bernardino County, California.** Dudek was retained to prepare a Cultural Resources Technical Report in support of the SB2 Planning Grant Project in San Bernardino County. Preparation of the report involved extensive archival research and historic context statement development. Ms. Greeley serves as an architectural historian for the project and is responsible for archival research and coauthoring the historic context statement. (2022)

**Willow Tree Inn, City of Compton, California.** Dudek was retained to prepare a historic resources evaluation, a Built Environment Inventory, and an evaluation report for the Willow Tree Inn located within the city limits of Compton. Preparation of the report involved extensive archival research, in-field research, historic context statement development, building development descriptions, historical significance evaluations, and DPR forms for the property. Ms. Greeley serves as an architectural historian for the project and is responsible for fieldwork, archival research, and writing building descriptions. (2022)

## Relevant Previous Experience

**California Housing and Community Investment Department of Los Angeles, City of Los Angeles, California.** Ms. Greeley performed intake of incoming work orders of affordable housing projects and conducted historic research on each project site and neighboring properties. She evaluated properties throughout Los Angeles in compliance with Section 106 to determine potential eligibility of historic resources for designation on the NRHP. She also created the preliminary Area of Potential Effects boundary maps for the proposed project using Photoshop for visual presentation. She aided in making preliminary determinations to see if the proposed affordable housing project had an effect on surrounding properties eligible for the NRHP in accordance with Section 106. She coordinated with and provided training to coworkers on the intake process for the project. She conducted site survey of individual resources in the City of Los Angeles through photographic documentation and contributed to DPR forms. (2020–2021)

**Cultural Assessment for Weatherization Projects for Homes, California Department of General Services, California.** Ms. Greeley helped with the intake of reviews, assigned reviews to staff, and coordinated with agencies. She also conducted research on historic-age properties throughout California using assessor records, building permits, historic aerials, local ordinances, or surveys regarding local historic preservation to determine if the proposed project had an effect on properties eligible for the NRHP in accordance with Section 106. (2020–2022)

**XpressWest Passenger Train Project, California and Nevada.** Ms. Greeley performed administrative tasks and organized Section 106 consultation party documents. She also contributed to DPR forms and NRHP eligibility evaluations of individual resources. She conducted research on unknown parcels using historic photographs and spatial analysis programs such as Google Earth imaging. She edited survey photos through post-production software, such as Photoshop, for visual presentation. (2020)

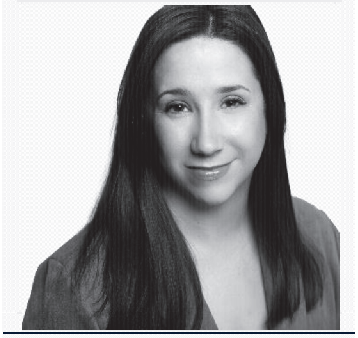
**Interstate 10/Mt. Vernon Avenue Improvement Project, City of Colton and Caltrans District 8, San Bernardino County, California.** Ms. Greeley conducted a field survey to identify built environment resources requiring formal evaluation and participated in the identification of built resources subject to exemption per Attachment 4 of the Caltrans Section 106 Programmatic Agreement. She also researched and contributed to the City of Colton historic

context statement in the draft Historical Resources Evaluation Report. Additionally, she prepared DPR forms for individual resources in the project Area of Potential Effect. (2020)

**Fenix Marine Intermodal Railyard Expansion and Modernization Project, The Port of Los Angeles and Maritime Administration, California.** Ms. Greeley researched consulting parties for the project and drafted consultation letters and tribal letters as part of the Section 106 process. She also contributed to the draft technical report and conducted a field survey of historic built environment resources. (2020)

# Claire Cancilla, MSHP

**ARCHITECTURAL HISTORIAN**



Claire Cancilla (KLAIR *Kan-sil-uh; she/her*) is an Architectural Historian with 3 years' professional experience that encompasses a wide variety of project types in varied geographic locations, including Los Angeles, Laguna Beach, Agoura Hills, Baldwin Park, Poway, Riverside, San Diego, Glendale, Pasadena, Sequoia National Park, New York City, and Venice, Italy. She has completed historic significance evaluations in consideration of the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), and local designation criteria for single-family residences, commercial properties, educational institutions, warehouse and industrial properties, and municipal facilities. Additional project experience includes writing national register and local register nominations, conducting historic archival research, performing conditions assessments and reconnaissance surveys, conducting CEQA impacts analyses, preparing environmental impact report (EIR) sections, and conducting design reviews under the Secretary of the Interior's Standards. She meets the Secretary of the Interior's Professional Qualification Standards for Architectural History.

***Education***

*Columbia University*
*MS, Historic Preservation, 2020*

*Occidental College*
*BA, History, 2016*

## Dudek Project Experience

**Los Angeles County Metro Area Plan Project, Los Angeles County, California.** Dudek was retained by the County of Los Angeles Department of Regional Planning to prepare a Historic Context Statement (HCS) in support of the Metro Area Plan (MAP) project. The goal of the HCS component of the project is to inform, enhance, and streamline the larger MAP project as it pertains to historical resources. The communities included within the MAP HCS include East Los Angeles, East Rancho Dominguez, Florence–Firestone, Walnut Park, West Athens–Westmont, West Rancho Dominguez–Victoria, and Willowbrook. The HCS documents the development history of the communities from the rancho period to the present; identifies important themes, events, and patterns of development; and describes the different property types, styles, builders, and architects associated with these important periods and themes. The document will also provide registration requirements and recommendations for future study/action by the County of Los Angeles to facilitate and streamline the historic preservation program. Responsibilities include report section preparation and archival research. (2021–Present)

**Kaiser Baldwin Park Medical Center Project, Top Commercial Realty, Baldwin Park California**. Dudek was retained to complete a Built Environment Inventory and Evaluation Report for a proposed project involving the development of the Kaiser Baldwin Park Medical Center. Ms. Cancilla co-authored a Built Environment Inventory and Evaluation Report for a 1970s vernacular commercial building. (2022).

**Arlington Avenue Historic Resources Technical Report, Foulger Pratt, Riverside, California**. Dudek was retained to complete a Historic Resources Technical Report on a Mid-Century Modern former Sears Department Store in the city of Riverside, California for a proposed redevelopment. Ms. Cancilla contributed to the significance evaluation and historic contexts for the technical report. (2022).

**Oak Knoll Road, Poway, San Diego County, California.** Dudek was retained to complete a historical resources evaluation for a residential development project in the City of Poway. The Project proposes the development of the 10.72-acre property into a residential development within an existing residential neighborhood. As an architectural historian, Ms. Cancilla contributed to the significance evaluation and historic contexts for the technical report. (2022)

## Relevant Previous Experience

**Mayfield Junior School Historic Resource Assessment, City of Pasadena, California.** Primary author of a historic resource assessment (HRA) for two mid-century educational buildings on the Mayfield Junior School campus. Work involved archival research, survey and documentation of the buildings and campus, and an evaluation of both buildings' eligibility under local, state, and federal criteria. (2022)

**Silver Lake Reservoir Complex Master Plan EIR, City of Los Angeles, California.** Conducted a site survey of the Silver Lake Reservoir, documenting character-defining features of the complex and conducting a direct, indirect, and cumulative impacts analysis for a proposed master plan. Work involved identifying all previously recorded historic built environment resources within 0.25-mile of the complex's perimeter for the impacts analysis. (2022)

**Project Crossings Redevelopment HRA and EIR Section, Apple Inc., Los Angeles and Culver City, California.** Primary author of an HRA for three industrial buildings, located on the boundary between Los Angeles and Culver City. All buildings were evaluated under both cities' local evaluation criteria. Conducted a direct, indirect, and cumulative impacts analysis, analyzing potential effects of the proposed redevelopment on adjacent built environment resources and prepared an EIR section for the project (2021–2022)

**Heritage Park Rehabilitation Project, City of San Diego, California.** Conducted research and updated Department of Parks and Recreation (DPR) forms for seven Victorian-era buildings located in San Diego's Heritage Park in anticipation of a forthcoming rehabilitation project. The residences were moved to the park in the 1970s and 1980s due to their impending demolition. (2022)

**446 26th Street DPR Form, San Diego Unified School District, San Diego California.** Conducted research and completed DPR forms for a 1970 vacant former hospital facility in San Diego. Documented the history of the building and its various owners and functions and analyzed the building within the context of the federal Model Cities Program, which provided funding for the building's original construction. (2022)

**2720 Monte Mar Terrace Historical Consulting Services, Confidential Client, Los Angeles, California.** Conducted research on the history and development of 1920s Tudor Revival residence and provided consulting services to the homeowners to help guide a potential new addition to the residence. (2022)

**7 Oakmont Drive Character-Defining Features Analysis, Confidential Client, Los Angeles, California.** Conducted a site visit at the Paul Revere Williams Los Angeles Historic-Cultural Monument (LAHCM) residence, photographically documenting all elevations to identify character-defining features of the residence. Compiled a table of character-defining features and provided preservation recommendations and treatments in anticipation of a rehabilitation and exterior addition to the residence. (2021)

**Kun House II LAHCM, Confidential Client, Los Angeles, California.** Co-authored an LAHCM nomination for a Richard Neutra-designed residence. Kun House II is located across the street from Kun House I, another Neutra-deigned home for the same client. Work involved conducting archival research at the University of California Los Angeles, surveying the residence, and contextualizing the home within the body of Neutra's residential work to argue for the home being an excellent example of Neutra's small-scale residential design. (2021)

**989 Cliff Drive HRA and Impacts Analysis, Confidential Client, Laguna Beach, California.** Authored an HRA for a 1920s Mediterranean Revival beach house that was identified in Laguna Beach's historic resources survey. Research involved an extensive alteration history using plans from renovations and historic photographs, a site visit, and research on the development of the area and the house's inhabitants. Further conducted a direct and indirect impacts analysis for a proposed garage renovation and addition on the project site. (2021)

**28307 Agoura Road HRA and HABS III Documentation, Confidential Client, Agoura Hills, California.** Authored an HRA on a 1940s vernacular commerical property in Agoura Hills. Researched the rural character and history of Agoura Hills, conducted research at the Agoura Hills Library and Bulding Division, identified occupants, and assessed eligiblity. Upon completion of the HRA, assisted HABS III documentation for the property prior to its redevelopment. (2021)

**Marine Drive HRA and Impacts Analysis, Confidential Client, Laguna Beach, California.** Authored an HRA for a single-family 1920s Craftsman residence on Marine Drive. Researched the original property owner, who was a founder of the Orange County Register, and the early beachfront development of Laguna Beach, and conducted an integrity analysis of the home using historic photographs and on-site observation. (2021)

**Edgemont Street Los Angeles Historic Cultural Monument Nomination, Confidential Client, Los Angeles, California.** Drafted an LAHCM nomination for an American Colonial Revival courtyard garden apartment complex located on the boundary between Los Feliz and East Hollywood. Contextualized the apartment complex within the courtyard apartment typology and as an example of the work of a prolific construction company that designed several other courtyard apartment buildings in Los Angeles. (2021).

**5654 Fountain Avenue HRA, Confidential Client, Los Angeles, California.** Primary author of an HRA for an American Colonial Revival residential duplex in Hollywood constructed in 1919. Documented the building's history; conducted extensive reserach on the building, its site, and neighbohrood development; and analyzed the building's material and design integirty. (2021)

**Powers Street Mosque National Register Nomination, Williamsburg, Brooklyn, New York.** Authored a National Register nomination for the Powers Street Mosque, the oldest extant mosque in New York City. The mosque, originally constructed as an Episcopalian church, was founded in 1931 by the American Mohammed Society, formed by Lipka Tatar Muslims, many of whom immigrated to Brooklyn from Lithuania. Researched the property's history, both before its use as a mosque and after; interviewed the mosque's caretaker whose family was involved in the mosque's founding; and conducted photographic documentation. (2020)

**Victoria Theatre Historic Resource Report, Confidential Client, Harlem, New York.** Authored a historic resource report documenting the development history of the Victoria Theatre, located on 125th Street in Harlem, New York and designed by architect Thomas Lamb. Conducted research trips to archival repositories to document the theater's history, analyzed the theater within the context of Harlem's historical development, and identified additional theaters in the area designed by Lamb. The report provided the basis for an interpretive exhibit in the theater's lobby. (2020)

## Awards

Zabar Family Scholarship, Preservation League of New York State, 2020.

Cleo and James Marston Fitch Prize, Columbia University Preservation Alumni, 2019.

Avery Scholarship, Columbia University Graduate School of Architecture, Planning, and Preservation, 2018–2020.

# Appendix B

DPR Forms for 1022-1026 Leorita Street

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

# PRIMARY RECORD

Primary #_____
HRI #
Trinomial
**NRHP Status Code** 6Z

Other Listings_____
Review Code Reviewer Date

**Page** 1 **of** 14 ***Resource Name or #:** (Assigned by recorder) 1022-1026 Leorita Street
**P1. Other Identifier:** Broken Horn Saddlery

*P2. **Location:** ☐ **Not for Publication** ■ **Unrestricted**
*a. **County** Los Angeles **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
b. **USGS 7.5' Quad** Baldwin Park **Date** 2021 **T** 1S; **R** 11W; **Sec** 24; San Bernardino **B.M.**
c. Address 1022-1026 Leorita Street City Baldwin Park Zip 91706
d. UTM: (Give more than one for large and/or linear resources) Zone 11N , 408838 mE/ 3769880 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
APN 8559-008-005 (1976); APN 8559-008-011 (1986)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property is a one-story nondescript commercial building with some references to the western tradition that ties to the goods sold there. The subject property is composed of two connected structures, each with a rectangular plan: the original 1976 portion of the building (1026 Leorita Street), which occupies the northern portion of the Project site, and a 1986 expansion (1022-1024 Leorita Street), which occupies the southern portion of the Project site. These two sections of the building were connected circa 1995. [**See Continuation Sheet**]

***P3b. Resource Attributes:** (List attributes and codes) HP6. 1-3 Story Commercial Building
***P4.Resources Present:** ■ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

**P5b.** Description of Photo: (view, date, accession #) Primary (west) elevation, looking east (IMG 1376), 04/19/2022

***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both
1976; addition in 1986 (building permits; Los Angeles County Assessor)

***P7. Owner and Address:**
Kaiser Foundation Hospitals
1800 Harrison St
19th Floor
Oakland, CA

***P8. Recorded by:** (Name, affiliation, and address)
Andrew Bursan, MCRP
Dudek, 38 N Marengo Avenue,
Pasadena, CA 91101

***P9. Date Recorded:** 04/19/22

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Dudek. 2022. Historic Resources Technical Report: Kaiser Baldwin Park Medical Center Project, City of Baldwin Park. Prepared August 2022.

***Attachments:** ☐NONE ■Location Map ■Continuation Sheet ■Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # _____
HRI# _____

# BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) 1022-1026 Leorita Street ***NRHP Status Code** 6Z

**Page** 2 **of** 14

B1. Historic Name: Broken Horn Saddlery / 1022-1026 Leorita Street

B2. Common Name: Broken Horn Saddlery / 1022-1026 Leorita Street

B3. Original Use: Commercial B4. Present Use: Vacant

***B5. Architectural Style:** None

***B6. Construction History:** (Construction date, alterations, and date of alterations)

See **Continuation Sheet** for list of alterations.

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** _____ **Original Location:** _____

***B8. Related Features:**

N/A

B9a. Architect: None b. Builder: John Barr (1976); Charlie Nuzzo (1986 addition)

***B10. Significance: Theme** N/A **Area** N/A

**Period of Significance** 1976-1986 **Property Type** Commercial **Applicable Criteria** N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

## Significance summary

1022-1026 Leorita Street (APN 8559-008-011; APN 8559-008-005) does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of a potential or existing historic district. It further does not meet any of the criteria for landmark listing by the City of Baldwin Park. The subject property does not meet the minimum requirements for any category of historical resource within the City of Baldwin Park. The recommended status code is 6Z: Found ineligible for NR, CR or Local designation through survey evaluation. [**See Continuation Sheet**]

B11. Additional Resource Attributes: (List attributes and codes) N/A

***B12. References:**

See **Continuation Sheet** for full list of references.

B13. Remarks:

***B14. Evaluator:** Claire Cancilla, MSHP and Allison Lyons, MSHP

***Date of Evaluation:** 7/28/2022

(This space reserved for official comments.)

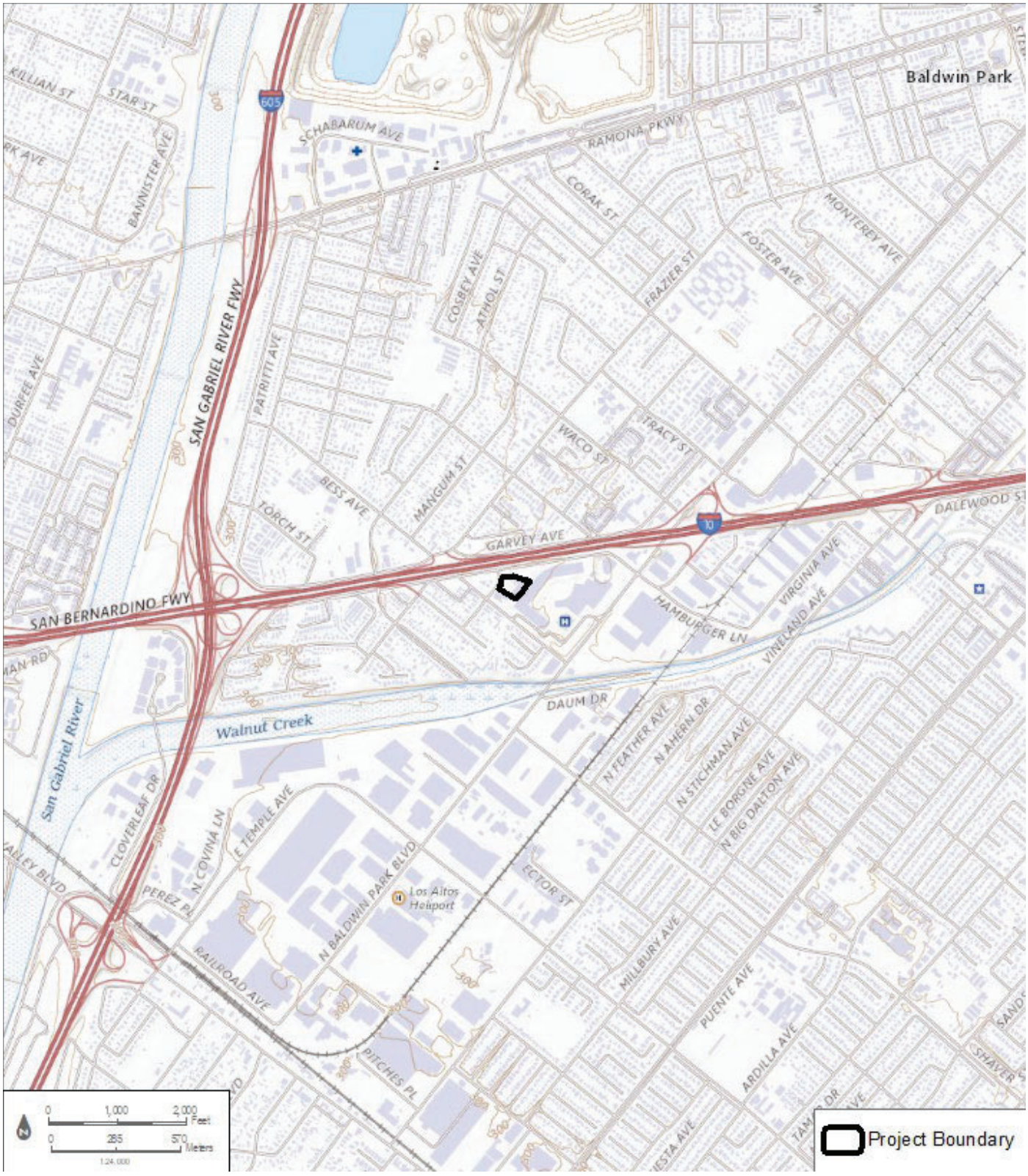
(Sketch Map with north arrow required.)

**State of California - The Resources Agency**
**DEPARTMENT OF PARKS AND RECREATION**

# LOCATION MAP

Primary #
HRI#
Trinomial

**Page** 3 **of** 14 ***Resource Name or #** (Assigned by recorder) _1022-1026 Leorita Street___
***Map Name:** Baldwin Park, CA ***Scale:** 1:24,000 ***Date of map:** ___2021



*P3a. Description:

The subject property is surrounded by large concrete parking lots with scattered palm trees. There is an ancillary shed outside the west elevation of the 1986 portion of the building that was added circa 1992 per aerial photographs, and a stepped concrete block wall separating the subject property's lot from the adjacent Kaiser parking garages at the south end of the lot. The subject property has a flat roof and is constructed of concrete block; most elevations do not have fenestration and consist of uninterrupted walls of painted concrete block. There are three primary entrances to the building: one on the west elevation and one on the north elevation of the 1976 portion of the building, and one on the primary west elevation of the 1986 portion of the building.

The west elevation of the 1976 portion of the building (1026 Leorita Street) has two large rectangular bays that were covered with a metal roll-up door at the time of the site visit. The northern bay features a trapezoidal overhang clad in red tile; the other bay is uncovered. The north elevation of the 1976 portion of the building has a metal frame double door at the center of the elevation, covered with a metal security gate, with a red tile-clad overhang. The elevation has no additional fenestration, consisting of painted concrete blocks interrupted at regular intervals by nine brick pilasters. A sign on the roof, added circa 1998 per building permits, reads "Broken Horn Western Store" and is readily visible from the nearby I-10 freeway. Outside the elevation is a freestanding sign reading "English & Western Saddlery." The east elevation has one door single-leaf door at its center and is otherwise unornamented.

The primary (west) elevation of the 1986 portion of the building (1022-1024 Leorita Street) is nine bays across, consisting of three arches flanked by three rectangular bays covered with metal roll-up doors on either side. The rectangular bays are recessed slightly behind the arches and all bays are separated by brick piers. This elevation is clad in painted brick; the remainder of the subject property is constructed of concrete blocks. The middle arch, located at the center of the elevation, contains the building's primary entrance, an arched metal frame glass double door covered with a decorative cast iron privacy gate. All bays are covered with an overhang clad in red tile and supported by large wood brackets. Above, the words "Broken Horn" are painted at the center of the building's elevation. The remainder of the elevations consist of uninterrupted concrete with a single-leaf door at the center of the south elevation.

**Figure 1.** Overall view of the subject property's west (primary) elevation, view to the east. The 1976 portion of the building is on the left (north) and the 1986 portion is on the right (south) (IMG_1376)

**Figure 2.** view of the subject property's north elevation, view to the south. This elevation is part of the 1976 portion of the subject property (IMG_1493)

***B6. Construction History** *(continued from page 2):*

The subject property has undergone the following alterations, as documented in City of Baldwin Park building permits:

- Freestanding sign (1977)
- Concrete retaining wall (1977)
- Add mezzanine addition to building at 1026 Leorita Street (1979)
- New construction (1022 Leorita Street; 1984-1986)
- Wall sign (1998)
- Re-roof (2007)

***B10. Significance** *(continued from page 2):*

**Historical Overview of the City of Baldwin Park**

Baldwin Park, colloquially known as the "hub of the San Gabriel Valley" due to its central geographic location in the Valley, is situated approximately 17 miles east of Los Angeles and five miles north of the San Gabriel Mountains. At the beginning of the 19th century, the land comprising modern-day Baldwin Park consisted of cattle grazing land that was owned by the San Gabriel Mission. This land was part of two ranchos: the Rancho Azusa de Dalton and the Rancho La Puente. By 1860, the community was known as Pleasant Grove. The small community grew in the subsequent decades, but remained largely agrarian, supporting agriculture, vineyards, and cattle ranching.

Pleasant Grove was renamed Vineland in 1880, a reflection of the many vineyards that flourished

in the area. At this time, a severe drought precipitated the gradual decline of cattle ranching, and the land formerly used by cattle ranches, to the north of present-day Ramona Boulevard, was consequently settled and built up by squatter farmers. While still primarily agricultural, by this time the built environment began to expand, with the first residence constructed on present-day Los Angeles Street by Austin Brown. Soon, a business center developed around the community's general store, located at present-day Los Angeles and La Rica Streets.

In 1890, the Vineland School District was established. The establishment of a school district serving the area also necessitated the construction of a two-room schoolhouse in 1890, which served the dual purpose of educational facility and general community meeting space. Between 1892 and 1895, the present-day Main and Los Angeles Streets were the center of the community's activity, due in part to being part of the frequently traveled stagecoach line to San Jose. Although the community was expanding, water shortage continued to be a major challenge, with farmers forced to haul water from the San Gabriel River. Farmers in the area at this time largely did not use irrigation, so all crops depended on groundwater, wells, and water from rainfall.

In 1906, prolific and influential real estate speculator Elias "Lucky" Baldwin proposed the establishment of a new city to be called "Baldwinville" near the existing Vineland settlement. At this time, Baldwin owned the land south of present-day Ramona Street. The establishment of an adjacent community posed a potential threat to the economy and development of Vineland, as locals believed the establishment of a nearby city would fuel competition for already-scarce water. Citizens of Vineland invited Baldwin to discuss his proposal. Baldwin agreed, and he arrived at Shultis' Grocery, run by local businessman D.J. Shultis. When he arrived, the octogenarian Baldwin tripped and nearly fell over, but was saved from the tumble by Mrs. Shultis, the wife of the store's proprietor. Baldwin was reportedly so grateful for this that he agreed not to follow through with his plans for Baldwinville, instead lending his name to the Vineland community, which was renamed Baldwin Park.

Baldwin Park continued to expand in subsequent years, facilitated the Pacific Electric Railroad laying tracks in the center of town in 1912, which improved Baldwin Park's accessibility and allowed residents to navigate Baldwin Park and the surrounding areas more easily. The Pacific Electric Railroad served Baldwin Park until 1951. Community organizations grew rapidly, with both the Chamber of Commerce and the Baldwin Park Women's Club starting in 1906. In 1913, the community's first newspaper, the *Baldwin Park Bulletin*, was established.

While Baldwin Park maintained its semi-rural character for the first half of the 20th century, new educational and civic facilities, businesses, and residences were constructed through the 1920 and 1930s. The first automobile shop and garage, E.F. Tice, for example, was constructed in 1923, and the Steel Furniture Manufacturing Company opened its doors in 1927. Investment into the city's educational system and outdoor space accelerated in this period as well, with the completion of the Margaret Heath School (which initially served as a primary school) in 1924 and the creation of Morgan Park in 1931. Like communities throughout the United States, Baldwin Park's economy pivoted to primarily war-related activities when the United States entered World War II in 1941.

The city developed rapidly in the post-World War II years, as a population boom in the Los Angeles area turned the region into a megalopolis. Suburbs exploded outside Los Angeles, engulfing farmland. As suburbs grew, automobile-oriented development did as well. This was particularly apparent in Baldwin Park, which is home to California's first drive-through restaurant: In-N-Out, which was established in Baldwin Park in 1948. Although the original hamburger stand is no longer extant, the company still maintains a presence in the city. Like other communities outside of Los Angeles, residential development and the construction of freeways quickly changed the area's previously semi-rural character into a more suburbanized community.

The 1950s were of rapid development and change in Baldwin Park, which saw the groundbreaking of

a new reservoir in 1950 and the opening of several commercial businesses and financial institutions, including Bank of America, which also opened in 1950. Baldwin Park became an incorporated city in 1956, as the 47th General Law City in California. The I-10 San Bernardino Freeway was completed the next year, in 1957, providing easy access to Baldwin Park.

While the process of suburbanization began in the immediate post-war years, it accelerated further after Baldwin Park's incorporation as the city's population and built environment expanded and farmers and ranchers moved further away from the rapidly developing city. The population in Baldwin Park reportedly rose by about one-third in the six years after its incorporation, increasing from 28,000 to close to 37,000. This is in marked contrast to the 1940s when the population stayed steadily around 9,000. The large lots that formerly supported agriculture were subdivided into smaller lots for residential development in the years after the City's incorporation. In 1961, for example, permits were issued for 26 new subdivisions and nine more were issued in the first nine months of 1962. In 1960, the city's first hospital, Baldwin Park Community Hospital, opened its doors.

The 1970s were a period of slower growth and development than the previous decades. A 1979 article in the *Los Angeles Times* outlined the challenges facing Baldwin Park in the 1970s, noting that housing prices in the city were low relative to other nearby communities, freeway access and circulation remained difficult, and the City had recently experienced political turmoil that resulted in a recall election of several city officials. In this period, Baldwin Park's per capita income was approximately $1,000 less than neighboring communities such as West Covina.

Commercial development in this period also appeared to have stalled; in 1966, there were 231 businesses in Baldwin Park; by 1979 that number had only risen by 56 for a total of 287 businesses. The *Los Angeles Times* article further stated that approximately $30.4 million worth of shopping was being done by Baldwin Park citizens in other cities due to the city's lack of commercial options. The City, in conjunction with the Chamber of Commerce, launched a concreted advertising campaign to bring business to the City. This effort had mixed success; some new businesses opened in this period, such as the Broken Horn Saddlery (1976) and several financial institutions, including the Golden State Sanwa Bank (1973) and Crocker Bank (1974), but the city still reportedly faced a dearth of commercial development overall. The City also invested in the construction of its new Baldwin Park Civic Center (1978) which housed City Hall and City Council Chambers, among other functions.

In response to the city's challenges, the City Council approved the creation of the Baldwin Park Community Redevelopment Agency which considered urban renewal efforts in so-called "blighted" areas, focusing on the downtown commercial retail section of the city. The Redevelopment Agency was controversial from its inception, with many community members opposing efforts to redevelop parts of Baldwin Park.

The 1980s saw an uptick in residential housing construction, the fastest period of residential development in Baldwin Park since the 1960s. This housing was primarily multi-family residential construction, which outpaced single-family residential construction by five to one. This pace of construction slowed by the 1990s, in part because the City faced serious economic problems caused by budget cuts which necessitated the reduction of the police force among other services. According to a 1991 *Los Angeles Time*s article, Baldwin Park also struggled to draw new business despite available open land and prices that were lower than surrounding communities. Today, Baldwin Park continues to be a mixed-use community of commercial, residential, and industrial buildings. (Garber 2018; City of Baldwin Park 2015; Benbow 2011; City of Baldwin Park Community Development Department: 2005; City of Baldwin Park Department of Planning 2002: I-1; Los Angeles Times 1991; Pinheiro et. al 1981; Birkinshaw 1979; Duncan et. al 1962.)

**History of The Broken Horn Saddlery**

From its construction in 1976 (and subsequent expansion in 1986) until 2021, the subject

property was occupied by the Broken Horn Saddlery, described as the "West's largest tack store" (Pernokas 2017). The subject property consists of two connected structures: 1026 Leorita Street, which was constructed in 1976, and 1022-1024 Leorita Street, which was constructed in 1986 to provide additional retail and manufacturing space for the Broken Horn. The two portions of the building appear to be haven connected circa 1995, per aerial photographs (NETR 2022). In 2021, the Broken Horn Saddlery vacated the subject property and re-opened in 2022 under new ownership at 4120 Maine Avenue in downtown Baldwin Park (Baldwin Park News 2022). Prior to the construction of the subject property, aerial photographs indicate that there was a residential structure on each lot now occupied by the subject property (Figure 3).

The Broken Horn Saddlery was founded in 1956 by Charlie Nuzzo and his wife Mattie Nuzzo and remained a family-run operation until 2021. In the early 1950s, Nuzzo worked for United Tent and Awning, which built tents for clients including the military. While in this position, Nuzzo met a wealthy boat owner who asked him to make him a cover for his boat to prevent weathering. Nuzzo agreed, making a cover out of tent material, reportedly an innovative approach to boat coverings at the time. The customer was satisfied, and Nuzzo was soon inundated with additional requests for boat covers, eventually forming a side business constructing boat covers in his basement.

Soon, the original boat owner came to Nuzzo with another request: a horse blanket, also made out of tent material. Nuzzo agreed and soon his horse blankets and day sheets became a popular product. At this time, the Los Angeles area had a flourishing postwar recreational horse industry and Nuzzo capitalized on this by taking his blankets to horsing events. Nuzzo's products were wildly popular, prompting him to formalize his business with his brother-in-law. This partnership was short-lived, however, as Nuzzo's brother-in-law was keeping two sets of books. Nuzzo consequently forayed into business on his own, opening the earliest iteration of Broken Horse Saddlery in Alhambra in 1956 with his wife Mattie.

Broken Horn Saddlery began by manufacturing and selling wholesale blankets and sheets, eventually adding a retail component. This growth prompted a move to a new building at 1022 Leorita Street in 1976. At this time, the Broken Horn Saddlery continued to manufacture blankets and pads but had also expanded to leather tack, largely at the behest of Charlie Nuzzo's son, Joe Nuzzo. The Broken Horn Saddlery also had an in-house silver department. By the time the Broken Horn Saddlery opened at the subject property, approximately 77% of their business was manufacturing. The business expanded its operations in 1986 with the addition of the building at 1022-1024 Leorita Street, which was built by Charlie Nuzzo according to its original building permit. Manufacturing at the Broken Horn Saddlery included leather tack, silver, boot repair, and saddle production with in-house departments producing these goods.

By 2007, Broken Horn Saddlery pivoted away from in-house manufacturing. As of 2017, the only manufacturing component that remained under the control of Broken Horn Saddlery was leather tack; the silver department became an in-house but independent business (Mario Solis's Silver Shop), as did the Broken Horn's two saddle shops (Sal's Custom Saddles, run by Salvador Gomez and another shop run by Galdino Gomez, Salvador's brother). This change in business format allowed for increased flexibility in a changing market where demand for saddles and silver declined; the Broken Horn Saddlery could access these products as needed but did not need to maintain the individual business operations. In 2017, there was also an in-house independent boot repair shop run by Felipe De Santiago. The individuals running these in-house businesses were all longtime employees of the Broken Horn, many working at the store for decades.

The Broken Horn Saddlery remained a family-run business, with Joe Nuzzo, Charlie Nuzzo's son, most recently serving as president. Jerry Nuzzo, Charlie's grandson, also served as vice president, and Charlie's daughter, Rosalie Nuzzo, served as secretary and treasurer. For 65 years, Broken Horn was a destination for equestrian enthusiasts from Baldwin Park and around the globe, with customers reportedly coming from Asia, Europe, Australia, the Middle East, and Africa. The Broken Horn Saddlery closed its doors at the subject property in 2021; the business, under new ownership, reopened in Downtown Baldwin Park at 4120 Maine Avenue in 2022 (Pernokas

2017; Baldwin Park News 2021; Baldwin Park News 2022).

**NRHP/CRHR Evaluation of Significance**

***Criterion A/1:*** *That are associated with events that have made a significant contribution to the broad patterns of our history.*

Archival research indicated that the Broken Horn Saddlery's first building at 1026 Leorita Street was constructed in 1976 with a subsequent expansion completed in 1986. The two portions of the subject property appear to have been connected circa 1995, per aerial photographs (NETR 2022). Both portions of the subject property were built as commercial, manufacturing, and storage space specifically for the Broken Horn Saddlery. At the time it was constructed, the area directly surrounding the subject property to the west and south was primarily residential, although there was already some commercial development in the neighborhood, including the Edgewood Drive-In (1964) located adjacent to the subject property to the east at the present site of the Kaiser Permanente Baldwin Hills Medical Center (1992). There was additional commercial development elsewhere in the neighborhood, notably on Baldwin Park Boulevard, approximately 0.20-mile southeast of the subject property.

By the 1960s, Baldwin Park's rural character had changed due to increased development resulting from the post-World War II population boom in Southern California that expanded Los Angeles' suburbs outwards. As a result of this expansion, Baldwin Park saw an intensive period of residential construction and accompanying commercial development. By the 1970s, however, the post-World War II development boom subsided, and Baldwin Park faced various significant challenges in drawing business and residents to the city. A 1979 Los Angeles Times article, for example, noted that commercial growth was minimal in the period from 1966 to 1979, with the number of businesses in the city growing from 231 to 287 (Birkinshaw 1979). Challenges bringing new businesses to the city continued into the 1980s when the subject property expanded (Los Angeles Times 1991).

The subject property thus appears to have been constructed in a period of relatively stagnant commercial growth in Baldwin Park citywide, when much of the city had already been developed. It does not seem to have been part of a broader pattern development and was neither the first nor last nondescript r commercial structure to be constructed in the neighborhood, Baldwin Park, the greater Los Angeles area, or Southern California at large. The neighborhood in which the subject property sits was mixed-use prior to the subject property's construction, with primarily residential structures to the west and south of the subject property and commercial buildings primarily to the east and south of the subject property. The subject property appears to follow an already-established pattern of development in Baldwin Park and does not appear to represent any particular period of development or historical pattern in the city.

The property is not known to be directly associated with events that have made a significant contribution to the history of Baldwin Park, California, or the United States. Therefore, the property does not appear eligible under NRHP Criterion A or CRHR Criterion 1.

***Criterion B/2:*** *That are associated with the lives of persons significant in our past.*

To be found eligible under Criterion B/2 the property must be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. Archival research did not indicate any such direct association between individuals that are known to be historic figures at the national or state, level. From its construction in 1976 (and expansion in 1986) until 2021, the subject property was occupied by the Broken Horn Saddlery, Baldwin Park's only tact store. The Broken Horn Saddlery was owned and operated by the Nuzzo family. The business itself was founded by Charlie Nuzzo in 1956 and was run by the Nuzzo family until 2021. The Broken Horn Saddlery moved to 4120 Maine Avenue in downtown Baldwin Park in 2022 under new ownership.

While the Nuzzo family undoubtedly contributed substantially to the equestrian community of Baldwin Park and beyond through the Broken Horn Saddlery, research did not identify information that would indicate the association of members of the Nuzzo family with the subject property would rise to the threshold of significance required for eligibility. Therefore, the subject property does not appear eligible under NRHP Criterion B or CRHR Criterion 2.

***Criterion C/3:*** *That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.*

The subject property is a nondescript commercial building composed of two attached structures: one built in 1976 and one built in 1986. Based on aerial photographs, the structures appear to have been connected circa 1995. While the subject property does have some elements that appear to reflect Western, hacienda, and ranching influences tying the exterior of the building to the goods it sold as the Broken Horn Saddlery, such as its tile-clad overhangs and the arches on the primary west elevation of the 1986 portion of the building, the building does not embody any discernable architectural style.

The subject property does not embody distinctive characteristics of a type, period or method of construction. It is a typical example of a 1970s-1980s nondescript commercial building. There is nothing notable or unique about its design; it does not possess the distinctive characteristics of any particular style and is executed in common materials. The subject property appears to have been constructed through already well-documented and common construction techniques and methods. It is not a rare example of its type in Baldwin Park; there is another similar commercial building that features similar design elements such as tile overhangs, for example, located approximately 0.20-mile southeast of the subject property at 927 Baldwin Park Boulevard (constructed 1973 per the Los Angeles County Assessor).

Research further did not identify the subject property as being designed by a master architect, builder, or contractor. The 1976 portion of the building was built by contractor John Barr, according to the original building permit. Research did not identify information on Barr that would indicate he was a master builder. The 1986 portion of the subject property was built by Charlie Nuzzo, the business owner, according to its original building permit. The property further does not appear to possess high artistic values by articulating a particular concept of design to the extent that it expresses an aesthetic ideal.

The last component of Criterion C, representing a significant and distinguishable entity whose components may lack individual distinction, is the most applicable to districts. The subject property does not appear likely to contribute to a potential historic district. Therefore, the subject property does not appear eligible under NRHP Criterion C or CRHR Criterion 3.

***Criterion D/4:*** *That have yielded or may be likely to yield information important in prehistory or history.*

The subject property is not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials, or technologies.

**Integrity Discussion**

To be eligible for listing in the NRHP or CRHP, properties must retain their physical integrity from the period in which they gained significance. In the case of architecturally significant properties, the period of significance is normally the date of construction. For historically

significant properties, the length of the historic associations usually measures the period of significance.

The subject property is composed of two connected buildings, one that was constructed in 1976 and one that was constructed in 1986. Since the subject property has not been moved, the property retains integrity of location. Building permit research and site survey information identified only minor alterations to the building and it appears to consequently retain integrity of design, materials, and workmanship. While some of the building's signage advertising the Broken Horn Saddlery has been removed, the building still retains signage reading "Broken Horn Saddlery" on its primary west elevation, as well as signage on its north elevation and consequently still retains its integrity of feeling, as it still is readily identifiable as a commercial space that was occupied by the Broken Horn Saddlery. The subject property retains only marginal integrity of setting; since the subject property's construction, the Kaiser Permanente Baldwin Hills campus was constructed in 1991 to the south and east of the subject property, replacing the Edgewood Drive-In that was extant at the time of the subject property's construction. The medical facilities are directly adjacent to the subject property and introduced new building typologies and a larger scale to the neighborhood. While the Nuzzo family, who founded Broken Horn Saddlery, were notable local businesspeople, their significance and association with the subject property does not appear to rise to the level of significance required for eligibility. Thus, research did not reveal that the property has an association with significant people or events in Baldwin Park, thus it does not retain integrity of association. In conclusion, subject property retains integrity of location, design, materials, workmanship, feeling, and association, but only retains marginal integrity of setting.

**City of Baldwin Park Statement of Significance**

The property at 1022 Leorita Street does not meet any of the criteria for City of Baldwin Hills historical designation or as part of an existing historic district, as demonstrated below.

A. *Representation: The building or structure is particularly representative of a distinct historical period, type, style, region or way of life.*

The subject property is a 1976 (with 1986 addition) nondescript commercial building with some minimal Western influences and was occupied by the Broken Horn Saddlery until 2021. Similar buildings are ubiquitous in Baldwin Park and the greater Southern California region. The subject property is a typical building of its period and does not appear to represent a distinct historical period, type, style, region, or way of life. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion A.

B. *Connection to important personality: The building or structure was connected with someone renowned, important or who was a local personality.*

As discussed in NRHP / CRHP Criterion B/2, the subject property was the home of the Broken Horn Saddlery from its construction in 1976 (and subsequent 1986 expansion) until 2021. The Broken Horn Saddlery was founded by Charlie Nuzzo, and remained a family-run operation until 2021, when the business vacated the subject property. The Broken Horn Saddlery re-opened under new ownership at 4120 Maine Avenue in 2022 (Baldwin Park News 2022). While the Broken Horn Saddlery was, and remains, an important local business serving the equestrian community of Baldwin Park and beyond, and while the Nuzzo family were important family stewards of this legacy business, it does not appear that the building or structure is connected to someone renowned, important, or who was a local personality that would rise to the level required for designation. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion B.

C. *Connection to rare business: The building or structure is connected with a business or use which was once common but is now rare.*

The subject property was occupied by the Big Horn Saddlery from its construction in 1976 until 2021, when the business moved to downtown Baldwin Park (Baldwin Park News 2022). It appears that Big Horn Saddlery is the only tack shop in the City of Baldwin Park and has historically been the primary source for tack and saddles in the city. While this is a rare business type in the city, it was never a common business as it appears to have been the only store of its type in Baldwin Hills. The business is still in operation in Baldwin Park today, albeit in a new location. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion C.

D. *Master work: The building or structure represents the work of a master builder, engineer, designer, artist or architect.*

As discussed in NRHP/CRHR Criterion C/3, the subject property was not designed by a master builder, engineer, designer, artist, or architect. According to its original building permit, the building at 1026 Leorita Street was constructed by John Barr; research did not identify information on John Barr that would indicate he is a master builder. The original building permits for 1022-1024 Leorita Street lists the owner of the Broken Horn Saddlery, Charlie Nuzzo, as the contractor. No architect was listed on either permit. There is no indication the property is the work of an architect, builder, engineer, designer, or artist of major importance. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion D.

E. *Historic event: The building or structure is the site of an important historic event or is associated with events that have made a meaningful contribution to the nation, state or city.*

As discussed in NRHP/CRHR Criterion A/1, archival research did not reveal that the subject property was related to historical events significant to the City of Baldwin Park and does not reflect elements associated with a historic event having major significance to the City of Baldwin Park, Los Angeles County, the State of California or the United States. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion E.

F. *Particular architectural style: The building or structure exemplifies a particular architectural style.*

As discussed in NRHP / CRHR Criterion C/3, the subject property is a nondescript commercial building with no discernable style. While the subject property has some design elements that appear to reference Western, hacienda, and ranching traditions, such as overhangs clad in tiles and arches on the primary (west) elevation of the 1986 portion of the building, it does not embody most of the character-defining features of the stye. Rather, it is a functional building constructed for functional purposes and does not exemplify any particular architectural style. Therefore, the subject property does not appear eligible under City of Baldwin Park Criterion F.

G. *Best remaining: The building or structure exemplifies the best remaining architectural type of a neighborhood.*

The subject property is not the best remaining architectural type in its neighborhood. The subject property is not a rare example of a nondescript commercial building constructed in the 1970s in the neighborhood or Baldwin Park at large. One of many examples of a comparable commercial building in the neighborhood is the building at 927 Baldwin Park Boulevard (constructed 1973 per the Los Angeles County Assessor). Therefore, the subject property does not appear eligible under City of Baldwin Park Criteria G.

H. *Outstanding design: The construction materials or engineering methods used in the building or structure embody elements of outstanding architectural or engineering design, detail, material or craftsmanship.*

As discussed in NRHP/CRHR Criteria C/3, the subject property does not appear to embody elements of outstanding architectural or engineering design, detail, material or craftsmanship. It is a typical example of a common and widespread 1970s commercial structure. Therefore, the subject property does not appear eligible under City of Baldwin Park Criteria H.

**Summary of Findings**

1022-1026 Leorita Street (APN 8559-008-005; APN 8559-008-011) does not meet any of the criteria for listing in the NRHP or CRHR, either individually or as part of a potential or existing historic district. It further does not meet any of the criteria for landmark listing by the City of Baldwin Park. The recommended status code is 6Z: Found ineligible for NR, CR or Local designation through survey evaluation.

***B12. References:**

Baldwin Park News. 2021. "Broken Horn Saddlery which has been in operation for 65 years set to relocate and close its Baldwin Park location this Sunday." July 12, 2021. https://baldwinparknewsonline.com/broken-horn-saddlery-which-has-been-in-operation-for-65-years-set-to-relocate-and-close-its-baldwin-park-location-this-sunday/. Accessed July 2022.

Baldwin Park News. 2022. "Broken Horn Saddlery reopened in Baldwin Park's Downtown Area." April 4, 2022. https://baldwinparknewsonline.com/broken-horn-saddlery-reopened-in-baldwin-parks-downtown-area/. Accessed July 2022.

Benbow, Bob, and Lorraine O'Brien. 2011. *Images of America: Baldwin Park*. Mount Pleasant, South Carolina: Arcadia Publishing.

Birkinshaw, Jack. 1979. "Baldwin Park, at Valley's Hub, Tries to Get Off Dead Center." *Los Angeles Times*. November 4, 1979.

City of Baldwin Park Department of Planning. 2002. "2020 General Plan." Prepared for the City of Baldwin Park. https://www.baldwinpark.com/online-documents/community-development/planning/general-plan-individual-elements/1943-introduction/file/. Accessed July 2022.

City of Baldwin Park Community Development Department. 2005. "City of Baldwin Park: Consolidated Plan, 2005-2010." City of Baldwin Park. Adopted May 4, 2005. https://www.baldwinpark.com/docssidemenu/community-development/redevelopment/cdbg/97-consolidated-plan-1/file. Accessed July 2022.

City of Baldwin Park. 2015. "Historical Society and Museum." https://www.baldwinpark.com/2015-01-24 22-56-10. Accessed July 2022.

Duncan, Ray and Dirk Werkman. 1962. "Baldwin Park Gains in Stature: Population Soars, Values Rise in 6-Year Old City." Newspapers.com: *Pasadena Independent*. November 29, 1962.

Garber, Scott. 2018. "Neighborhood Spotlight, Baldwin Park: Unassuming City, Modest Prices." Newspapers.com: *Los Angeles Times*. September 8, 2018.

Los Angeles Times. 1991. "City Looks for Way to Ease Crunch." Newspapers.com: *Los Angeles Times*. July 14, 1991.

NETR (Nationwide Environmental Title Research LLC). 2022. Historic Aerial Photographs of 1022-1026 Leorita Street, Baldwin Park dating from 1948, 1952, 1964, 1972, 1980, 187, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2003, 2004, 2005, 2009, 2010, 2012, 2014, 2016, and 2018. Accessed July, 2022. https://www.historicaerials.com/viewer

NPS (National Park Service). 1995. "How to Apply the National Register Criteria for Evaluation." National Register Bulletin 15. Accessed December 27, 2021. https://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf

Pernokas, Nick. 2017. "Broken Horn Saddlery: How the West's Largest Tack Store Successfully Adapted to a Changing Environment." *Shop Talk Magazine*. June 15, 2017. Accessed July 2022.

Pinheiro, Aileen F. and Lena Taylor. 1981. *The Heritage of Baldwin Park*. Baldwin Park, California: Baldwin Park Historical Society.

UCSB (University of California, Santa Barbara). 2021. Historic Aerial Photographs of 1022-1026 Leorita Street, Baldwin Park, California dating from 1938. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource. Accessed July 2022. http://mil.library.ucsb.edu/ap_indexes/FrameFinder.

# Appendix C

Air Quality, Greenhouse Gas Emissions, and Energy

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Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Emergency Room

**South Coast AQMD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 22.29 | 1000sqft | 0.51 | 22,293.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific values.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults adjusted to fit proposed construction schedule by multiplying each phase length by 4.1

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - 24790 sf of existing buildings to demo.

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading - 2,100 CU of cut/export

Architectural Coating - CalEEMod defaults.

Vehicle Trips - CalEEMod defaults.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower. Site watered twice a day.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
|---|---|---|---|
| tblConstructionPhase | NumDays | 1.00 | 4.00 |
| tblConstructionPhase | NumDays | 2.00 | 8.00 |
| tblConstructionPhase | NumDays | 100.00 | 410.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 10.00 | 40.00 |
| tblConstructionPhase | PhaseEndDate | 5/15/2023 | 6/30/2023 |
| tblConstructionPhase | PhaseEndDate | 5/17/2023 | 7/12/2023 |
| tblConstructionPhase | PhaseEndDate | 10/4/2023 | 2/5/2025 |
| tblConstructionPhase | PhaseEndDate | 10/11/2023 | 3/6/2025 |
| tblConstructionPhase | PhaseEndDate | 10/18/2023 | 4/4/2025 |
| tblConstructionPhase | PhaseEndDate | 5/12/2023 | 6/26/2023 |
| tblConstructionPhase | PhaseStartDate | 5/13/2023 | 6/27/2023 |
| tblConstructionPhase | PhaseStartDate | 5/16/2023 | 7/1/2023 |
| tblConstructionPhase | PhaseStartDate | 5/18/2023 | 7/13/2023 |
| tblConstructionPhase | PhaseStartDate | 10/5/2023 | 2/6/2025 |
| tblConstructionPhase | PhaseStartDate | 10/12/2023 | 3/7/2025 |
| tblGrading | MaterialExported | 0.00 | 2,100.00 |
| tblLandUse | LandUseSquareFeet | 22,290.00 | 22,293.00 |
| tblTripsAndVMT | HaulingTripNumber | 113.00 | 114.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 7.00 | 8.00 |
| tblTripsAndVMT | WorkerTripNumber | 1.00 | 2.00 |

## 2.0 Emissions Summary

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.0596 | 0.5982 | 0.6486 | 1.2400e-003 | 0.0311 | 0.0277 | 0.0588 | 8.0000e-003 | 0.0257 | 0.0337 | 0.0000 | 110.6218 | 110.6218 | 0.0267 | 2.5100e-003 | 112.0373 |
| 2024 | 0.0816 | 0.8049 | 0.9652 | 1.6800e-003 | 0.0148 | 0.0372 | 0.0520 | 4.0100e-003 | 0.0342 | 0.0382 | 0.0000 | 149.2444 | 149.2444 | 0.0430 | 1.5500e-003 | 150.7809 |
| 2025 | 0.1191 | 0.1375 | 0.1938 | 3.3000e-004 | 3.7700e-003 | 6.0000e-003 | 9.7700e-003 | 1.0100e-003 | 5.6000e-003 | 6.6100e-003 | 0.0000 | 29.0140 | 29.0140 | 7.3300e-003 | 1.9000e-004 | 29.2539 |
| **Maximum** | **0.1191** | **0.8049** | **0.9652** | **1.6800e-003** | **0.0311** | **0.0372** | **0.0588** | **8.0000e-003** | **0.0342** | **0.0382** | **0.0000** | **149.2444** | **149.2444** | **0.0430** | **2.5100e-003** | **150.7809** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.0334 | 0.4535 | 0.7134 | 1.2400e-003 | 0.0211 | 8.4500e-003 | 0.0295 | 5.5200e-003 | 8.0900e-003 | 0.0136 | 0.0000 | 110.6217 | 110.6217 | 0.0267 | 2.5100e-003 | 112.0372 |
| 2024 | 0.0405 | 0.6162 | 1.0743 | 1.6800e-003 | 0.0148 | 7.2800e-003 | 0.0221 | 4.0100e-003 | 6.8600e-003 | 0.0109 | 0.0000 | 149.2443 | 149.2443 | 0.0430 | 1.5500e-003 | 150.7807 |
| 2025 | 0.1103 | 0.1138 | 0.2037 | 3.3000e-004 | 3.7700e-003 | 9.7000e-004 | 4.7400e-003 | 1.0100e-003 | 9.2000e-004 | 1.9300e-003 | 0.0000 | 29.0140 | 29.0140 | 7.3300e-003 | 1.9000e-004 | 29.2539 |
| **Maximum** | **0.1103** | **0.6162** | **1.0743** | **1.6800e-003** | **0.0211** | **8.4500e-003** | **0.0295** | **5.5200e-003** | **8.0900e-003** | **0.0136** | **0.0000** | **149.2443** | **149.2443** | **0.0430** | **2.5100e-003** | **150.7807** |

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## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 29.23 | 23.18 | -10.17 | 0.00 | 20.16 | 76.44 | 53.26 | 19.05 | 75.78 | 66.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 5-1-2023 | 7-31-2023 | 0.2628 | 0.2109 |
| 2 | 8-1-2023 | 10-31-2023 | 0.2381 | 0.1664 |
| 3 | 11-1-2023 | 1-31-2024 | 0.2329 | 0.1660 |
| 4 | 2-1-2024 | 4-30-2024 | 0.2174 | 0.1611 |
| 5 | 5-1-2024 | 7-31-2024 | 0.2221 | 0.1644 |
| 6 | 8-1-2024 | 10-31-2024 | 0.2222 | 0.1645 |
| 7 | 11-1-2024 | 1-31-2025 | 0.2164 | 0.1639 |
| 8 | 2-1-2025 | 4-30-2025 | 0.1845 | 0.1665 |
| | | Highest | 0.2628 | 0.2109 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0909 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| Energy | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 162.3768 | 162.3768 | 8.7200e-003 | 2.2800e-003 | 163.2743 |
| Mobile | 0.1121 | 0.1360 | 1.1887 | 2.7800e-003 | 0.3165 | 1.9800e-003 | 0.3185 | 0.0845 | 1.8500e-003 | 0.0863 | 0.0000 | 256.7848 | 256.7848 | 0.0160 | 0.0111 | 260.4893 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 48.8660 | 0.0000 | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.8874 | 7.5085 | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| **Total** | **0.2107** | **0.2061** | **1.2479** | **3.2000e-003** | **0.3165** | **7.3100e-003** | **0.3238** | **0.0845** | **7.1800e-003** | **0.0916** | **49.7534** | **426.6706** | **476.4239** | **3.0044** | **0.0156** | **556.1820** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0909 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| Energy | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 162.3768 | 162.3768 | 8.7200e-003 | 2.2800e-003 | 163.2743 |
| Mobile | 0.1121 | 0.1360 | 1.1887 | 2.7800e-003 | 0.3165 | 1.9800e-003 | 0.3185 | 0.0845 | 1.8500e-003 | 0.0863 | 0.0000 | 256.7848 | 256.7848 | 0.0160 | 0.0111 | 260.4893 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 48.8660 | 0.0000 | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.8874 | 7.5085 | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| **Total** | **0.2107** | **0.2061** | **1.2479** | **3.2000e-003** | **0.3165** | **7.3100e-003** | **0.3238** | **0.0845** | **7.1800e-003** | **0.0916** | **49.7534** | **426.6706** | **476.4239** | **3.0044** | **0.0156** | **556.1820** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 5/1/2023 | 6/26/2023 | 5 | 40 | |
| 2 | Site Preparation | Site Preparation | 6/27/2023 | 6/30/2023 | 5 | 4 | |
| 3 | Grading | Grading | 7/1/2023 | 7/12/2023 | 5 | 8 | |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | Building Construction | Building Construction | 7/13/2023 | 2/5/2025 | 5 | 410 | |
| 5 | Paving | Paving | 2/6/2025 | 3/6/2025 | 5 | 21 | |
| 6 | Architectural Coating | Architectural Coating | 3/7/2025 | 4/4/2025 | 5 | 21 | |

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,440; Non-Residential Outdoor: 11,147; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 4.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 6.00 | 89 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 7.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 1.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 2 | 6.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 262.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 5 | 8.00 | 4.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 2.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Demolition | 4 | 10.00 | 0.00 | 114.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

## 3.2 Demolition - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0125 | 0.0000 | 0.0125 | 1.8900e-003 | 0.0000 | 1.8900e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0133 | 0.1185 | 0.1516 | 2.5000e-004 | | 5.7800e-003 | 5.7800e-003 | | 5.5300e-003 | 5.5300e-003 | 0.0000 | 21.3572 | 21.3572 | 3.8900e-003 | 0.0000 | 21.4544 |
| **Total** | **0.0133** | **0.1185** | **0.1516** | **2.5000e-004** | **0.0125** | **5.7800e-003** | **0.0183** | **1.8900e-003** | **5.5300e-003** | **7.4200e-003** | **0.0000** | **21.3572** | **21.3572** | **3.8900e-003** | **0.0000** | **21.4544** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.2000e-004 | 7.4200e-003 | 1.9900e-003 | 3.0000e-005 | 1.0100e-003 | 5.0000e-005 | 1.0600e-003 | 2.8000e-004 | 5.0000e-005 | 3.3000e-004 | 0.0000 | 3.3326 | 3.3326 | 1.9000e-004 | 5.3000e-004 | 3.4950 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4000e-004 | 4.9000e-004 | 6.6900e-003 | 2.0000e-005 | 2.2500e-003 | 1.0000e-005 | 2.2600e-003 | 6.0000e-004 | 1.0000e-005 | 6.1000e-004 | 0.0000 | 1.7601 | 1.7601 | 5.0000e-005 | 5.0000e-005 | 1.7747 |
| **Total** | **7.6000e-004** | **7.9100e-003** | **8.6800e-003** | **5.0000e-005** | **3.2600e-003** | **6.0000e-005** | **3.3200e-003** | **8.8000e-004** | **6.0000e-005** | **9.4000e-004** | **0.0000** | **5.0927** | **5.0927** | **2.4000e-004** | **5.8000e-004** | **5.2697** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 5.6300e-003 | 0.0000 | 5.6300e-003 | 8.5000e-004 | 0.0000 | 8.5000e-004 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0108 | 0.1083 | 0.1558 | 2.5000e-004 | | 3.8500e-003 | 3.8500e-003 | | 3.7600e-003 | 3.7600e-003 | 0.0000 | 21.3572 | 21.3572 | 3.8900e-003 | 0.0000 | 21.4543 |
| **Total** | **0.0108** | **0.1083** | **0.1558** | **2.5000e-004** | **5.6300e-003** | **3.8500e-003** | **9.4800e-003** | **8.5000e-004** | **3.7600e-003** | **4.6100e-003** | **0.0000** | **21.3572** | **21.3572** | **3.8900e-003** | **0.0000** | **21.4543** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.2000e-004 | 7.4200e-003 | 1.9900e-003 | 3.0000e-005 | 1.0100e-003 | 5.0000e-005 | 1.0600e-003 | 2.8000e-004 | 5.0000e-005 | 3.3000e-004 | 0.0000 | 3.3326 | 3.3326 | 1.9000e-004 | 5.3000e-004 | 3.4950 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4000e-004 | 4.9000e-004 | 6.6900e-003 | 2.0000e-005 | 2.2500e-003 | 1.0000e-005 | 2.2600e-003 | 6.0000e-004 | 1.0000e-005 | 6.1000e-004 | 0.0000 | 1.7601 | 1.7601 | 5.0000e-005 | 5.0000e-005 | 1.7747 |
| **Total** | **7.6000e-004** | **7.9100e-003** | **8.6800e-003** | **5.0000e-005** | **3.2600e-003** | **6.0000e-005** | **3.3200e-003** | **8.8000e-004** | **6.0000e-005** | **9.4000e-004** | **0.0000** | **5.0927** | **5.0927** | **2.4000e-004** | **5.8000e-004** | **5.2697** |

## 3.3 Site Preparation - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.7000e-004 | 0.0000 | 2.7000e-004 | 3.0000e-005 | 0.0000 | 3.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.0700e-003 | 0.0124 | 7.8500e-003 | 2.0000e-005 | | 4.5000e-004 | 4.5000e-004 | | 4.2000e-004 | 4.2000e-004 | 0.0000 | 1.7099 | 1.7099 | 5.5000e-004 | 0.0000 | 1.7237 |
| **Total** | **1.0700e-003** | **0.0124** | **7.8500e-003** | **2.0000e-005** | **2.7000e-004** | **4.5000e-004** | **7.2000e-004** | **3.0000e-005** | **4.2000e-004** | **4.5000e-004** | **0.0000** | **1.7099** | **1.7099** | **5.5000e-004** | **0.0000** | **1.7237** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.0000e-005 | 3.0000e-005 | 3.9000e-004 | 0.0000 | 1.3000e-004 | 0.0000 | 1.3000e-004 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1030 | 0.1030 | 0.0000 | 0.0000 | 0.1039 |
| **Total** | **4.0000e-005** | **3.0000e-005** | **3.9000e-004** | **0.0000** | **1.3000e-004** | **0.0000** | **1.3000e-004** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **0.0000** | **0.1030** | **0.1030** | **0.0000** | **0.0000** | **0.1039** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 1.2000e-004 | 0.0000 | 1.2000e-004 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.0000e-004 | 6.3000e-003 | 0.0117 | 2.0000e-005 | | 7.0000e-005 | 7.0000e-005 | | 7.0000e-005 | 7.0000e-005 | 0.0000 | 1.7099 | 1.7099 | 5.5000e-004 | 0.0000 | 1.7237 |
| **Total** | **4.0000e-004** | **6.3000e-003** | **0.0117** | **2.0000e-005** | **1.2000e-004** | **7.0000e-005** | **1.9000e-004** | **1.0000e-005** | **7.0000e-005** | **8.0000e-005** | **0.0000** | **1.7099** | **1.7099** | **5.5000e-004** | **0.0000** | **1.7237** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.0000e-005 | 3.0000e-005 | 3.9000e-004 | 0.0000 | 1.3000e-004 | 0.0000 | 1.3000e-004 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1030 | 0.1030 | 0.0000 | 0.0000 | 0.1039 |
| **Total** | **4.0000e-005** | **3.0000e-005** | **3.9000e-004** | **0.0000** | **1.3000e-004** | **0.0000** | **1.3000e-004** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **0.0000** | **0.1030** | **0.1030** | **0.0000** | **0.0000** | **0.1039** |

## 3.4 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 5.4300e-003 | 0.0000 | 5.4300e-003 | 2.5900e-003 | 0.0000 | 2.5900e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.7300e-003 | 0.0407 | 0.0222 | 6.0000e-005 | | 1.6800e-003 | 1.6800e-003 | | 1.5500e-003 | 1.5500e-003 | 0.0000 | 4.9524 | 4.9524 | 1.6000e-003 | 0.0000 | 4.9924 |
| **Total** | **3.7300e-003** | **0.0407** | **0.0222** | **6.0000e-005** | **5.4300e-003** | **1.6800e-003** | **7.1100e-003** | **2.5900e-003** | **1.5500e-003** | **4.1400e-003** | **0.0000** | **4.9524** | **4.9524** | **1.6000e-003** | **0.0000** | **4.9924** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 2.7000e-004 | 0.0166 | 4.4600e-003 | 7.0000e-005 | 2.2500e-003 | 1.2000e-004 | 2.3700e-003 | 6.2000e-004 | 1.1000e-004 | 7.3000e-004 | 0.0000 | 7.4722 | 7.4722 | 4.1000e-004 | 1.1900e-003 | 7.8364 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0000e-004 | 8.0000e-005 | 1.0400e-003 | 0.0000 | 3.5000e-004 | 0.0000 | 3.5000e-004 | 9.0000e-005 | 0.0000 | 1.0000e-004 | 0.0000 | 0.2748 | 0.2748 | 1.0000e-005 | 1.0000e-005 | 0.2770 |
| **Total** | **3.7000e-004** | **0.0167** | **5.5000e-003** | **7.0000e-005** | **2.6000e-003** | **1.2000e-004** | **2.7200e-003** | **7.1000e-004** | **1.1000e-004** | **8.3000e-004** | **0.0000** | **7.7470** | **7.7470** | **4.2000e-004** | **1.2000e-003** | **8.1134** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.4400e-003 | 0.0000 | 2.4400e-003 | 1.1600e-003 | 0.0000 | 1.1600e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.8900e-003 | 0.0242 | 0.0301 | 6.0000e-005 | | 6.2000e-004 | 6.2000e-004 | | 5.8000e-004 | 5.8000e-004 | 0.0000 | 4.9524 | 4.9524 | 1.6000e-003 | 0.0000 | 4.9924 |
| **Total** | **1.8900e-003** | **0.0242** | **0.0301** | **6.0000e-005** | **2.4400e-003** | **6.2000e-004** | **3.0600e-003** | **1.1600e-003** | **5.8000e-004** | **1.7400e-003** | **0.0000** | **4.9524** | **4.9524** | **1.6000e-003** | **0.0000** | **4.9924** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 2.7000e-004 | 0.0166 | 4.4600e-003 | 7.0000e-005 | 2.2500e-003 | 1.2000e-004 | 2.3700e-003 | 6.2000e-004 | 1.1000e-004 | 7.3000e-004 | 0.0000 | 7.4722 | 7.4722 | 4.1000e-004 | 1.1900e-003 | 7.8364 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0000e-004 | 8.0000e-005 | 1.0400e-003 | 0.0000 | 3.5000e-004 | 0.0000 | 3.5000e-004 | 9.0000e-005 | 0.0000 | 1.0000e-004 | 0.0000 | 0.2748 | 0.2748 | 1.0000e-005 | 1.0000e-005 | 0.2770 |
| **Total** | **3.7000e-004** | **0.0167** | **5.5000e-003** | **7.0000e-005** | **2.6000e-003** | **1.2000e-004** | **2.7200e-003** | **7.1000e-004** | **1.1000e-004** | **8.3000e-004** | **0.0000** | **7.7470** | **7.7470** | **4.2000e-004** | **1.2000e-003** | **8.1134** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0386 | 0.3915 | 0.4329 | 7.0000e-004 | | 0.0195 | 0.0195 | | 0.0180 | 0.0180 | 0.0000 | 61.1271 | 61.1271 | 0.0198 | 0.0000 | 61.6214 |
| **Total** | **0.0386** | **0.3915** | **0.4329** | **7.0000e-004** | | **0.0195** | **0.0195** | | **0.0180** | **0.0180** | **0.0000** | **61.1271** | **61.1271** | **0.0198** | **0.0000** | **61.6214** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.6000e-004 | 9.3000e-003 | 3.5400e-003 | 4.0000e-005 | 1.5400e-003 | 5.0000e-005 | 1.5900e-003 | 4.4000e-004 | 5.0000e-005 | 4.9000e-004 | 0.0000 | 4.3425 | 4.3425 | 1.5000e-004 | 6.3000e-004 | 4.5337 |
| Worker | 1.5200e-003 | 1.1700e-003 | 0.0159 | 5.0000e-005 | 5.3500e-003 | 3.0000e-005 | 5.3800e-003 | 1.4200e-003 | 3.0000e-005 | 1.4500e-003 | 0.0000 | 4.1899 | 4.1899 | 1.1000e-004 | 1.1000e-004 | 4.2247 |
| **Total** | **1.7800e-003** | **0.0105** | **0.0195** | **9.0000e-005** | **6.8900e-003** | **8.0000e-005** | **6.9700e-003** | **1.8600e-003** | **8.0000e-005** | **1.9400e-003** | **0.0000** | **8.5324** | **8.5324** | **2.6000e-004** | **7.4000e-004** | **8.7584** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0174 | 0.2796 | 0.4818 | 7.0000e-004 | | 3.6400e-003 | 3.6400e-003 | | 3.4200e-003 | 3.4200e-003 | 0.0000 | 61.1271 | 61.1271 | 0.0198 | 0.0000 | 61.6213 |
| **Total** | **0.0174** | **0.2796** | **0.4818** | **7.0000e-004** | | **3.6400e-003** | **3.6400e-003** | | **3.4200e-003** | **3.4200e-003** | **0.0000** | **61.1271** | **61.1271** | **0.0198** | **0.0000** | **61.6213** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.6000e-004 | 9.3000e-003 | 3.5400e-003 | 4.0000e-005 | 1.5400e-003 | 5.0000e-005 | 1.5900e-003 | 4.4000e-004 | 5.0000e-005 | 4.9000e-004 | 0.0000 | 4.3425 | 4.3425 | 1.5000e-004 | 6.3000e-004 | 4.5337 |
| Worker | 1.5200e-003 | 1.1700e-003 | 0.0159 | 5.0000e-005 | 5.3500e-003 | 3.0000e-005 | 5.3800e-003 | 1.4200e-003 | 3.0000e-005 | 1.4500e-003 | 0.0000 | 4.1899 | 4.1899 | 1.1000e-004 | 1.1000e-004 | 4.2247 |
| **Total** | **1.7800e-003** | **0.0105** | **0.0195** | **9.0000e-005** | **6.8900e-003** | **8.0000e-005** | **6.9700e-003** | **1.8600e-003** | **8.0000e-005** | **1.9400e-003** | **0.0000** | **8.5324** | **8.5324** | **2.6000e-004** | **7.4000e-004** | **8.7584** |

## 3.5 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0780 | 0.7826 | 0.9258 | 1.5000e-003 | | 0.0370 | 0.0370 | | 0.0340 | 0.0340 | 0.0000 | 131.3176 | 131.3176 | 0.0425 | 0.0000 | 132.3793 |
| **Total** | **0.0780** | **0.7826** | **0.9258** | **1.5000e-003** | | **0.0370** | **0.0370** | | **0.0340** | **0.0340** | **0.0000** | **131.3176** | **131.3176** | **0.0425** | **0.0000** | **132.3793** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 5.5000e-004 | 0.0201 | 7.4800e-003 | 9.0000e-005 | 3.3000e-003 | 1.1000e-004 | 3.4200e-003 | 9.5000e-004 | 1.1000e-004 | 1.0600e-003 | 0.0000 | 9.1917 | 9.1917 | 3.1000e-004 | 1.3300e-003 | 9.5969 |
| Worker | 3.0500e-003 | 2.2400e-003 | 0.0319 | 1.0000e-004 | 0.0115 | 6.0000e-005 | 0.0116 | 3.0500e-003 | 6.0000e-005 | 3.1100e-003 | 0.0000 | 8.7352 | 8.7352 | 2.1000e-004 | 2.2000e-004 | 8.8046 |
| **Total** | **3.6000e-003** | **0.0223** | **0.0393** | **1.9000e-004** | **0.0148** | **1.7000e-004** | **0.0150** | **4.0000e-003** | **1.7000e-004** | **4.1700e-003** | **0.0000** | **17.9269** | **17.9269** | **5.2000e-004** | **1.5500e-003** | **18.4015** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0369 | 0.5939 | 1.0350 | 1.5000e-003 | | 7.1000e-003 | 7.1000e-003 | | 6.7000e-003 | 6.7000e-003 | 0.0000 | 131.3174 | 131.3174 | 0.0425 | 0.0000 | 132.3792 |
| **Total** | **0.0369** | **0.5939** | **1.0350** | **1.5000e-003** | | **7.1000e-003** | **7.1000e-003** | | **6.7000e-003** | **6.7000e-003** | **0.0000** | **131.3174** | **131.3174** | **0.0425** | **0.0000** | **132.3792** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 5.5000e-004 | 0.0201 | 7.4800e-003 | 9.0000e-005 | 3.3000e-003 | 1.1000e-004 | 3.4200e-003 | 9.5000e-004 | 1.1000e-004 | 1.0600e-003 | 0.0000 | 9.1917 | 9.1917 | 3.1000e-004 | 1.3300e-003 | 9.5969 |
| Worker | 3.0500e-003 | 2.2400e-003 | 0.0319 | 1.0000e-004 | 0.0115 | 6.0000e-005 | 0.0116 | 3.0500e-003 | 6.0000e-005 | 3.1100e-003 | 0.0000 | 8.7352 | 8.7352 | 2.1000e-004 | 2.2000e-004 | 8.8046 |
| **Total** | **3.6000e-003** | **0.0223** | **0.0393** | **1.9000e-004** | **0.0148** | **1.7000e-004** | **0.0150** | **4.0000e-003** | **1.7000e-004** | **4.1700e-003** | **0.0000** | **17.9269** | **17.9269** | **5.2000e-004** | **1.5500e-003** | **18.4015** |

## 3.5 Building Construction - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 7.1600e-003 | 0.0713 | 0.0914 | 1.5000e-004 | | 3.1400e-003 | 3.1400e-003 | | 2.8900e-003 | 2.8900e-003 | 0.0000 | 13.0384 | 13.0384 | 4.2200e-003 | 0.0000 | 13.1439 |
| **Total** | **7.1600e-003** | **0.0713** | **0.0914** | **1.5000e-004** | | **3.1400e-003** | **3.1400e-003** | | **2.8900e-003** | **2.8900e-003** | **0.0000** | **13.0384** | **13.0384** | **4.2200e-003** | **0.0000** | **13.1439** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 5.0000e-005 | 1.9800e-003 | 7.3000e-004 | 1.0000e-005 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 9.0000e-005 | 1.0000e-005 | 1.1000e-004 | 0.0000 | 0.8955 | 0.8955 | 3.0000e-005 | 1.3000e-004 | 0.9351 |
| Worker | 2.8000e-004 | 2.0000e-004 | 2.9500e-003 | 1.0000e-005 | 1.1400e-003 | 1.0000e-005 | 1.1500e-003 | 3.0000e-004 | 1.0000e-005 | 3.1000e-004 | 0.0000 | 0.8374 | 0.8374 | 2.0000e-005 | 2.0000e-005 | 0.8438 |
| **Total** | **3.3000e-004** | **2.1800e-003** | **3.6800e-003** | **2.0000e-005** | **1.4700e-003** | **2.0000e-005** | **1.4900e-003** | **3.9000e-004** | **2.0000e-005** | **4.2000e-004** | **0.0000** | **1.7329** | **1.7329** | **5.0000e-005** | **1.5000e-004** | **1.7789** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 3.5700e-003 | 0.0581 | 0.1027 | 1.5000e-004 | | 6.1000e-004 | 6.1000e-004 | | 5.8000e-004 | 5.8000e-004 | 0.0000 | 13.0384 | 13.0384 | 4.2200e-003 | 0.0000 | 13.1439 |
| **Total** | **3.5700e-003** | **0.0581** | **0.1027** | **1.5000e-004** | | **6.1000e-004** | **6.1000e-004** | | **5.8000e-004** | **5.8000e-004** | **0.0000** | **13.0384** | **13.0384** | **4.2200e-003** | **0.0000** | **13.1439** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 5.0000e-005 | 1.9800e-003 | 7.3000e-004 | 1.0000e-005 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 9.0000e-005 | 1.0000e-005 | 1.1000e-004 | 0.0000 | 0.8955 | 0.8955 | 3.0000e-005 | 1.3000e-004 | 0.9351 |
| Worker | 2.8000e-004 | 2.0000e-004 | 2.9500e-003 | 1.0000e-005 | 1.1400e-003 | 1.0000e-005 | 1.1500e-003 | 3.0000e-004 | 1.0000e-005 | 3.1000e-004 | 0.0000 | 0.8374 | 0.8374 | 2.0000e-005 | 2.0000e-005 | 0.8438 |
| **Total** | **3.3000e-004** | **2.1800e-003** | **3.6800e-003** | **2.0000e-005** | **1.4700e-003** | **2.0000e-005** | **1.4900e-003** | **3.9000e-004** | **2.0000e-005** | **4.2000e-004** | **0.0000** | **1.7329** | **1.7329** | **5.0000e-005** | **1.5000e-004** | **1.7789** |

## 3.6 Paving - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 5.9200e-003 | 0.0517 | 0.0738 | 1.2000e-004 | | 2.3000e-003 | 2.3000e-003 | | 2.1500e-003 | 2.1500e-003 | 0.0000 | 9.8709 | 9.8709 | 2.8800e-003 | 0.0000 | 9.9428 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **5.9200e-003** | **0.0517** | **0.0738** | **1.2000e-004** | | **2.3000e-003** | **2.3000e-003** | | **2.1500e-003** | **2.1500e-003** | **0.0000** | **9.8709** | **9.8709** | **2.8800e-003** | **0.0000** | **9.9428** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.2000e-004 | 3.6000e-004 | 5.3600e-003 | 2.0000e-005 | 2.0700e-003 | 1.0000e-005 | 2.0800e-003 | 5.5000e-004 | 1.0000e-005 | 5.6000e-004 | 0.0000 | 1.5217 | 1.5217 | 3.0000e-005 | 4.0000e-005 | 1.5334 |
| **Total** | **5.2000e-004** | **3.6000e-004** | **5.3600e-003** | **2.0000e-005** | **2.0700e-003** | **1.0000e-005** | **2.0800e-003** | **5.5000e-004** | **1.0000e-005** | **5.6000e-004** | **0.0000** | **1.5217** | **1.5217** | **3.0000e-005** | **4.0000e-005** | **1.5334** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.8800e-003 | 0.0420 | 0.0722 | 1.2000e-004 | | 2.9000e-004 | 2.9000e-004 | | 2.8000e-004 | 2.8000e-004 | 0.0000 | 9.8709 | 9.8709 | 2.8800e-003 | 0.0000 | 9.9428 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **1.8800e-003** | **0.0420** | **0.0722** | **1.2000e-004** | | **2.9000e-004** | **2.9000e-004** | | **2.8000e-004** | **2.8000e-004** | **0.0000** | **9.8709** | **9.8709** | **2.8800e-003** | **0.0000** | **9.9428** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.2000e-004 | 3.6000e-004 | 5.3600e-003 | 2.0000e-005 | 2.0700e-003 | 1.0000e-005 | 2.0800e-003 | 5.5000e-004 | 1.0000e-005 | 5.6000e-004 | 0.0000 | 1.5217 | 1.5217 | 3.0000e-005 | 4.0000e-005 | 1.5334 |
| **Total** | **5.2000e-004** | **3.6000e-004** | **5.3600e-003** | **2.0000e-005** | **2.0700e-003** | **1.0000e-005** | **2.0800e-003** | **5.5000e-004** | **1.0000e-005** | **5.6000e-004** | **0.0000** | **1.5217** | **1.5217** | **3.0000e-005** | **4.0000e-005** | **1.5334** |

## 3.7 Architectural Coating - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1033 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.7900e-003 | 0.0120 | 0.0190 | 3.0000e-005 | | 5.4000e-004 | 5.4000e-004 | | 5.4000e-004 | 5.4000e-004 | 0.0000 | 2.6809 | 2.6809 | 1.5000e-004 | 0.0000 | 2.6846 |
| **Total** | **0.1051** | **0.0120** | **0.0190** | **3.0000e-005** | | **5.4000e-004** | **5.4000e-004** | | **5.4000e-004** | **5.4000e-004** | **0.0000** | **2.6809** | **2.6809** | **1.5000e-004** | **0.0000** | **2.6846** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.0000e-005 | 4.0000e-005 | 6.0000e-004 | 0.0000 | 2.3000e-004 | 0.0000 | 2.3000e-004 | 6.0000e-005 | 0.0000 | 6.0000e-005 | 0.0000 | 0.1691 | 0.1691 | 0.0000 | 0.0000 | 0.1704 |
| **Total** | **6.0000e-005** | **4.0000e-005** | **6.0000e-004** | **0.0000** | **2.3000e-004** | **0.0000** | **2.3000e-004** | **6.0000e-005** | **0.0000** | **6.0000e-005** | **0.0000** | **0.1691** | **0.1691** | **0.0000** | **0.0000** | **0.1704** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1033 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 5.7000e-004 | 0.0111 | 0.0192 | 3.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | 0.0000 | 2.6809 | 2.6809 | 1.5000e-004 | 0.0000 | 2.6846 |
| **Total** | **0.1039** | **0.0111** | **0.0192** | **3.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | **0.0000** | **2.6809** | **2.6809** | **1.5000e-004** | **0.0000** | **2.6846** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.0000e-005 | 4.0000e-005 | 6.0000e-004 | 0.0000 | 2.3000e-004 | 0.0000 | 2.3000e-004 | 6.0000e-005 | 0.0000 | 6.0000e-005 | 0.0000 | 0.1691 | 0.1691 | 0.0000 | 0.0000 | 0.1704 |
| **Total** | **6.0000e-005** | **4.0000e-005** | **6.0000e-004** | **0.0000** | **2.3000e-004** | **0.0000** | **2.3000e-004** | **6.0000e-005** | **0.0000** | **6.0000e-005** | **0.0000** | **0.1691** | **0.1691** | **0.0000** | **0.0000** | **0.1704** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.1121 | 0.1360 | 1.1887 | 2.7800e-003 | 0.3165 | 1.9800e-003 | 0.3185 | 0.0845 | 1.8500e-003 | 0.0863 | 0.0000 | 256.7848 | 256.7848 | 0.0160 | 0.0111 | 260.4893 |
| Unmitigated | 0.1121 | 0.1360 | 1.1887 | 2.7800e-003 | 0.3165 | 1.9800e-003 | 0.3185 | 0.0845 | 1.8500e-003 | 0.0863 | 0.0000 | 256.7848 | 256.7848 | 0.0160 | 0.0111 | 260.4893 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Hospital | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |
| Total | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Hospital | 16.60 | 8.40 | 6.90 | 64.90 | 16.10 | 19.00 | 73 | 25 | 2 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hospital | 0.540893 | 0.062748 | 0.186142 | 0.127785 | 0.023768 | 0.006610 | 0.012333 | 0.009205 | 0.000817 | 0.000491 | 0.024860 | 0.000754 | 0.003594 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 85.9900 | 85.9900 | 7.2600e-003 | 8.8000e-004 | 86.4336 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 85.9900 | 85.9900 | 7.2600e-003 | 8.8000e-004 | 86.4336 |
| NaturalGas Mitigated | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 76.3867 | 76.3867 | 1.4600e-003 | 1.4000e-003 | 76.8407 |
| NaturalGas Unmitigated | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 76.3867 | 76.3867 | 1.4600e-003 | 1.4000e-003 | 76.8407 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hospital | 1.43143e+006 | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 76.3867 | 76.3867 | 1.4600e-003 | 1.4000e-003 | 76.8407 |
| **Total** | | **7.7200e-003** | **0.0702** | **0.0589** | **4.2000e-004** | | **5.3300e-003** | **5.3300e-003** | | **5.3300e-003** | **5.3300e-003** | **0.0000** | **76.3867** | **76.3867** | **1.4600e-003** | **1.4000e-003** | **76.8407** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hospital | 1.43143e+006 | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 76.3867 | 76.3867 | 1.4600e-003 | 1.4000e-003 | 76.8407 |
| **Total** | | **7.7200e-003** | **0.0702** | **0.0589** | **4.2000e-004** | | **5.3300e-003** | **5.3300e-003** | | **5.3300e-003** | **5.3300e-003** | **0.0000** | **76.3867** | **76.3867** | **1.4600e-003** | **1.4000e-003** | **76.8407** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Hospital | 484873 | 85.9900 | 7.2600e-003 | 8.8000e-004 | 86.4336 |
| **Total** | | **85.9900** | **7.2600e-003** | **8.8000e-004** | **86.4336** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Hospital | 484873 | 85.9900 | 7.2600e-003 | 8.8000e-004 | 86.4336 |
| **Total** | | **85.9900** | **7.2600e-003** | **8.8000e-004** | **86.4336** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0909 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| Unmitigated | 0.0909 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0103 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0806 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 3.0000e-005 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| **Total** | **0.0909** | **0.0000** | **2.8000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **5.5000e-004** | **5.5000e-004** | **0.0000** | **0.0000** | **5.9000e-004** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0103 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0806 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 3.0000e-005 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| **Total** | **0.0909** | **0.0000** | **2.8000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **5.5000e-004** | **5.5000e-004** | **0.0000** | **0.0000** | **5.9000e-004** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| Unmitigated | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Hospital | 2.79696 / 0.532755 | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| **Total** | | **8.3958** | **0.0918** | **2.2300e-003** | **11.3543** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Hospital | 2.79696 / 0.532755 | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| **Total** | | **8.3958** | **0.0918** | **2.2300e-003** | **11.3543** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| Unmitigated | 48.8660 | 2.8879 | 0.0000 | 121.0635 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Hospital | 240.73 | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| **Total** | | **48.8660** | **2.8879** | **0.0000** | **121.0635** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Hospital | 240.73 | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| **Total** | | **48.8660** | **2.8879** | **0.0000** | **121.0635** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Emergency Room

**South Coast AQMD Air District, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 22.29 | 1000sqft | 0.51 | 22,293.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific values.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults adjusted to fit proposed construction schedule by multiplying each phase length by 4.1

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - 24790 sf of existing buildings to demo.

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading - 2,100 CU of cut/export

Architectural Coating - CalEEMod defaults.

Vehicle Trips - CalEEMod defaults.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower. Site watered twice a day.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
|---|---|---|---|
| tblConstructionPhase | NumDays | 1.00 | 4.00 |
| tblConstructionPhase | NumDays | 2.00 | 8.00 |
| tblConstructionPhase | NumDays | 100.00 | 410.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 10.00 | 40.00 |
| tblConstructionPhase | PhaseEndDate | 5/15/2023 | 6/30/2023 |
| tblConstructionPhase | PhaseEndDate | 5/17/2023 | 7/12/2023 |
| tblConstructionPhase | PhaseEndDate | 10/4/2023 | 2/5/2025 |
| tblConstructionPhase | PhaseEndDate | 10/11/2023 | 3/6/2025 |
| tblConstructionPhase | PhaseEndDate | 10/18/2023 | 4/4/2025 |
| tblConstructionPhase | PhaseEndDate | 5/12/2023 | 6/26/2023 |
| tblConstructionPhase | PhaseStartDate | 5/13/2023 | 6/27/2023 |
| tblConstructionPhase | PhaseStartDate | 5/16/2023 | 7/1/2023 |
| tblConstructionPhase | PhaseStartDate | 5/18/2023 | 7/13/2023 |
| tblConstructionPhase | PhaseStartDate | 10/5/2023 | 2/6/2025 |
| tblConstructionPhase | PhaseStartDate | 10/12/2023 | 3/7/2025 |
| tblGrading | MaterialExported | 0.00 | 2,100.00 |
| tblLandUse | LandUseSquareFeet | 22,290.00 | 22,293.00 |
| tblTripsAndVMT | HaulingTripNumber | 113.00 | 114.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 7.00 | 8.00 |
| tblTripsAndVMT | WorkerTripNumber | 1.00 | 2.00 |

## 2.0 Emissions Summary

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 1.0297 | 14.1410 | 7.8400 | 0.0336 | 2.0199 | 0.4505 | 2.4704 | 0.8274 | 0.4156 | 1.2429 | 0.0000 | 3,502.1468 | 3,502.1468 | 0.5577 | 0.3288 | 3,614.0718 |
| 2024 | 0.6232 | 6.1351 | 7.3851 | 0.0129 | 0.1150 | 0.2837 | 0.3987 | 0.0311 | 0.2610 | 0.2921 | 0.0000 | 1,259.1208 | 1,259.1208 | 0.3618 | 0.0129 | 1,272.0052 |
| 2025 | 10.0174 | 5.6409 | 7.5735 | 0.0129 | 0.2012 | 0.2426 | 0.4209 | 0.0534 | 0.2232 | 0.2589 | 0.0000 | 1,255.6804 | 1,255.6804 | 0.3618 | 0.0126 | 1,268.4759 |
| **Maximum** | **10.0174** | **14.1410** | **7.8400** | **0.0336** | **2.0199** | **0.4505** | **2.4704** | **0.8274** | **0.4156** | **1.2429** | **0.0000** | **3,502.1468** | **3,502.1468** | **0.5577** | **0.3288** | **3,614.0718** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 0.5679 | 10.0173 | 8.9120 | 0.0336 | 1.2732 | 0.1908 | 1.4597 | 0.4717 | 0.1864 | 0.6457 | 0.0000 | 3,502.1468 | 3,502.1468 | 0.5577 | 0.3288 | 3,614.0718 |
| 2024 | 0.3096 | 4.6945 | 8.2183 | 0.0129 | 0.1150 | 0.0556 | 0.1706 | 0.0311 | 0.0524 | 0.0835 | 0.0000 | 1,259.1208 | 1,259.1208 | 0.3618 | 0.0129 | 1,272.0052 |
| 2025 | 9.9011 | 4.6266 | 8.1961 | 0.0129 | 0.2012 | 0.0484 | 0.2296 | 0.0534 | 0.0458 | 0.0806 | 0.0000 | 1,255.6804 | 1,255.6804 | 0.3618 | 0.0126 | 1,268.4759 |
| **Maximum** | **9.9011** | **10.0173** | **8.9120** | **0.0336** | **1.2732** | **0.1908** | **1.4597** | **0.4717** | **0.1864** | **0.6457** | **0.0000** | **3,502.1468** | **3,502.1468** | **0.5577** | **0.3288** | **3,614.0718** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 7.64 | 25.38 | -11.09 | 0.00 | 31.96 | 69.83 | 43.47 | 39.00 | 68.37 | 54.86 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Energy | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| Mobile | 0.7111 | 0.7566 | 7.3807 | 0.0174 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,777.5787 | 1,777.5787 | 0.1048 | 0.0709 | 1,801.3284 |
| **Total** | **1.2516** | **1.1411** | **7.7059** | **0.0197** | **1.9520** | **0.0413** | **1.9933** | **0.5202** | **0.0404** | **0.5606** | | **2,238.9643** | **2,238.9643** | **0.1137** | **0.0794** | **2,265.4561** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Energy | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| Mobile | 0.7111 | 0.7566 | 7.3807 | 0.0174 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,777.5787 | 1,777.5787 | 0.1048 | 0.0709 | 1,801.3284 |
| **Total** | **1.2516** | **1.1411** | **7.7059** | **0.0197** | **1.9520** | **0.0413** | **1.9933** | **0.5202** | **0.0404** | **0.5606** | | **2,238.9643** | **2,238.9643** | **0.1137** | **0.0794** | **2,265.4561** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 5/1/2023 | 6/26/2023 | 5 | 40 | |
| 2 | Site Preparation | Site Preparation | 6/27/2023 | 6/30/2023 | 5 | 4 | |
| 3 | Grading | Grading | 7/1/2023 | 7/12/2023 | 5 | 8 | |
| 4 | Building Construction | Building Construction | 7/13/2023 | 2/5/2025 | 5 | 410 | |
| 5 | Paving | Paving | 2/6/2025 | 3/6/2025 | 5 | 21 | |
| 6 | Architectural Coating | Architectural Coating | 3/7/2025 | 4/4/2025 | 5 | 21 | |

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,440; Non-Residential Outdoor: 11,147; Striped Parking Area: 0 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | Cranes | 1 | 4.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 6.00 | 89 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 7.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 1.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 2 | 6.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 262.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 5 | 8.00 | 4.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 2.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Demolition | 4 | 10.00 | 0.00 | 114.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.6101 | 0.0000 | 0.6101 | 0.0924 | 0.0000 | 0.0924 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.6463 | 5.7787 | 7.3926 | 0.0120 | | 0.2821 | 0.2821 | | 0.2698 | 0.2698 | | 1,148.4055 | 1,148.4055 | 0.2089 | | 1,153.6290 |
| **Total** | **0.6463** | **5.7787** | **7.3926** | **0.0120** | **0.6101** | **0.2821** | **0.8922** | **0.0924** | **0.2698** | **0.3622** | | **1,148.4055** | **1,148.4055** | **0.2089** | | **1,153.6290** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 6.1400e-003 | 0.3433 | 0.0966 | 1.6300e-003 | 0.0499 | 2.6000e-003 | 0.0525 | 0.0137 | 2.4900e-003 | 0.0162 | | 179.1112 | 179.1112 | 9.9600e-003 | 0.0285 | 187.8399 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0319 | 0.0214 | 0.3508 | 9.8000e-004 | 0.1118 | 6.3000e-004 | 0.1124 | 0.0296 | 5.8000e-004 | 0.0302 | | 98.9593 | 98.9593 | 2.4000e-003 | 2.2600e-003 | 99.6928 |
| **Total** | **0.0381** | **0.3647** | **0.4473** | **2.6100e-003** | **0.1616** | **3.2300e-003** | **0.1649** | **0.0433** | **3.0700e-003** | **0.0464** | | **278.0705** | **278.0705** | **0.0124** | **0.0307** | **287.5327** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.2745 | 0.0000 | 0.2745 | 0.0416 | 0.0000 | 0.0416 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5252 | 5.2809 | 7.5996 | 0.0120 | | 0.1876 | 0.1876 | | 0.1833 | 0.1833 | 0.0000 | 1,148.4055 | 1,148.4055 | 0.2089 | | 1,153.6290 |
| **Total** | **0.5252** | **5.2809** | **7.5996** | **0.0120** | **0.2745** | **0.1876** | **0.4621** | **0.0416** | **0.1833** | **0.2249** | **0.0000** | **1,148.4055** | **1,148.4055** | **0.2089** | | **1,153.6290** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 6.1400e-003 | 0.3433 | 0.0966 | 1.6300e-003 | 0.0499 | 2.6000e-003 | 0.0525 | 0.0137 | 2.4900e-003 | 0.0162 | | 179.1112 | 179.1112 | 9.9600e-003 | 0.0285 | 187.8399 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0319 | 0.0214 | 0.3508 | 9.8000e-004 | 0.1118 | 6.3000e-004 | 0.1124 | 0.0296 | 5.8000e-004 | 0.0302 | | 98.9593 | 98.9593 | 2.4000e-003 | 2.2600e-003 | 99.6928 |
| **Total** | **0.0381** | **0.3647** | **0.4473** | **2.6100e-003** | **0.1616** | **3.2300e-003** | **0.1649** | **0.0433** | **3.0700e-003** | **0.0464** | | **278.0705** | **278.0705** | **0.0124** | **0.0307** | **287.5327** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.1326 | 0.0000 | 0.1326 | 0.0143 | 0.0000 | 0.0143 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5348 | 6.1887 | 3.9239 | 9.7300e-003 | | 0.2266 | 0.2266 | | 0.2084 | 0.2084 | | 942.4317 | 942.4317 | 0.3048 | | 950.0517 |
| **Total** | **0.5348** | **6.1887** | **3.9239** | **9.7300e-003** | **0.1326** | **0.2266** | **0.3591** | **0.0143** | **0.2084** | **0.2228** | | **942.4317** | **942.4317** | **0.3048** | | **950.0517** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0192 | 0.0129 | 0.2105 | 5.9000e-004 | 0.0671 | 3.8000e-004 | 0.0674 | 0.0178 | 3.5000e-004 | 0.0181 | | 59.3756 | 59.3756 | 1.4400e-003 | 1.3600e-003 | 59.8157 |
| **Total** | **0.0192** | **0.0129** | **0.2105** | **5.9000e-004** | **0.0671** | **3.8000e-004** | **0.0674** | **0.0178** | **3.5000e-004** | **0.0181** | | **59.3756** | **59.3756** | **1.4400e-003** | **1.3600e-003** | **59.8157** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0597 | 0.0000 | 0.0597 | 6.4400e-003 | 0.0000 | 6.4400e-003 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2015 | 3.1515 | 5.8257 | 9.7300e-003 | | 0.0364 | 0.0364 | | 0.0346 | 0.0346 | 0.0000 | 942.4317 | 942.4317 | 0.3048 | | 950.0517 |
| **Total** | **0.2015** | **3.1515** | **5.8257** | **9.7300e-003** | **0.0597** | **0.0364** | **0.0961** | **6.4400e-003** | **0.0346** | **0.0411** | **0.0000** | **942.4317** | **942.4317** | **0.3048** | | **950.0517** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0192 | 0.0129 | 0.2105 | 5.9000e-004 | 0.0671 | 3.8000e-004 | 0.0674 | 0.0178 | 3.5000e-004 | 0.0181 | | 59.3756 | 59.3756 | 1.4400e-003 | 1.3600e-003 | 59.8157 |
| **Total** | **0.0192** | **0.0129** | **0.2105** | **5.9000e-004** | **0.0671** | **3.8000e-004** | **0.0674** | **0.0178** | **3.5000e-004** | **0.0181** | | **59.3756** | **59.3756** | **1.4400e-003** | **1.3600e-003** | **59.8157** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 1.3577 | 0.0000 | 1.3577 | 0.6466 | 0.0000 | 0.6466 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.9335 | 10.1789 | 5.5516 | 0.0141 | | 0.4201 | 0.4201 | | 0.3865 | 0.3865 | | 1,364.7713 | 1,364.7713 | 0.4414 | | 1,375.8062 |
| **Total** | **0.9335** | **10.1789** | **5.5516** | **0.0141** | **1.3577** | **0.4201** | **1.7778** | **0.6466** | **0.3865** | **1.0331** | | **1,364.7713** | **1,364.7713** | **0.4414** | | **1,375.8062** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0706 | 3.9450 | 1.1095 | 0.0187 | 0.5729 | 0.0299 | 0.6027 | 0.1570 | 0.0286 | 0.1856 | | 2,058.2081 | 2,058.2081 | 0.1144 | 0.3270 | 2,158.5114 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0255 | 0.0171 | 0.2806 | 7.8000e-004 | 0.0894 | 5.0000e-004 | 0.0899 | 0.0237 | 4.6000e-004 | 0.0242 | | 79.1674 | 79.1674 | 1.9200e-003 | 1.8100e-003 | 79.7542 |
| **Total** | **0.0961** | **3.9621** | **1.3901** | **0.0195** | **0.6623** | **0.0304** | **0.6927** | **0.1807** | **0.0291** | **0.2098** | | **2,137.3755** | **2,137.3755** | **0.1163** | **0.3288** | **2,238.2656** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.6110 | 0.0000 | 0.6110 | 0.2910 | 0.0000 | 0.2910 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.4718 | 6.0551 | 7.5219 | 0.0141 | | 0.1561 | 0.1561 | | 0.1449 | 0.1449 | 0.0000 | 1,364.7713 | 1,364.7713 | 0.4414 | | 1,375.8062 |
| **Total** | **0.4718** | **6.0551** | **7.5219** | **0.0141** | **0.6110** | **0.1561** | **0.7670** | **0.2910** | **0.1449** | **0.4359** | **0.0000** | **1,364.7713** | **1,364.7713** | **0.4414** | | **1,375.8062** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0706 | 3.9450 | 1.1095 | 0.0187 | 0.5729 | 0.0299 | 0.6027 | 0.1570 | 0.0286 | 0.1856 | | 2,058.2081 | 2,058.2081 | 0.1144 | 0.3270 | 2,158.5114 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0255 | 0.0171 | 0.2806 | 7.8000e-004 | 0.0894 | 5.0000e-004 | 0.0899 | 0.0237 | 4.6000e-004 | 0.0242 | | 79.1674 | 79.1674 | 1.9200e-003 | 1.8100e-003 | 79.7542 |
| **Total** | **0.0961** | **3.9621** | **1.3901** | **0.0195** | **0.6623** | **0.0304** | **0.6927** | **0.1807** | **0.0291** | **0.2098** | | **2,137.3755** | **2,137.3755** | **0.1163** | **0.3288** | **2,238.2656** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6322 | 6.4186 | 7.0970 | 0.0114 | | 0.3203 | 0.3203 | | 0.2946 | 0.2946 | | 1,104.6089 | 1,104.6089 | 0.3573 | | 1,113.5402 |
| **Total** | **0.6322** | **6.4186** | **7.0970** | **0.0114** | | **0.3203** | **0.3203** | | **0.2946** | **0.2946** | | **1,104.6089** | **1,104.6089** | **0.3573** | | **1,113.5402** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.4200e-003 | 0.1452 | 0.0572 | 7.3000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1800e-003 | | 78.4124 | 78.4124 | 2.6400e-003 | 0.0114 | 81.8611 |
| Worker | 0.0255 | 0.0171 | 0.2806 | 7.8000e-004 | 0.0894 | 5.0000e-004 | 0.0899 | 0.0237 | 4.6000e-004 | 0.0242 | | 79.1674 | 79.1674 | 1.9200e-003 | 1.8100e-003 | 79.7542 |
| **Total** | **0.0300** | **0.1623** | **0.3378** | **1.5100e-003** | **0.1150** | **1.3500e-003** | **0.1164** | **0.0311** | **1.2700e-003** | **0.0324** | | **157.5798** | **157.5798** | **4.5600e-003** | **0.0132** | **161.6153** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2857 | 4.5840 | 7.8982 | 0.0114 | | 0.0597 | 0.0597 | | 0.0561 | 0.0561 | 0.0000 | 1,104.6089 | 1,104.6089 | 0.3573 | | 1,113.5402 |
| **Total** | **0.2857** | **4.5840** | **7.8982** | **0.0114** | | **0.0597** | **0.0597** | | **0.0561** | **0.0561** | **0.0000** | **1,104.6089** | **1,104.6089** | **0.3573** | | **1,113.5402** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.4200e-003 | 0.1452 | 0.0572 | 7.3000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1800e-003 | | 78.4124 | 78.4124 | 2.6400e-003 | 0.0114 | 81.8611 |
| Worker | 0.0255 | 0.0171 | 0.2806 | 7.8000e-004 | 0.0894 | 5.0000e-004 | 0.0899 | 0.0237 | 4.6000e-004 | 0.0242 | | 79.1674 | 79.1674 | 1.9200e-003 | 1.8100e-003 | 79.7542 |
| **Total** | **0.0300** | **0.1623** | **0.3378** | **1.5100e-003** | **0.1150** | **1.3500e-003** | **0.1164** | **0.0311** | **1.2700e-003** | **0.0324** | | **157.5798** | **157.5798** | **4.5600e-003** | **0.0132** | **161.6153** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5950 | 5.9739 | 7.0675 | 0.0114 | | 0.2824 | 0.2824 | | 0.2598 | 0.2598 | | 1,104.9834 | 1,104.9834 | 0.3574 | | 1,113.9177 |
| **Total** | **0.5950** | **5.9739** | **7.0675** | **0.0114** | | **0.2824** | **0.2824** | | **0.2598** | **0.2598** | | **1,104.9834** | **1,104.9834** | **0.3574** | | **1,113.9177** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.3200e-003 | 0.1459 | 0.0562 | 7.2000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1800e-003 | | 77.2843 | 77.2843 | 2.6400e-003 | 0.0112 | 80.6893 |
| Worker | 0.0238 | 0.0153 | 0.2614 | 7.6000e-004 | 0.0894 | 4.8000e-004 | 0.0899 | 0.0237 | 4.4000e-004 | 0.0242 | | 76.8531 | 76.8531 | 1.7400e-003 | 1.6800e-003 | 77.3982 |
| **Total** | **0.0282** | **0.1612** | **0.3176** | **1.4800e-003** | **0.1150** | **1.3300e-003** | **0.1164** | **0.0311** | **1.2500e-003** | **0.0323** | | **154.1374** | **154.1374** | **4.3800e-003** | **0.0129** | **158.0875** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2814 | 4.5333 | 7.9007 | 0.0114 | | 0.0542 | 0.0542 | | 0.0512 | 0.0512 | 0.0000 | 1,104.9834 | 1,104.9834 | 0.3574 | | 1,113.9177 |
| **Total** | **0.2814** | **4.5333** | **7.9007** | **0.0114** | | **0.0542** | **0.0542** | | **0.0512** | **0.0512** | **0.0000** | **1,104.9834** | **1,104.9834** | **0.3574** | | **1,113.9177** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.3200e-003 | 0.1459 | 0.0562 | 7.2000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1800e-003 | | 77.2843 | 77.2843 | 2.6400e-003 | 0.0112 | 80.6893 |
| Worker | 0.0238 | 0.0153 | 0.2614 | 7.6000e-004 | 0.0894 | 4.8000e-004 | 0.0899 | 0.0237 | 4.4000e-004 | 0.0242 | | 76.8531 | 76.8531 | 1.7400e-003 | 1.6800e-003 | 77.3982 |
| **Total** | **0.0282** | **0.1612** | **0.3176** | **1.4800e-003** | **0.1150** | **1.3300e-003** | **0.1164** | **0.0311** | **1.2500e-003** | **0.0323** | | **154.1374** | **154.1374** | **4.3800e-003** | **0.0129** | **158.0875** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5510 | 5.4820 | 7.0282 | 0.0114 | | 0.2413 | 0.2413 | | 0.2220 | 0.2220 | | 1,105.5711 | 1,105.5711 | 0.3576 | | 1,114.5102 |
| **Total** | **0.5510** | **5.4820** | **7.0282** | **0.0114** | | **0.2413** | **0.2413** | | **0.2220** | **0.2220** | | **1,105.5711** | **1,105.5711** | **0.3576** | | **1,114.5102** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.2200e-003 | 0.1452 | 0.0554 | 7.0000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1900e-003 | | 75.8757 | 75.8757 | 2.6400e-003 | 0.0110 | 79.2238 |
| Worker | 0.0223 | 0.0138 | 0.2435 | 7.3000e-004 | 0.0894 | 4.6000e-004 | 0.0899 | 0.0237 | 4.2000e-004 | 0.0241 | | 74.2337 | 74.2337 | 1.5700e-003 | 1.5700e-003 | 74.7420 |
| **Total** | **0.0265** | **0.1589** | **0.2988** | **1.4300e-003** | **0.1150** | **1.3100e-003** | **0.1163** | **0.0311** | **1.2300e-003** | **0.0323** | | **150.1094** | **150.1094** | **4.2100e-003** | **0.0126** | **153.9658** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2746 | 4.4677 | 7.8973 | 0.0114 | | 0.0471 | 0.0471 | | 0.0446 | 0.0446 | 0.0000 | 1,105.5711 | 1,105.5711 | 0.3576 | | 1,114.5102 |
| **Total** | **0.2746** | **4.4677** | **7.8973** | **0.0114** | | **0.0471** | **0.0471** | | **0.0446** | **0.0446** | **0.0000** | **1,105.5711** | **1,105.5711** | **0.3576** | | **1,114.5102** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.2200e-003 | 0.1452 | 0.0554 | 7.0000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1900e-003 | | 75.8757 | 75.8757 | 2.6400e-003 | 0.0110 | 79.2238 |
| Worker | 0.0223 | 0.0138 | 0.2435 | 7.3000e-004 | 0.0894 | 4.6000e-004 | 0.0899 | 0.0237 | 4.2000e-004 | 0.0241 | | 74.2337 | 74.2337 | 1.5700e-003 | 1.5700e-003 | 74.7420 |
| **Total** | **0.0265** | **0.1589** | **0.2988** | **1.4300e-003** | **0.1150** | **1.3100e-003** | **0.1163** | **0.0311** | **1.2300e-003** | **0.0323** | | **150.1094** | **150.1094** | **4.2100e-003** | **0.0126** | **153.9658** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5638 | 4.9206 | 7.0257 | 0.0113 | | 0.2186 | 0.2186 | | 0.2046 | 0.2046 | | 1,036.2711 | 1,036.2711 | 0.3019 | | 1,043.8179 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5638** | **4.9206** | **7.0257** | **0.0113** | | **0.2186** | **0.2186** | | **0.2046** | **0.2046** | | **1,036.2711** | **1,036.2711** | **0.3019** | | **1,043.8179** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0502 | 0.0310 | 0.5478 | 1.6500e-003 | 0.2012 | 1.0300e-003 | 0.2022 | 0.0534 | 9.5000e-004 | 0.0543 | | 167.0257 | 167.0257 | 3.5300e-003 | 3.5400e-003 | 168.1695 |
| **Total** | **0.0502** | **0.0310** | **0.5478** | **1.6500e-003** | **0.2012** | **1.0300e-003** | **0.2022** | **0.0534** | **9.5000e-004** | **0.0543** | | **167.0257** | **167.0257** | **3.5300e-003** | **3.5400e-003** | **168.1695** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.1790 | 3.9959 | 6.8743 | 0.0113 | | 0.0274 | 0.0274 | | 0.0263 | 0.0263 | 0.0000 | 1,036.2711 | 1,036.2711 | 0.3019 | | 1,043.8179 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.1790** | **3.9959** | **6.8743** | **0.0113** | | **0.0274** | **0.0274** | | **0.0263** | **0.0263** | **0.0000** | **1,036.2711** | **1,036.2711** | **0.3019** | | **1,043.8179** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0502 | 0.0310 | 0.5478 | 1.6500e-003 | 0.2012 | 1.0300e-003 | 0.2022 | 0.0534 | 9.5000e-004 | 0.0543 | | 167.0257 | 167.0257 | 3.5300e-003 | 3.5400e-003 | 168.1695 |
| **Total** | **0.0502** | **0.0310** | **0.5478** | **1.6500e-003** | **0.2012** | **1.0300e-003** | **0.2022** | **0.0534** | **9.5000e-004** | **0.0543** | | **167.0257** | **167.0257** | **3.5300e-003** | **3.5400e-003** | **168.1695** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 9.8410 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **10.0119** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.5800e-003 | 3.4400e-003 | 0.0609 | 1.8000e-004 | 0.0224 | 1.1000e-004 | 0.0225 | 5.9300e-003 | 1.1000e-004 | 6.0300e-003 | | 18.5584 | 18.5584 | 3.9000e-004 | 3.9000e-004 | 18.6855 |
| **Total** | **5.5800e-003** | **3.4400e-003** | **0.0609** | **1.8000e-004** | **0.0224** | **1.1000e-004** | **0.0225** | **5.9300e-003** | **1.1000e-004** | **6.0300e-003** | | **18.5584** | **18.5584** | **3.9000e-004** | **3.9000e-004** | **18.6855** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 9.8410 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0545 | 1.0598 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **9.8955** | **1.0598** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.5800e-003 | 3.4400e-003 | 0.0609 | 1.8000e-004 | 0.0224 | 1.1000e-004 | 0.0225 | 5.9300e-003 | 1.1000e-004 | 6.0300e-003 | | 18.5584 | 18.5584 | 3.9000e-004 | 3.9000e-004 | 18.6855 |
| **Total** | **5.5800e-003** | **3.4400e-003** | **0.0609** | **1.8000e-004** | **0.0224** | **1.1000e-004** | **0.0225** | **5.9300e-003** | **1.1000e-004** | **6.0300e-003** | | **18.5584** | **18.5584** | **3.9000e-004** | **3.9000e-004** | **18.6855** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.7111 | 0.7566 | 7.3807 | 0.0174 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,777.5787 | 1,777.5787 | 0.1048 | 0.0709 | 1,801.3284 |
| Unmitigated | 0.7111 | 0.7566 | 7.3807 | 0.0174 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,777.5787 | 1,777.5787 | 0.1048 | 0.0709 | 1,801.3284 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Hospital | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |
| Total | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Hospital | 16.60 | 8.40 | 6.90 | 64.90 | 16.10 | 19.00 | 73 | 25 | 2 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hospital | 0.540893 | 0.062748 | 0.186142 | 0.127785 | 0.023768 | 0.006610 | 0.012333 | 0.009205 | 0.000817 | 0.000491 | 0.024860 | 0.000754 | 0.003594 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| NaturalGas Unmitigated | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Hospital | 3921.74 | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| **Total** | | **0.0423** | **0.3845** | **0.3230** | **2.3100e-003** | | **0.0292** | **0.0292** | | **0.0292** | **0.0292** | | **461.3807** | **461.3807** | **8.8400e-003** | **8.4600e-003** | **464.1224** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Hospital | 3.92174 | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| **Total** | | **0.0423** | **0.3845** | **0.3230** | **2.3100e-003** | | **0.0292** | **0.0292** | | **0.0292** | **0.0292** | | **461.3807** | **461.3807** | **8.8400e-003** | **8.4600e-003** | **464.1224** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Unmitigated | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0566 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.4414 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.1000e-004 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| **Total** | **0.4982** | **2.0000e-005** | **2.2700e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | | **4.8800e-003** | **4.8800e-003** | **1.0000e-005** | | **5.2000e-003** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0566 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.4414 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.1000e-004 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| **Total** | **0.4982** | **2.0000e-005** | **2.2700e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | | **4.8800e-003** | **4.8800e-003** | **1.0000e-005** | | **5.2000e-003** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Emergency Room

**South Coast AQMD Air District, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 22.29 | 1000sqft | 0.51 | 22,293.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific values.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults adjusted to fit proposed construction schedule by multiplying each phase length by 4.1

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - 24790 sf of existing buildings to demo.

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading - 2,100 CU of cut/export

Architectural Coating - CalEEMod defaults.

Vehicle Trips - CalEEMod defaults.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower. Site watered twice a day.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
|---|---|---|---|
| tblConstructionPhase | NumDays | 1.00 | 4.00 |
| tblConstructionPhase | NumDays | 2.00 | 8.00 |
| tblConstructionPhase | NumDays | 100.00 | 410.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 10.00 | 40.00 |
| tblConstructionPhase | PhaseEndDate | 5/15/2023 | 6/30/2023 |
| tblConstructionPhase | PhaseEndDate | 5/17/2023 | 7/12/2023 |
| tblConstructionPhase | PhaseEndDate | 10/4/2023 | 2/5/2025 |
| tblConstructionPhase | PhaseEndDate | 10/11/2023 | 3/6/2025 |
| tblConstructionPhase | PhaseEndDate | 10/18/2023 | 4/4/2025 |
| tblConstructionPhase | PhaseEndDate | 5/12/2023 | 6/26/2023 |
| tblConstructionPhase | PhaseStartDate | 5/13/2023 | 6/27/2023 |
| tblConstructionPhase | PhaseStartDate | 5/16/2023 | 7/1/2023 |
| tblConstructionPhase | PhaseStartDate | 5/18/2023 | 7/13/2023 |
| tblConstructionPhase | PhaseStartDate | 10/5/2023 | 2/6/2025 |
| tblConstructionPhase | PhaseStartDate | 10/12/2023 | 3/7/2025 |
| tblGrading | MaterialExported | 0.00 | 2,100.00 |
| tblLandUse | LandUseSquareFeet | 22,290.00 | 22,293.00 |
| tblTripsAndVMT | HaulingTripNumber | 113.00 | 114.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 7.00 | 8.00 |
| tblTripsAndVMT | WorkerTripNumber | 1.00 | 2.00 |

## 2.0 Emissions Summary

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 1.0264 | 14.3306 | 7.8080 | 0.0336 | 2.0199 | 0.4506 | 2.4705 | 0.8274 | 0.4156 | 1.2430 | 0.0000 | 3,499.8710 | 3,499.8710 | 0.5575 | 0.3293 | 3,611.9344 |
| 2024 | 0.6244 | 6.1438 | 7.3622 | 0.0129 | 0.1150 | 0.2837 | 0.3987 | 0.0311 | 0.2610 | 0.2921 | 0.0000 | 1,254.8059 | 1,254.8059 | 0.3618 | 0.0130 | 1,267.7297 |
| 2025 | 10.0178 | 5.6494 | 7.5220 | 0.0128 | 0.2012 | 0.2426 | 0.4209 | 0.0534 | 0.2232 | 0.2589 | 0.0000 | 1,251.5228 | 1,251.5228 | 0.3618 | 0.0127 | 1,264.3553 |
| **Maximum** | **10.0178** | **14.3306** | **7.8080** | **0.0336** | **2.0199** | **0.4506** | **2.4705** | **0.8274** | **0.4156** | **1.2430** | **0.0000** | **3,499.8710** | **3,499.8710** | **0.5575** | **0.3293** | **3,611.9344** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 0.5647 | 10.2069 | 8.9015 | 0.0336 | 1.2732 | 0.1908 | 1.4598 | 0.4717 | 0.1864 | 0.6458 | 0.0000 | 3,499.8710 | 3,499.8710 | 0.5575 | 0.3293 | 3,611.9344 |
| 2024 | 0.3108 | 4.7032 | 8.1954 | 0.0129 | 0.1150 | 0.0556 | 0.1706 | 0.0311 | 0.0524 | 0.0835 | 0.0000 | 1,254.8059 | 1,254.8059 | 0.3618 | 0.0130 | 1,267.7297 |
| 2025 | 9.9014 | 4.6351 | 8.1750 | 0.0128 | 0.2012 | 0.0484 | 0.2296 | 0.0534 | 0.0458 | 0.0806 | 0.0000 | 1,251.5228 | 1,251.5228 | 0.3618 | 0.0127 | 1,264.3553 |
| **Maximum** | **9.9014** | **10.2069** | **8.9015** | **0.0336** | **1.2732** | **0.1908** | **1.4598** | **0.4717** | **0.1864** | **0.6458** | **0.0000** | **3,499.8710** | **3,499.8710** | **0.5575** | **0.3293** | **3,611.9344** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 7.64 | 25.18 | -11.37 | 0.00 | 31.96 | 69.83 | 43.47 | 39.00 | 68.37 | 54.86 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Energy | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| Mobile | 0.6873 | 0.8126 | 7.1148 | 0.0166 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,695.8838 | 1,695.8838 | 0.1073 | 0.0736 | 1,720.4839 |
| **Total** | **1.2278** | **1.1971** | **7.4401** | **0.0189** | **1.9520** | **0.0413** | **1.9933** | **0.5202** | **0.0404** | **0.5606** | | **2,157.2693** | **2,157.2693** | **0.1161** | **0.0820** | **2,184.6115** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Energy | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| Mobile | 0.6873 | 0.8126 | 7.1148 | 0.0166 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,695.8838 | 1,695.8838 | 0.1073 | 0.0736 | 1,720.4839 |
| **Total** | **1.2278** | **1.1971** | **7.4401** | **0.0189** | **1.9520** | **0.0413** | **1.9933** | **0.5202** | **0.0404** | **0.5606** | | **2,157.2693** | **2,157.2693** | **0.1161** | **0.0820** | **2,184.6115** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 5/1/2023 | 6/26/2023 | 5 | 40 | |
| 2 | Site Preparation | Site Preparation | 6/27/2023 | 6/30/2023 | 5 | 4 | |
| 3 | Grading | Grading | 7/1/2023 | 7/12/2023 | 5 | 8 | |
| 4 | Building Construction | Building Construction | 7/13/2023 | 2/5/2025 | 5 | 410 | |
| 5 | Paving | Paving | 2/6/2025 | 3/6/2025 | 5 | 21 | |
| 6 | Architectural Coating | Architectural Coating | 3/7/2025 | 4/4/2025 | 5 | 21 | |

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,440; Non-Residential Outdoor: 11,147; Striped Parking Area: 0 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | Cranes | 1 | 4.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 6.00 | 89 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 7.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 1.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 2 | 6.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 262.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 5 | 8.00 | 4.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 2.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Demolition | 4 | 10.00 | 0.00 | 114.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.6101 | 0.0000 | 0.6101 | 0.0924 | 0.0000 | 0.0924 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.6463 | 5.7787 | 7.3926 | 0.0120 | | 0.2821 | 0.2821 | | 0.2698 | 0.2698 | | 1,148.4055 | 1,148.4055 | 0.2089 | | 1,153.6290 |
| **Total** | **0.6463** | **5.7787** | **7.3926** | **0.0120** | **0.6101** | **0.2821** | **0.8922** | **0.0924** | **0.2698** | **0.3622** | | **1,148.4055** | **1,148.4055** | **0.2089** | | **1,153.6290** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 5.7300e-003 | 0.3597 | 0.0980 | 1.6300e-003 | 0.0499 | 2.6100e-003 | 0.0525 | 0.0137 | 2.4900e-003 | 0.0162 | | 179.3130 | 179.3130 | 9.9400e-003 | 0.0285 | 188.0508 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0337 | 0.0234 | 0.3175 | 9.2000e-004 | 0.1118 | 6.3000e-004 | 0.1124 | 0.0296 | 5.8000e-004 | 0.0302 | | 93.2166 | 93.2166 | 2.4300e-003 | 2.4000e-003 | 93.9918 |
| **Total** | **0.0394** | **0.3831** | **0.4154** | **2.5500e-003** | **0.1616** | **3.2400e-003** | **0.1649** | **0.0433** | **3.0700e-003** | **0.0464** | | **272.5296** | **272.5296** | **0.0124** | **0.0309** | **282.0426** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.2745 | 0.0000 | 0.2745 | 0.0416 | 0.0000 | 0.0416 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5252 | 5.2809 | 7.5996 | 0.0120 | | 0.1876 | 0.1876 | | 0.1833 | 0.1833 | 0.0000 | 1,148.4055 | 1,148.4055 | 0.2089 | | 1,153.6290 |
| **Total** | **0.5252** | **5.2809** | **7.5996** | **0.0120** | **0.2745** | **0.1876** | **0.4621** | **0.0416** | **0.1833** | **0.2249** | **0.0000** | **1,148.4055** | **1,148.4055** | **0.2089** | | **1,153.6290** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 5.7300e-003 | 0.3597 | 0.0980 | 1.6300e-003 | 0.0499 | 2.6100e-003 | 0.0525 | 0.0137 | 2.4900e-003 | 0.0162 | | 179.3130 | 179.3130 | 9.9400e-003 | 0.0285 | 188.0508 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0337 | 0.0234 | 0.3175 | 9.2000e-004 | 0.1118 | 6.3000e-004 | 0.1124 | 0.0296 | 5.8000e-004 | 0.0302 | | 93.2166 | 93.2166 | 2.4300e-003 | 2.4000e-003 | 93.9918 |
| **Total** | **0.0394** | **0.3831** | **0.4154** | **2.5500e-003** | **0.1616** | **3.2400e-003** | **0.1649** | **0.0433** | **3.0700e-003** | **0.0464** | | **272.5296** | **272.5296** | **0.0124** | **0.0309** | **282.0426** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.1326 | 0.0000 | 0.1326 | 0.0143 | 0.0000 | 0.0143 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5348 | 6.1887 | 3.9239 | 9.7300e-003 | | 0.2266 | 0.2266 | | 0.2084 | 0.2084 | | 942.4317 | 942.4317 | 0.3048 | | 950.0517 |
| **Total** | **0.5348** | **6.1887** | **3.9239** | **9.7300e-003** | **0.1326** | **0.2266** | **0.3591** | **0.0143** | **0.2084** | **0.2228** | | **942.4317** | **942.4317** | **0.3048** | | **950.0517** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0202 | 0.0141 | 0.1905 | 5.5000e-004 | 0.0671 | 3.8000e-004 | 0.0674 | 0.0178 | 3.5000e-004 | 0.0181 | | 55.9300 | 55.9300 | 1.4600e-003 | 1.4400e-003 | 56.3951 |
| **Total** | **0.0202** | **0.0141** | **0.1905** | **5.5000e-004** | **0.0671** | **3.8000e-004** | **0.0674** | **0.0178** | **3.5000e-004** | **0.0181** | | **55.9300** | **55.9300** | **1.4600e-003** | **1.4400e-003** | **56.3951** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0597 | 0.0000 | 0.0597 | 6.4400e-003 | 0.0000 | 6.4400e-003 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2015 | 3.1515 | 5.8257 | 9.7300e-003 | | 0.0364 | 0.0364 | | 0.0346 | 0.0346 | 0.0000 | 942.4317 | 942.4317 | 0.3048 | | 950.0517 |
| **Total** | **0.2015** | **3.1515** | **5.8257** | **9.7300e-003** | **0.0597** | **0.0364** | **0.0961** | **6.4400e-003** | **0.0346** | **0.0411** | **0.0000** | **942.4317** | **942.4317** | **0.3048** | | **950.0517** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0202 | 0.0141 | 0.1905 | 5.5000e-004 | 0.0671 | 3.8000e-004 | 0.0674 | 0.0178 | 3.5000e-004 | 0.0181 | | 55.9300 | 55.9300 | 1.4600e-003 | 1.4400e-003 | 56.3951 |
| **Total** | **0.0202** | **0.0141** | **0.1905** | **5.5000e-004** | **0.0671** | **3.8000e-004** | **0.0674** | **0.0178** | **3.5000e-004** | **0.0181** | | **55.9300** | **55.9300** | **1.4600e-003** | **1.4400e-003** | **56.3951** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 1.3577 | 0.0000 | 1.3577 | 0.6466 | 0.0000 | 0.6466 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.9335 | 10.1789 | 5.5516 | 0.0141 | | 0.4201 | 0.4201 | | 0.3865 | 0.3865 | | 1,364.7713 | 1,364.7713 | 0.4414 | | 1,375.8062 |
| **Total** | **0.9335** | **10.1789** | **5.5516** | **0.0141** | **1.3577** | **0.4201** | **1.7778** | **0.6466** | **0.3865** | **1.0331** | | **1,364.7713** | **1,364.7713** | **0.4414** | | **1,375.8062** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0659 | 4.1330 | 1.1257 | 0.0187 | 0.5729 | 0.0300 | 0.6028 | 0.1570 | 0.0287 | 0.1857 | | 2,060.5264 | 2,060.5264 | 0.1142 | 0.3274 | 2,160.9347 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0270 | 0.0187 | 0.2540 | 7.4000e-004 | 0.0894 | 5.0000e-004 | 0.0899 | 0.0237 | 4.6000e-004 | 0.0242 | | 74.5733 | 74.5733 | 1.9500e-003 | 1.9200e-003 | 75.1935 |
| **Total** | **0.0928** | **4.1518** | **1.3796** | **0.0195** | **0.6623** | **0.0305** | **0.6927** | **0.1807** | **0.0291** | **0.2099** | | **2,135.0997** | **2,135.0997** | **0.1161** | **0.3293** | **2,236.1282** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.6110 | 0.0000 | 0.6110 | 0.2910 | 0.0000 | 0.2910 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.4718 | 6.0551 | 7.5219 | 0.0141 | | 0.1561 | 0.1561 | | 0.1449 | 0.1449 | 0.0000 | 1,364.7713 | 1,364.7713 | 0.4414 | | 1,375.8062 |
| **Total** | **0.4718** | **6.0551** | **7.5219** | **0.0141** | **0.6110** | **0.1561** | **0.7670** | **0.2910** | **0.1449** | **0.4359** | **0.0000** | **1,364.7713** | **1,364.7713** | **0.4414** | | **1,375.8062** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0659 | 4.1330 | 1.1257 | 0.0187 | 0.5729 | 0.0300 | 0.6028 | 0.1570 | 0.0287 | 0.1857 | | 2,060.5264 | 2,060.5264 | 0.1142 | 0.3274 | 2,160.9347 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0270 | 0.0187 | 0.2540 | 7.4000e-004 | 0.0894 | 5.0000e-004 | 0.0899 | 0.0237 | 4.6000e-004 | 0.0242 | | 74.5733 | 74.5733 | 1.9500e-003 | 1.9200e-003 | 75.1935 |
| **Total** | **0.0928** | **4.1518** | **1.3796** | **0.0195** | **0.6623** | **0.0305** | **0.6927** | **0.1807** | **0.0291** | **0.2099** | | **2,135.0997** | **2,135.0997** | **0.1161** | **0.3293** | **2,236.1282** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6322 | 6.4186 | 7.0970 | 0.0114 | | 0.3203 | 0.3203 | | 0.2946 | 0.2946 | | 1,104.6089 | 1,104.6089 | 0.3573 | | 1,113.5402 |
| **Total** | **0.6322** | **6.4186** | **7.0970** | **0.0114** | | **0.3203** | **0.3203** | | **0.2946** | **0.2946** | | **1,104.6089** | **1,104.6089** | **0.3573** | | **1,113.5402** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.2300e-003 | 0.1524 | 0.0590 | 7.3000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1900e-003 | | 78.5541 | 78.5541 | 2.6200e-003 | 0.0114 | 82.0116 |
| Worker | 0.0270 | 0.0187 | 0.2540 | 7.4000e-004 | 0.0894 | 5.0000e-004 | 0.0899 | 0.0237 | 4.6000e-004 | 0.0242 | | 74.5733 | 74.5733 | 1.9500e-003 | 1.9200e-003 | 75.1935 |
| **Total** | **0.0312** | **0.1711** | **0.3130** | **1.4700e-003** | **0.1150** | **1.3500e-003** | **0.1164** | **0.0311** | **1.2700e-003** | **0.0324** | | **153.1274** | **153.1274** | **4.5700e-003** | **0.0133** | **157.2050** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2857 | 4.5840 | 7.8982 | 0.0114 | | 0.0597 | 0.0597 | | 0.0561 | 0.0561 | 0.0000 | 1,104.6089 | 1,104.6089 | 0.3573 | | 1,113.5402 |
| **Total** | **0.2857** | **4.5840** | **7.8982** | **0.0114** | | **0.0597** | **0.0597** | | **0.0561** | **0.0561** | **0.0000** | **1,104.6089** | **1,104.6089** | **0.3573** | | **1,113.5402** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.2300e-003 | 0.1524 | 0.0590 | 7.3000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1900e-003 | | 78.5541 | 78.5541 | 2.6200e-003 | 0.0114 | 82.0116 |
| Worker | 0.0270 | 0.0187 | 0.2540 | 7.4000e-004 | 0.0894 | 5.0000e-004 | 0.0899 | 0.0237 | 4.6000e-004 | 0.0242 | | 74.5733 | 74.5733 | 1.9500e-003 | 1.9200e-003 | 75.1935 |
| **Total** | **0.0312** | **0.1711** | **0.3130** | **1.4700e-003** | **0.1150** | **1.3500e-003** | **0.1164** | **0.0311** | **1.2700e-003** | **0.0324** | | **153.1274** | **153.1274** | **4.5700e-003** | **0.0133** | **157.2050** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5950 | 5.9739 | 7.0675 | 0.0114 | | 0.2824 | 0.2824 | | 0.2598 | 0.2598 | | 1,104.9834 | 1,104.9834 | 0.3574 | | 1,113.9177 |
| **Total** | **0.5950** | **5.9739** | **7.0675** | **0.0114** | | **0.2824** | **0.2824** | | **0.2598** | **0.2598** | | **1,104.9834** | **1,104.9834** | **0.3574** | | **1,113.9177** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.1200e-003 | 0.1531 | 0.0580 | 7.2000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1900e-003 | | 77.4264 | 77.4264 | 2.6200e-003 | 0.0112 | 80.8398 |
| Worker | 0.0252 | 0.0167 | 0.2366 | 7.2000e-004 | 0.0894 | 4.8000e-004 | 0.0899 | 0.0237 | 4.4000e-004 | 0.0242 | | 72.3961 | 72.3961 | 1.7600e-003 | 1.7800e-003 | 72.9722 |
| **Total** | **0.0294** | **0.1698** | **0.2947** | **1.4400e-003** | **0.1150** | **1.3300e-003** | **0.1164** | **0.0311** | **1.2500e-003** | **0.0324** | | **149.8225** | **149.8225** | **4.3800e-003** | **0.0130** | **153.8120** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2814 | 4.5333 | 7.9007 | 0.0114 | | 0.0542 | 0.0542 | | 0.0512 | 0.0512 | 0.0000 | 1,104.9834 | 1,104.9834 | 0.3574 | | 1,113.9177 |
| **Total** | **0.2814** | **4.5333** | **7.9007** | **0.0114** | | **0.0542** | **0.0542** | | **0.0512** | **0.0512** | **0.0000** | **1,104.9834** | **1,104.9834** | **0.3574** | | **1,113.9177** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.1200e-003 | 0.1531 | 0.0580 | 7.2000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.1000e-004 | 8.1900e-003 | | 77.4264 | 77.4264 | 2.6200e-003 | 0.0112 | 80.8398 |
| Worker | 0.0252 | 0.0167 | 0.2366 | 7.2000e-004 | 0.0894 | 4.8000e-004 | 0.0899 | 0.0237 | 4.4000e-004 | 0.0242 | | 72.3961 | 72.3961 | 1.7600e-003 | 1.7800e-003 | 72.9722 |
| **Total** | **0.0294** | **0.1698** | **0.2947** | **1.4400e-003** | **0.1150** | **1.3300e-003** | **0.1164** | **0.0311** | **1.2500e-003** | **0.0324** | | **149.8225** | **149.8225** | **4.3800e-003** | **0.0130** | **153.8120** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5510 | 5.4820 | 7.0282 | 0.0114 | | 0.2413 | 0.2413 | | 0.2220 | 0.2220 | | 1,105.5711 | 1,105.5711 | 0.3576 | | 1,114.5102 |
| **Total** | **0.5510** | **5.4820** | **7.0282** | **0.0114** | | **0.2413** | **0.2413** | | **0.2220** | **0.2220** | | **1,105.5711** | **1,105.5711** | **0.3576** | | **1,114.5102** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.0300e-003 | 0.1524 | 0.0572 | 7.0000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.2000e-004 | 8.1900e-003 | | 76.0172 | 76.0172 | 2.6300e-003 | 0.0110 | 79.3736 |
| Worker | 0.0237 | 0.0150 | 0.2206 | 6.9000e-004 | 0.0894 | 4.6000e-004 | 0.0899 | 0.0237 | 4.2000e-004 | 0.0241 | | 69.9345 | 69.9345 | 1.5900e-003 | 1.6700e-003 | 70.4716 |
| **Total** | **0.0277** | **0.1674** | **0.2778** | **1.3900e-003** | **0.1150** | **1.3100e-003** | **0.1164** | **0.0311** | **1.2400e-003** | **0.0323** | | **145.9517** | **145.9517** | **4.2200e-003** | **0.0127** | **149.8452** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2746 | 4.4677 | 7.8973 | 0.0114 | | 0.0471 | 0.0471 | | 0.0446 | 0.0446 | 0.0000 | 1,105.5711 | 1,105.5711 | 0.3576 | | 1,114.5102 |
| **Total** | **0.2746** | **4.4677** | **7.8973** | **0.0114** | | **0.0471** | **0.0471** | | **0.0446** | **0.0446** | **0.0000** | **1,105.5711** | **1,105.5711** | **0.3576** | | **1,114.5102** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 4.0300e-003 | 0.1524 | 0.0572 | 7.0000e-004 | 0.0256 | 8.5000e-004 | 0.0265 | 7.3700e-003 | 8.2000e-004 | 8.1900e-003 | | 76.0172 | 76.0172 | 2.6300e-003 | 0.0110 | 79.3736 |
| Worker | 0.0237 | 0.0150 | 0.2206 | 6.9000e-004 | 0.0894 | 4.6000e-004 | 0.0899 | 0.0237 | 4.2000e-004 | 0.0241 | | 69.9345 | 69.9345 | 1.5900e-003 | 1.6700e-003 | 70.4716 |
| **Total** | **0.0277** | **0.1674** | **0.2778** | **1.3900e-003** | **0.1150** | **1.3100e-003** | **0.1164** | **0.0311** | **1.2400e-003** | **0.0323** | | **145.9517** | **145.9517** | **4.2200e-003** | **0.0127** | **149.8452** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5638 | 4.9206 | 7.0257 | 0.0113 | | 0.2186 | 0.2186 | | 0.2046 | 0.2046 | | 1,036.2711 | 1,036.2711 | 0.3019 | | 1,043.8179 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5638** | **4.9206** | **7.0257** | **0.0113** | | **0.2186** | **0.2186** | | **0.2046** | **0.2046** | | **1,036.2711** | **1,036.2711** | **0.3019** | | **1,043.8179** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0533 | 0.0338 | 0.4963 | 1.5600e-003 | 0.2012 | 1.0300e-003 | 0.2022 | 0.0534 | 9.5000e-004 | 0.0543 | | 157.3525 | 157.3525 | 3.5900e-003 | 3.7500e-003 | 158.5610 |
| **Total** | **0.0533** | **0.0338** | **0.4963** | **1.5600e-003** | **0.2012** | **1.0300e-003** | **0.2022** | **0.0534** | **9.5000e-004** | **0.0543** | | **157.3525** | **157.3525** | **3.5900e-003** | **3.7500e-003** | **158.5610** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.1790 | 3.9959 | 6.8743 | 0.0113 | | 0.0274 | 0.0274 | | 0.0263 | 0.0263 | 0.0000 | 1,036.2711 | 1,036.2711 | 0.3019 | | 1,043.8179 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.1790** | **3.9959** | **6.8743** | **0.0113** | | **0.0274** | **0.0274** | | **0.0263** | **0.0263** | **0.0000** | **1,036.2711** | **1,036.2711** | **0.3019** | | **1,043.8179** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0533 | 0.0338 | 0.4963 | 1.5600e-003 | 0.2012 | 1.0300e-003 | 0.2022 | 0.0534 | 9.5000e-004 | 0.0543 | | 157.3525 | 157.3525 | 3.5900e-003 | 3.7500e-003 | 158.5610 |
| **Total** | **0.0533** | **0.0338** | **0.4963** | **1.5600e-003** | **0.2012** | **1.0300e-003** | **0.2022** | **0.0534** | **9.5000e-004** | **0.0543** | | **157.3525** | **157.3525** | **3.5900e-003** | **3.7500e-003** | **158.5610** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 9.8410 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **10.0119** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9300e-003 | 3.7600e-003 | 0.0551 | 1.7000e-004 | 0.0224 | 1.1000e-004 | 0.0225 | 5.9300e-003 | 1.1000e-004 | 6.0300e-003 | | 17.4836 | 17.4836 | 4.0000e-004 | 4.2000e-004 | 17.6179 |
| **Total** | **5.9300e-003** | **3.7600e-003** | **0.0551** | **1.7000e-004** | **0.0224** | **1.1000e-004** | **0.0225** | **5.9300e-003** | **1.1000e-004** | **6.0300e-003** | | **17.4836** | **17.4836** | **4.0000e-004** | **4.2000e-004** | **17.6179** |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 9.8410 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0545 | 1.0598 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **9.8955** | **1.0598** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9300e-003 | 3.7600e-003 | 0.0551 | 1.7000e-004 | 0.0224 | 1.1000e-004 | 0.0225 | 5.9300e-003 | 1.1000e-004 | 6.0300e-003 | | 17.4836 | 17.4836 | 4.0000e-004 | 4.2000e-004 | 17.6179 |
| **Total** | **5.9300e-003** | **3.7600e-003** | **0.0551** | **1.7000e-004** | **0.0224** | **1.1000e-004** | **0.0225** | **5.9300e-003** | **1.1000e-004** | **6.0300e-003** | | **17.4836** | **17.4836** | **4.0000e-004** | **4.2000e-004** | **17.6179** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.6873 | 0.8126 | 7.1148 | 0.0166 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,695.8838 | 1,695.8838 | 0.1073 | 0.0736 | 1,720.4839 |
| Unmitigated | 0.6873 | 0.8126 | 7.1148 | 0.0166 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,695.8838 | 1,695.8838 | 0.1073 | 0.0736 | 1,720.4839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Hospital | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |
| Total | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Hospital | 16.60 | 8.40 | 6.90 | 64.90 | 16.10 | 19.00 | 73 | 25 | 2 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hospital | 0.540893 | 0.062748 | 0.186142 | 0.127785 | 0.023768 | 0.006610 | 0.012333 | 0.009205 | 0.000817 | 0.000491 | 0.024860 | 0.000754 | 0.003594 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| NaturalGas Unmitigated | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Hospital | 3921.74 | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| **Total** | | **0.0423** | **0.3845** | **0.3230** | **2.3100e-003** | | **0.0292** | **0.0292** | | **0.0292** | **0.0292** | | **461.3807** | **461.3807** | **8.8400e-003** | **8.4600e-003** | **464.1224** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Hospital | 3.92174 | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| **Total** | | **0.0423** | **0.3845** | **0.3230** | **2.3100e-003** | | **0.0292** | **0.0292** | | **0.0292** | **0.0292** | | **461.3807** | **461.3807** | **8.8400e-003** | **8.4600e-003** | **464.1224** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Unmitigated | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |

Kaiser Baldwin Park - Emergency Room - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0566 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.4414 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.1000e-004 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| **Total** | **0.4982** | **2.0000e-005** | **2.2700e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | | **4.8800e-003** | **4.8800e-003** | **1.0000e-005** | | **5.2000e-003** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0566 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.4414 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.1000e-004 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| **Total** | **0.4982** | **2.0000e-005** | **2.2700e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | | **4.8800e-003** | **4.8800e-003** | **1.0000e-005** | | **5.2000e-003** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Medical Office Building

**South Coast AQMD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Medical Office Building | 33.00 | 1000sqft | 0.76 | 33,000.00 | 0 |
| Parking Lot | 80.00 | Space | 0.72 | 32,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2030 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific information.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults. Length adjusted to match contractor's projections.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Demolition - Basded on existing buildings onsite.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Trip rates calculated from traffic report.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | FuelType | Diesel | Electrical |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 8.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 200.00 | 350.00 |
| tblConstructionPhase | NumDays | 4.00 | 7.00 |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 2.00 | 4.00 |
| tblConstructionPhase | PhaseEndDate | 4/12/2029 | 12/7/2029 |
| tblConstructionPhase | PhaseEndDate | 3/15/2029 | 10/18/2029 |
| tblConstructionPhase | PhaseEndDate | 6/8/2028 | 6/15/2028 |
| tblConstructionPhase | PhaseEndDate | 3/29/2029 | 11/13/2029 |
| tblConstructionPhase | PhaseEndDate | 6/2/2028 | 6/6/2028 |
| tblConstructionPhase | PhaseStartDate | 3/30/2029 | 11/14/2029 |
| tblConstructionPhase | PhaseStartDate | 6/9/2028 | 6/16/2028 |
| tblConstructionPhase | PhaseStartDate | 6/3/2028 | 6/7/2028 |
| tblConstructionPhase | PhaseStartDate | 3/16/2029 | 10/19/2029 |
| tblGrading | AcresOfGrading | 7.00 | 4.00 |
| tblGrading | AcresOfGrading | 2.81 | 1.88 |
| tblTripsAndVMT | VendorTripNumber | 11.00 | 12.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 14.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.57 | 31.85 |
| tblVehicleTrips | SU_TR | 1.42 | 31.85 |
| tblVehicleTrips | WD_TR | 34.80 | 31.85 |

## 2.0 Emissions Summary

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2028 | 0.1044 | 0.8329 | 0.9729 | 1.9400e-003 | 0.0566 | 0.0305 | 0.0871 | 0.0229 | 0.0293 | 0.0522 | 0.0000 | 164.0326 | 164.0326 | 0.0247 | 2.2900e-003 | 165.3314 |
| 2029 | 0.3105 | 1.1965 | 1.4738 | 2.8700e-003 | 0.0374 | 0.0441 | 0.0815 | 0.0101 | 0.0424 | 0.0525 | 0.0000 | 242.0827 | 242.0827 | 0.0356 | 3.3400e-003 | 243.9662 |
| **Maximum** | **0.3105** | **1.1965** | **1.4738** | **2.8700e-003** | **0.0566** | **0.0441** | **0.0871** | **0.0229** | **0.0424** | **0.0525** | **0.0000** | **242.0827** | **242.0827** | **0.0356** | **3.3400e-003** | **243.9662** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2028 | 0.0257 | 0.4197 | 0.7491 | 1.4000e-003 | 0.0389 | 1.9500e-003 | 0.0409 | 0.0139 | 1.9400e-003 | 0.0159 | 0.0000 | 124.2238 | 124.2238 | 0.0209 | 2.2900e-003 | 125.4280 |
| 2029 | 0.1960 | 0.6345 | 1.1228 | 2.0700e-003 | 0.0374 | 2.8600e-003 | 0.0403 | 0.0101 | 2.8400e-003 | 0.0130 | 0.0000 | 183.0753 | 183.0753 | 0.0300 | 3.3400e-003 | 184.8187 |
| **Maximum** | **0.1960** | **0.6345** | **1.1228** | **2.0700e-003** | **0.0389** | **2.8600e-003** | **0.0409** | **0.0139** | **2.8400e-003** | **0.0159** | **0.0000** | **183.0753** | **183.0753** | **0.0300** | **3.3400e-003** | **184.8187** |

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## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 46.56 | 48.05 | 23.49 | 27.86 | 18.80 | 93.55 | 51.87 | 27.12 | 93.34 | 72.47 | 0.00 | 24.33 | 24.33 | 15.59 | 0.00 | 24.20 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 6-1-2028 | 8-31-2028 | 0.4061 | 0.1930 |
| 2 | 9-1-2028 | 11-30-2028 | 0.3992 | 0.1893 |
| 3 | 12-1-2028 | 2-28-2029 | 0.3949 | 0.1873 |
| 4 | 3-1-2029 | 5-31-2029 | 0.4030 | 0.1908 |
| 5 | 6-1-2029 | 8-31-2029 | 0.4027 | 0.1905 |
| 6 | 9-1-2029 | 9-30-2029 | 0.1313 | 0.0621 |
| | | Highest | 0.4061 | 0.1930 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.1372 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| Energy | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 93.2973 | 93.2973 | 6.6900e-003 | 1.1000e-003 | 93.7928 |
| Mobile | 0.3943 | 0.4116 | 3.7509 | 8.2400e-003 | 1.0265 | 5.4500e-003 | 1.0320 | 0.2740 | 5.0800e-003 | 0.2791 | 0.0000 | 763.0303 | 763.0303 | 0.0523 | 0.0354 | 774.8723 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 72.3460 | 0.0000 | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.3137 | 11.1162 | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| **Total** | **0.5333** | **0.4282** | **3.7664** | **8.3400e-003** | **1.0265** | **6.7300e-003** | **1.0332** | **0.2740** | **6.3600e-003** | **0.2803** | **73.6597** | **867.4466** | **941.1062** | **4.4704** | **0.0398** | **1,064.7121** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.1372 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| Energy | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 93.2973 | 93.2973 | 6.6900e-003 | 1.1000e-003 | 93.7928 |
| Mobile | 0.3943 | 0.4116 | 3.7509 | 8.2400e-003 | 1.0265 | 5.4500e-003 | 1.0320 | 0.2740 | 5.0800e-003 | 0.2791 | 0.0000 | 763.0303 | 763.0303 | 0.0523 | 0.0354 | 774.8723 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 72.3460 | 0.0000 | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.3137 | 11.1162 | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| **Total** | **0.5333** | **0.4282** | **3.7664** | **8.3400e-003** | **1.0265** | **6.7300e-003** | **1.0332** | **0.2740** | **6.3600e-003** | **0.2803** | **73.6597** | **867.4466** | **941.1062** | **4.4704** | **0.0398** | **1,064.7121** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 6/1/2028 | 6/6/2028 | 5 | 4 | |
| 2 | Grading | Grading | 6/7/2028 | 6/15/2028 | 5 | 7 | |
| 3 | Building Construction | Building Construction | 6/16/2028 | 10/18/2029 | 5 | 350 | |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | Paving | Paving | 10/19/2029 | 11/13/2029 | 5 | 18 | |
| 5 | Architectural Coating | Architectural Coating | 11/14/2029 | 12/7/2029 | 5 | 18 | |

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0.72**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,500; Non-Residential Outdoor: 16,500; Striped Parking Area: 1,920 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 4 | 10.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 24.00 | 12.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 14.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 6.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

## 3.2 Site Preparation - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 8.9000e-003 | 0.0000 | 8.9000e-003 | 4.4500e-003 | 0.0000 | 4.4500e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.0200e-003 | 0.0212 | 0.0129 | 3.0000e-005 | | 8.4000e-004 | 8.4000e-004 | | 7.7000e-004 | 7.7000e-004 | 0.0000 | 3.0225 | 3.0225 | 9.8000e-004 | 0.0000 | 3.0470 |
| **Total** | **2.0200e-003** | **0.0212** | **0.0129** | **3.0000e-005** | **8.9000e-003** | **8.4000e-004** | **9.7400e-003** | **4.4500e-003** | **7.7000e-004** | **5.2200e-003** | **0.0000** | **3.0225** | **3.0225** | **9.8000e-004** | **0.0000** | **3.0470** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.0000e-005 | 2.0000e-005 | 3.8000e-004 | 0.0000 | 1.8000e-004 | 0.0000 | 1.8000e-004 | 5.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.1183 | 0.1183 | 0.0000 | 0.0000 | 0.1191 |
| **Total** | **4.0000e-005** | **2.0000e-005** | **3.8000e-004** | **0.0000** | **1.8000e-004** | **0.0000** | **1.8000e-004** | **5.0000e-005** | **0.0000** | **5.0000e-005** | **0.0000** | **0.1183** | **0.1183** | **0.0000** | **0.0000** | **0.1191** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 4.0100e-003 | 0.0000 | 4.0100e-003 | 2.0000e-003 | 0.0000 | 2.0000e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 6.0000e-004 | 0.0101 | 0.0196 | 3.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | 0.0000 | 3.0225 | 3.0225 | 9.8000e-004 | 0.0000 | 3.0470 |
| **Total** | **6.0000e-004** | **0.0101** | **0.0196** | **3.0000e-005** | **4.0100e-003** | **6.0000e-005** | **4.0700e-003** | **2.0000e-003** | **6.0000e-005** | **2.0600e-003** | **0.0000** | **3.0225** | **3.0225** | **9.8000e-004** | **0.0000** | **3.0470** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.0000e-005 | 2.0000e-005 | 3.8000e-004 | 0.0000 | 1.8000e-004 | 0.0000 | 1.8000e-004 | 5.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.1183 | 0.1183 | 0.0000 | 0.0000 | 0.1191 |
| **Total** | **4.0000e-005** | **2.0000e-005** | **3.8000e-004** | **0.0000** | **1.8000e-004** | **0.0000** | **1.8000e-004** | **5.0000e-005** | **0.0000** | **5.0000e-005** | **0.0000** | **0.1183** | **0.1183** | **0.0000** | **0.0000** | **0.1191** |

## 3.3 Grading - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0232 | 0.0000 | 0.0232 | 0.0118 | 0.0000 | 0.0118 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.1700e-003 | 0.0435 | 0.0297 | 7.0000e-005 | | 1.7400e-003 | 1.7400e-003 | | 1.6000e-003 | 1.6000e-003 | 0.0000 | 6.3370 | 6.3370 | 2.0500e-003 | 0.0000 | 6.3882 |
| **Total** | **4.1700e-003** | **0.0435** | **0.0297** | **7.0000e-005** | **0.0232** | **1.7400e-003** | **0.0249** | **0.0118** | **1.6000e-003** | **0.0134** | **0.0000** | **6.3370** | **6.3370** | **2.0500e-003** | **0.0000** | **6.3882** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.0000e-005 | 5.0000e-005 | 8.4000e-004 | 0.0000 | 3.8000e-004 | 0.0000 | 3.9000e-004 | 1.0000e-004 | 0.0000 | 1.0000e-004 | 0.0000 | 0.2587 | 0.2587 | 0.0000 | 1.0000e-005 | 0.2605 |
| **Total** | **8.0000e-005** | **5.0000e-005** | **8.4000e-004** | **0.0000** | **3.8000e-004** | **0.0000** | **3.9000e-004** | **1.0000e-004** | **0.0000** | **1.0000e-004** | **0.0000** | **0.2587** | **0.2587** | **0.0000** | **1.0000e-005** | **0.2605** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0104 | 0.0000 | 0.0104 | 5.3200e-003 | 0.0000 | 5.3200e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.2900e-003 | 0.0223 | 0.0425 | 7.0000e-005 | | 1.2000e-004 | 1.2000e-004 | | 1.2000e-004 | 1.2000e-004 | 0.0000 | 6.3369 | 6.3369 | 2.0500e-003 | 0.0000 | 6.3882 |
| **Total** | **1.2900e-003** | **0.0223** | **0.0425** | **7.0000e-005** | **0.0104** | **1.2000e-004** | **0.0106** | **5.3200e-003** | **1.2000e-004** | **5.4400e-003** | **0.0000** | **6.3369** | **6.3369** | **2.0500e-003** | **0.0000** | **6.3882** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.0000e-005 | 5.0000e-005 | 8.4000e-004 | 0.0000 | 3.8000e-004 | 0.0000 | 3.9000e-004 | 1.0000e-004 | 0.0000 | 1.0000e-004 | 0.0000 | 0.2587 | 0.2587 | 0.0000 | 1.0000e-005 | 0.2605 |
| **Total** | **8.0000e-005** | **5.0000e-005** | **8.4000e-004** | **0.0000** | **3.8000e-004** | **0.0000** | **3.9000e-004** | **1.0000e-004** | **0.0000** | **1.0000e-004** | **0.0000** | **0.2587** | **0.2587** | **0.0000** | **1.0000e-005** | **0.2605** |

## 3.4 Building Construction - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0934 | 0.7341 | 0.8770 | 1.5600e-003 | | 0.0277 | 0.0277 | | 0.0267 | 0.0267 | 0.0000 | 128.0507 | 128.0507 | 0.0209 | 0.0000 | 128.5734 |
| **Total** | **0.0934** | **0.7341** | **0.8770** | **1.5600e-003** | | **0.0277** | **0.0277** | | **0.0267** | **0.0267** | **0.0000** | **128.0507** | **128.0507** | **0.0209** | **0.0000** | **128.5734** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 8.3000e-004 | 0.0316 | 0.0115 | 1.4000e-004 | 5.3400e-003 | 1.8000e-004 | 5.5100e-003 | 1.5400e-003 | 1.7000e-004 | 1.7100e-003 | 0.0000 | 13.7400 | 13.7400 | 5.1000e-004 | 2.0000e-003 | 14.3491 |
| Worker | 3.8900e-003 | 2.4900e-003 | 0.0405 | 1.4000e-004 | 0.0186 | 8.0000e-005 | 0.0186 | 4.9300e-003 | 7.0000e-005 | 5.0000e-003 | 0.0000 | 12.5054 | 12.5054 | 2.3000e-004 | 2.8000e-004 | 12.5941 |
| **Total** | **4.7200e-003** | **0.0341** | **0.0520** | **2.8000e-004** | **0.0239** | **2.6000e-004** | **0.0242** | **6.4700e-003** | **2.4000e-004** | **6.7100e-003** | **0.0000** | **26.2454** | **26.2454** | **7.4000e-004** | **2.2800e-003** | **26.9432** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0190 | 0.3531 | 0.6337 | 1.0100e-003 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 88.2419 | 88.2419 | 0.0171 | 0.0000 | 88.6701 |
| **Total** | **0.0190** | **0.3531** | **0.6337** | **1.0100e-003** | | **1.5200e-003** | **1.5200e-003** | | **1.5200e-003** | **1.5200e-003** | **0.0000** | **88.2419** | **88.2419** | **0.0171** | **0.0000** | **88.6701** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 8.3000e-004 | 0.0316 | 0.0115 | 1.4000e-004 | 5.3400e-003 | 1.8000e-004 | 5.5100e-003 | 1.5400e-003 | 1.7000e-004 | 1.7100e-003 | 0.0000 | 13.7400 | 13.7400 | 5.1000e-004 | 2.0000e-003 | 14.3491 |
| Worker | 3.8900e-003 | 2.4900e-003 | 0.0405 | 1.4000e-004 | 0.0186 | 8.0000e-005 | 0.0186 | 4.9300e-003 | 7.0000e-005 | 5.0000e-003 | 0.0000 | 12.5054 | 12.5054 | 2.3000e-004 | 2.8000e-004 | 12.5941 |
| **Total** | **4.7200e-003** | **0.0341** | **0.0520** | **2.8000e-004** | **0.0239** | **2.6000e-004** | **0.0242** | **6.4700e-003** | **2.4000e-004** | **6.7100e-003** | **0.0000** | **26.2454** | **26.2454** | **7.4000e-004** | **2.2800e-003** | **26.9432** |

## 3.4 Building Construction - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1384 | 1.0881 | 1.2999 | 2.3100e-003 | | 0.0410 | 0.0410 | | 0.0396 | 0.0396 | 0.0000 | 189.8057 | 189.8057 | 0.0310 | 0.0000 | 190.5804 |
| **Total** | **0.1384** | **1.0881** | **1.2999** | **2.3100e-003** | | **0.0410** | **0.0410** | | **0.0396** | **0.0396** | **0.0000** | **189.8057** | **189.8057** | **0.0310** | **0.0000** | **190.5804** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.2100e-003 | 0.0465 | 0.0170 | 2.0000e-004 | 7.9100e-003 | 2.6000e-004 | 8.1700e-003 | 2.2800e-003 | 2.5000e-004 | 2.5300e-003 | 0.0000 | 19.9805 | 19.9805 | 7.5000e-004 | 2.9100e-003 | 20.8672 |
| Worker | 5.4400e-003 | 3.4100e-003 | 0.0573 | 2.0000e-004 | 0.0275 | 1.1000e-004 | 0.0276 | 7.3100e-003 | 1.0000e-004 | 7.4100e-003 | 0.0000 | 18.1032 | 18.1032 | 3.2000e-004 | 4.0000e-004 | 18.2291 |
| **Total** | **6.6500e-003** | **0.0499** | **0.0743** | **4.0000e-004** | **0.0354** | **3.7000e-004** | **0.0358** | **9.5900e-003** | **3.5000e-004** | **9.9400e-003** | **0.0000** | **38.0837** | **38.0837** | **1.0700e-003** | **3.3100e-003** | **39.0963** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0282 | 0.5234 | 0.9393 | 1.5000e-003 | | 2.2500e-003 | 2.2500e-003 | | 2.2500e-003 | 2.2500e-003 | 0.0000 | 130.7983 | 130.7983 | 0.0254 | 0.0000 | 131.4329 |
| **Total** | **0.0282** | **0.5234** | **0.9393** | **1.5000e-003** | | **2.2500e-003** | **2.2500e-003** | | **2.2500e-003** | **2.2500e-003** | **0.0000** | **130.7983** | **130.7983** | **0.0254** | **0.0000** | **131.4329** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.2100e-003 | 0.0465 | 0.0170 | 2.0000e-004 | 7.9100e-003 | 2.6000e-004 | 8.1700e-003 | 2.2800e-003 | 2.5000e-004 | 2.5300e-003 | 0.0000 | 19.9805 | 19.9805 | 7.5000e-004 | 2.9100e-003 | 20.8672 |
| Worker | 5.4400e-003 | 3.4100e-003 | 0.0573 | 2.0000e-004 | 0.0275 | 1.1000e-004 | 0.0276 | 7.3100e-003 | 1.0000e-004 | 7.4100e-003 | 0.0000 | 18.1032 | 18.1032 | 3.2000e-004 | 4.0000e-004 | 18.2291 |
| **Total** | **6.6500e-003** | **0.0499** | **0.0743** | **4.0000e-004** | **0.0354** | **3.7000e-004** | **0.0358** | **9.5900e-003** | **3.5000e-004** | **9.9400e-003** | **0.0000** | **38.0837** | **38.0837** | **1.0700e-003** | **3.3100e-003** | **39.0963** |

## 3.5 Paving - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 5.1600e-003 | 0.0479 | 0.0792 | 1.2000e-004 | | 2.2200e-003 | 2.2200e-003 | | 2.0500e-003 | 2.0500e-003 | 0.0000 | 10.5962 | 10.5962 | 3.3600e-003 | 0.0000 | 10.6802 |
| Paving | 9.4000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.1000e-003** | **0.0479** | **0.0792** | **1.2000e-004** | | **2.2200e-003** | **2.2200e-003** | | **2.0500e-003** | **2.0500e-003** | **0.0000** | **10.5962** | **10.5962** | **3.3600e-003** | **0.0000** | **10.6802** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.7000e-004 | 1.7000e-004 | 2.8800e-003 | 1.0000e-005 | 1.3800e-003 | 1.0000e-005 | 1.3900e-003 | 3.7000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 0.9095 | 0.9095 | 2.0000e-005 | 2.0000e-005 | 0.9158 |
| **Total** | **2.7000e-004** | **1.7000e-004** | **2.8800e-003** | **1.0000e-005** | **1.3800e-003** | **1.0000e-005** | **1.3900e-003** | **3.7000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **0.9095** | **0.9095** | **2.0000e-005** | **2.0000e-005** | **0.9158** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.9300e-003 | 0.0514 | 0.0887 | 1.2000e-004 | | 1.9000e-004 | 1.9000e-004 | | 1.9000e-004 | 1.9000e-004 | 0.0000 | 10.5962 | 10.5962 | 3.3600e-003 | 0.0000 | 10.6801 |
| Paving | 9.4000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **2.8700e-003** | **0.0514** | **0.0887** | **1.2000e-004** | | **1.9000e-004** | **1.9000e-004** | | **1.9000e-004** | **1.9000e-004** | **0.0000** | **10.5962** | **10.5962** | **3.3600e-003** | **0.0000** | **10.6801** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.7000e-004 | 1.7000e-004 | 2.8800e-003 | 1.0000e-005 | 1.3800e-003 | 1.0000e-005 | 1.3900e-003 | 3.7000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 0.9095 | 0.9095 | 2.0000e-005 | 2.0000e-005 | 0.9158 |
| **Total** | **2.7000e-004** | **1.7000e-004** | **2.8800e-003** | **1.0000e-005** | **1.3800e-003** | **1.0000e-005** | **1.3900e-003** | **3.7000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **0.9095** | **0.9095** | **2.0000e-005** | **2.0000e-005** | **0.9158** |

## 3.6 Architectural Coating - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1574 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.5400e-003 | 0.0103 | 0.0163 | 3.0000e-005 | | 4.6000e-004 | 4.6000e-004 | | 4.6000e-004 | 4.6000e-004 | 0.0000 | 2.2979 | 2.2979 | 1.3000e-004 | 0.0000 | 2.3011 |
| **Total** | **0.1589** | **0.0103** | **0.0163** | **3.0000e-005** | | **4.6000e-004** | **4.6000e-004** | | **4.6000e-004** | **4.6000e-004** | **0.0000** | **2.2979** | **2.2979** | **1.3000e-004** | **0.0000** | **2.3011** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2000e-004 | 7.0000e-005 | 1.2300e-003 | 0.0000 | 5.9000e-004 | 0.0000 | 5.9000e-004 | 1.6000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 0.3898 | 0.3898 | 1.0000e-005 | 1.0000e-005 | 0.3925 |
| **Total** | **1.2000e-004** | **7.0000e-005** | **1.2300e-003** | **0.0000** | **5.9000e-004** | **0.0000** | **5.9000e-004** | **1.6000e-004** | **0.0000** | **1.6000e-004** | **0.0000** | **0.3898** | **0.3898** | **1.0000e-005** | **1.0000e-005** | **0.3925** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1574 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.9000e-004 | 9.5400e-003 | 0.0165 | 3.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | 0.0000 | 2.2979 | 2.2979 | 1.3000e-004 | 0.0000 | 2.3011 |
| **Total** | **0.1579** | **9.5400e-003** | **0.0165** | **3.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | **0.0000** | **2.2979** | **2.2979** | **1.3000e-004** | **0.0000** | **2.3011** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

### 3.6 Architectural Coating - 2029

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2000e-004 | 7.0000e-005 | 1.2300e-003 | 0.0000 | 5.9000e-004 | 0.0000 | 5.9000e-004 | 1.6000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 0.3898 | 0.3898 | 1.0000e-005 | 1.0000e-005 | 0.3925 |
| **Total** | **1.2000e-004** | **7.0000e-005** | **1.2300e-003** | **0.0000** | **5.9000e-004** | **0.0000** | **5.9000e-004** | **1.6000e-004** | **0.0000** | **1.6000e-004** | **0.0000** | **0.3898** | **0.3898** | **1.0000e-005** | **1.0000e-005** | **0.3925** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.3943 | 0.4116 | 3.7509 | 8.2400e-003 | 1.0265 | 5.4500e-003 | 1.0320 | 0.2740 | 5.0800e-003 | 0.2791 | 0.0000 | 763.0303 | 763.0303 | 0.0523 | 0.0354 | 774.8723 |
| Unmitigated | 0.3943 | 0.4116 | 3.7509 | 8.2400e-003 | 1.0265 | 5.4500e-003 | 1.0320 | 0.2740 | 5.0800e-003 | 0.2791 | 0.0000 | 763.0303 | 763.0303 | 0.0523 | 0.0354 | 774.8723 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Medical Office Building | 1,051.05 | 1,051.05 | 1051.05 | 2,726,275 | 2,726,275 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,051.05 | 1,051.05 | 1,051.05 | 2,726,275 | 2,726,275 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Medical Office Building | 16.60 | 8.40 | 6.90 | 29.60 | 51.40 | 19.00 | 60 | 30 | 10 |
| Parking Lot | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Medical Office Building | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |
| Parking Lot | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |

# 5.0 Energy Detail

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 75.1413 | 75.1413 | 6.3400e-003 | 7.7000e-004 | 75.5290 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 75.1413 | 75.1413 | 6.3400e-003 | 7.7000e-004 | 75.5290 |
| NaturalGas Mitigated | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 18.1560 | 18.1560 | 3.5000e-004 | 3.3000e-004 | 18.2639 |
| NaturalGas Unmitigated | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 18.1560 | 18.1560 | 3.5000e-004 | 3.3000e-004 | 18.2639 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Medical Office Building | 340230 | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 18.1560 | 18.1560 | 3.5000e-004 | 3.3000e-004 | 18.2639 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.8300e-003** | **0.0167** | **0.0140** | **1.0000e-004** | | **1.2700e-003** | **1.2700e-003** | | **1.2700e-003** | **1.2700e-003** | **0.0000** | **18.1560** | **18.1560** | **3.5000e-004** | **3.3000e-004** | **18.2639** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Medical Office Building | 340230 | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 18.1560 | 18.1560 | 3.5000e-004 | 3.3000e-004 | 18.2639 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.8300e-003** | **0.0167** | **0.0140** | **1.0000e-004** | | **1.2700e-003** | **1.2700e-003** | | **1.2700e-003** | **1.2700e-003** | **0.0000** | **18.1560** | **18.1560** | **3.5000e-004** | **3.3000e-004** | **18.2639** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Medical Office Building | 412500 | 73.1550 | 6.1700e-003 | 7.5000e-004 | 73.5324 |
| Parking Lot | 11200 | 1.9863 | 1.7000e-004 | 2.0000e-005 | 1.9965 |
| **Total** | | **75.1413** | **6.3400e-003** | **7.7000e-004** | **75.5290** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Medical Office Building | 412500 | 73.1550 | 6.1700e-003 | 7.5000e-004 | 73.5324 |
| Parking Lot | 11200 | 1.9863 | 1.7000e-004 | 2.0000e-005 | 1.9965 |
| **Total** | | **75.1413** | **6.3400e-003** | **7.7000e-004** | **75.5290** |

## 6.0 Area Detail

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.1372 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| Unmitigated | 0.1372 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0157 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.1213 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.3000e-004 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| **Total** | **0.1372** | **1.0000e-005** | **1.4300e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | **0.0000** | **2.8000e-003** | **2.8000e-003** | **1.0000e-005** | **0.0000** | **2.9900e-003** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0157 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.1213 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.3000e-004 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| **Total** | **0.1372** | **1.0000e-005** | **1.4300e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | **0.0000** | **2.8000e-003** | **2.8000e-003** | **1.0000e-005** | **0.0000** | **2.9900e-003** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| Unmitigated | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Medical Office Building | 4.14086 / 0.788735 | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **12.4299** | **0.1359** | **3.3000e-003** | **16.8099** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Medical Office Building | 4.14086 / 0.788735 | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **12.4299** | **0.1359** | **3.3000e-003** | **16.8099** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Unmitigated | 72.3460 | 4.2755 | 0.0000 | 179.2341 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Medical Office Building | 356.4 | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **72.3460** | **4.2755** | **0.0000** | **179.2341** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Medical Office Building | 356.4 | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **72.3460** | **4.2755** | **0.0000** | **179.2341** |

## 9.0 Operational Offroad

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Medical Office Building

**South Coast AQMD Air District, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Medical Office Building | 33.00 | 1000sqft | 0.76 | 33,000.00 | 0 |
| Parking Lot | 80.00 | Space | 0.72 | 32,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2030 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific information.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults. Length adjusted to match contractor's projections.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Demolition - Basded on existing buildings onsite.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Trip rates calculated from traffic report.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | FuelType | Diesel | Electrical |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 8.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 200.00 | 350.00 |
| tblConstructionPhase | NumDays | 4.00 | 7.00 |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 2.00 | 4.00 |
| tblConstructionPhase | PhaseEndDate | 4/12/2029 | 12/7/2029 |
| tblConstructionPhase | PhaseEndDate | 3/15/2029 | 10/18/2029 |
| tblConstructionPhase | PhaseEndDate | 6/8/2028 | 6/15/2028 |
| tblConstructionPhase | PhaseEndDate | 3/29/2029 | 11/13/2029 |
| tblConstructionPhase | PhaseEndDate | 6/2/2028 | 6/6/2028 |
| tblConstructionPhase | PhaseStartDate | 3/30/2029 | 11/14/2029 |
| tblConstructionPhase | PhaseStartDate | 6/9/2028 | 6/16/2028 |
| tblConstructionPhase | PhaseStartDate | 6/3/2028 | 6/7/2028 |
| tblConstructionPhase | PhaseStartDate | 3/16/2029 | 10/19/2029 |
| tblGrading | AcresOfGrading | 7.00 | 4.00 |
| tblGrading | AcresOfGrading | 2.81 | 1.88 |
| tblTripsAndVMT | VendorTripNumber | 11.00 | 12.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 14.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.57 | 31.85 |
| tblVehicleTrips | SU_TR | 1.42 | 31.85 |
| tblVehicleTrips | WD_TR | 34.80 | 31.85 |

## 2.0 Emissions Summary

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 1.3928 | 12.4374 | 13.2169 | 0.0261 | 6.7399 | 0.4965 | 7.2364 | 3.4053 | 0.4568 | 3.8621 | 0.0000 | 2,421.2345 | 2,421.2345 | 0.6470 | 0.0353 | 2,440.2121 |
| 2029 | 17.6735 | 10.8659 | 13.1881 | 0.0260 | 0.3451 | 0.3961 | 0.7412 | 0.0933 | 0.3819 | 0.4752 | 0.0000 | 2,412.3923 | 2,412.3923 | 0.4134 | 0.0346 | 2,431.1455 |
| **Maximum** | **17.6735** | **12.4374** | **13.2169** | **0.0261** | **6.7399** | **0.4965** | **7.2364** | **3.4053** | **0.4568** | **3.8621** | **0.0000** | **2,421.2345** | **2,421.2345** | **0.6470** | **0.0353** | **2,440.2121** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 0.3928 | 6.3760 | 12.4018 | 0.0215 | 3.0944 | 0.0341 | 3.1285 | 1.5487 | 0.0341 | 1.5828 | 0.0000 | 2,080.9738 | 2,080.9738 | 0.6470 | 0.0353 | 2,097.6503 |
| 2029 | 17.5571 | 5.7304 | 10.1945 | 0.0183 | 0.3451 | 0.0251 | 0.3702 | 0.0933 | 0.0249 | 0.1182 | 0.0000 | 1,789.9591 | 1,789.9591 | 0.4134 | 0.0346 | 1,807.2337 |
| **Maximum** | **17.5571** | **6.3760** | **12.4018** | **0.0215** | **3.0944** | **0.0341** | **3.1285** | **1.5487** | **0.0341** | **1.5828** | **0.0000** | **2,080.9738** | **2,080.9738** | **0.6470** | **0.0353** | **2,097.6503** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 5.86 | 48.05 | 14.42 | 23.61 | 51.45 | 93.37 | 56.14 | 53.07 | 92.97 | 60.78 | 0.00 | 19.92 | 19.92 | 0.00 | 0.00 | 19.84 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Energy | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Mobile | 2.3017 | 2.0854 | 20.8385 | 0.0469 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0279 | 1.5591 | | 4,789.4446 | 4,789.4446 | 0.3087 | 0.2055 | 4,858.3971 |
| **Total** | **3.0638** | **2.1769** | **20.9267** | **0.0475** | **5.7452** | **0.0370** | **5.7822** | **1.5311** | **0.0349** | **1.5661** | | **4,899.1325** | **4,899.1325** | **0.3109** | **0.2075** | **4,968.7382** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Energy | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Mobile | 2.3017 | 2.0854 | 20.8385 | 0.0469 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0279 | 1.5591 | | 4,789.4446 | 4,789.4446 | 0.3087 | 0.2055 | 4,858.3971 |
| **Total** | **3.0638** | **2.1769** | **20.9267** | **0.0475** | **5.7452** | **0.0370** | **5.7822** | **1.5311** | **0.0349** | **1.5661** | | **4,899.1325** | **4,899.1325** | **0.3109** | **0.2075** | **4,968.7382** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 6/1/2028 | 6/6/2028 | 5 | 4 | |
| 2 | Grading | Grading | 6/7/2028 | 6/15/2028 | 5 | 7 | |
| 3 | Building Construction | Building Construction | 6/16/2028 | 10/18/2029 | 5 | 350 | |
| 4 | Paving | Paving | 10/19/2029 | 11/13/2029 | 5 | 18 | |
| 5 | Architectural Coating | Architectural Coating | 11/14/2029 | 12/7/2029 | 5 | 18 | |

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0.72**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,500; Non-Residential Outdoor: 16,500; Striped Parking Area: 1,920 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 4 | 10.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 24.00 | 12.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 14.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 6.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 4.4504 | 0.0000 | 4.4504 | 2.2262 | 0.0000 | 2.2262 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.0103 | 10.5940 | 6.4468 | 0.0172 | | 0.4192 | 0.4192 | | 0.3857 | 0.3857 | | 1,665.8856 | 1,665.8856 | 0.5388 | | 1,679.3551 |
| **Total** | **1.0103** | **10.5940** | **6.4468** | **0.0172** | **4.4504** | **0.4192** | **4.8697** | **2.2262** | **0.3857** | **2.6118** | | **1,665.8856** | **1,665.8856** | **0.5388** | | **1,679.3551** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0187 | 0.0105 | 0.2054 | 6.7000e-004 | 0.0894 | 3.8000e-004 | 0.0898 | 0.0237 | 3.5000e-004 | 0.0241 | | 68.1410 | 68.1410 | 1.2000e-003 | 1.3500e-003 | 68.5727 |
| **Total** | **0.0187** | **0.0105** | **0.2054** | **6.7000e-004** | **0.0894** | **3.8000e-004** | **0.0898** | **0.0237** | **3.5000e-004** | **0.0241** | | **68.1410** | **68.1410** | **1.2000e-003** | **1.3500e-003** | **68.5727** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.0027 | 0.0000 | 2.0027 | 1.0018 | 0.0000 | 1.0018 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2998 | 5.0659 | 9.8221 | 0.0172 | | 0.0281 | 0.0281 | | 0.0281 | 0.0281 | 0.0000 | 1,665.8856 | 1,665.8856 | 0.5388 | | 1,679.3551 |
| **Total** | **0.2998** | **5.0659** | **9.8221** | **0.0172** | **2.0027** | **0.0281** | **2.0308** | **1.0018** | **0.0281** | **1.0299** | **0.0000** | **1,665.8856** | **1,665.8856** | **0.5388** | | **1,679.3551** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0187 | 0.0105 | 0.2054 | 6.7000e-004 | 0.0894 | 3.8000e-004 | 0.0898 | 0.0237 | 3.5000e-004 | 0.0241 | | 68.1410 | 68.1410 | 1.2000e-003 | 1.3500e-003 | 68.5727 |
| **Total** | **0.0187** | **0.0105** | **0.2054** | **6.7000e-004** | **0.0894** | **3.8000e-004** | **0.0898** | **0.0237** | **3.5000e-004** | **0.0241** | | **68.1410** | **68.1410** | **1.2000e-003** | **1.3500e-003** | **68.5727** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.6281 | 0.0000 | 6.6281 | 3.3757 | 0.0000 | 3.3757 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.1904 | 12.4243 | 8.4937 | 0.0206 | | 0.4961 | 0.4961 | | 0.4564 | 0.4564 | | 1,995.7975 | 1,995.7975 | 0.6455 | | 2,011.9345 |
| **Total** | **1.1904** | **12.4243** | **8.4937** | **0.0206** | **6.6281** | **0.4961** | **7.1242** | **3.3757** | **0.4564** | **3.8320** | | **1,995.7975** | **1,995.7975** | **0.6455** | | **2,011.9345** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0234 | 0.0132 | 0.2568 | 8.4000e-004 | 0.1118 | 4.7000e-004 | 0.1123 | 0.0296 | 4.4000e-004 | 0.0301 | | 85.1763 | 85.1763 | 1.5000e-003 | 1.6800e-003 | 85.7158 |
| **Total** | **0.0234** | **0.0132** | **0.2568** | **8.4000e-004** | **0.1118** | **4.7000e-004** | **0.1123** | **0.0296** | **4.4000e-004** | **0.0301** | | **85.1763** | **85.1763** | **1.5000e-003** | **1.6800e-003** | **85.7158** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.9826 | 0.0000 | 2.9826 | 1.5191 | 0.0000 | 1.5191 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.3694 | 6.3628 | 12.1450 | 0.0206 | | 0.0336 | 0.0336 | | 0.0336 | 0.0336 | 0.0000 | 1,995.7975 | 1,995.7975 | 0.6455 | | 2,011.9345 |
| **Total** | **0.3694** | **6.3628** | **12.1450** | **0.0206** | **2.9826** | **0.0336** | **3.0163** | **1.5191** | **0.0336** | **1.5527** | **0.0000** | **1,995.7975** | **1,995.7975** | **0.6455** | | **2,011.9345** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0234 | 0.0132 | 0.2568 | 8.4000e-004 | 0.1118 | 4.7000e-004 | 0.1123 | 0.0296 | 4.4000e-004 | 0.0301 | | 85.1763 | 85.1763 | 1.5000e-003 | 1.6800e-003 | 85.7158 |
| **Total** | **0.0234** | **0.0132** | **0.2568** | **8.4000e-004** | **0.1118** | **4.7000e-004** | **0.1123** | **0.0296** | **4.4000e-004** | **0.0301** | | **85.1763** | **85.1763** | **1.5000e-003** | **1.6800e-003** | **85.7158** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3246 | 10.4128 | 12.4393 | 0.0221 | | 0.3925 | 0.3925 | | 0.3785 | 0.3785 | | 2,002.1524 | 2,002.1524 | 0.3269 | | 2,010.3248 |
| **Total** | **1.3246** | **10.4128** | **12.4393** | **0.0221** | | **0.3925** | **0.3925** | | **0.3785** | **0.3785** | | **2,002.1524** | **2,002.1524** | **0.3269** | | **2,010.3248** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0120 | 0.4266 | 0.1613 | 1.9900e-003 | 0.0768 | 2.5200e-003 | 0.0794 | 0.0221 | 2.4100e-003 | 0.0245 | | 214.6590 | 214.6590 | 7.9500e-003 | 0.0313 | 224.1693 |
| Worker | 0.0562 | 0.0316 | 0.6163 | 2.0200e-003 | 0.2683 | 1.1400e-003 | 0.2694 | 0.0711 | 1.0500e-003 | 0.0722 | | 204.4231 | 204.4231 | 3.5900e-003 | 4.0400e-003 | 205.7180 |
| **Total** | **0.0682** | **0.4582** | **0.7776** | **4.0100e-003** | **0.3451** | **3.6600e-003** | **0.3488** | **0.0933** | **3.4600e-003** | **0.0967** | | **419.0821** | **419.0821** | **0.0115** | **0.0353** | **429.8873** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2696 | 5.0090 | 8.9880 | 0.0144 | | 0.0215 | 0.0215 | | 0.0215 | 0.0215 | 0.0000 | 1,379.7193 | 1,379.7193 | 0.2678 | | 1,386.4130 |
| **Total** | **0.2696** | **5.0090** | **8.9880** | **0.0144** | | **0.0215** | **0.0215** | | **0.0215** | **0.0215** | **0.0000** | **1,379.7193** | **1,379.7193** | **0.2678** | | **1,386.4130** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0120 | 0.4266 | 0.1613 | 1.9900e-003 | 0.0768 | 2.5200e-003 | 0.0794 | 0.0221 | 2.4100e-003 | 0.0245 | | 214.6590 | 214.6590 | 7.9500e-003 | 0.0313 | 224.1693 |
| Worker | 0.0562 | 0.0316 | 0.6163 | 2.0200e-003 | 0.2683 | 1.1400e-003 | 0.2694 | 0.0711 | 1.0500e-003 | 0.0722 | | 204.4231 | 204.4231 | 3.5900e-003 | 4.0400e-003 | 205.7180 |
| **Total** | **0.0682** | **0.4582** | **0.7776** | **4.0100e-003** | **0.3451** | **3.6600e-003** | **0.3488** | **0.0933** | **3.4600e-003** | **0.0967** | | **419.0821** | **419.0821** | **0.0115** | **0.0353** | **429.8873** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3246 | 10.4128 | 12.4393 | 0.0221 | | 0.3925 | 0.3925 | | 0.3785 | 0.3785 | | 2,002.1524 | 2,002.1524 | 0.3269 | | 2,010.3248 |
| **Total** | **1.3246** | **10.4128** | **12.4393** | **0.0221** | | **0.3925** | **0.3925** | | **0.3785** | **0.3785** | | **2,002.1524** | **2,002.1524** | **0.3269** | | **2,010.3248** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0119 | 0.4238 | 0.1603 | 1.9500e-003 | 0.0768 | 2.5100e-003 | 0.0794 | 0.0221 | 2.4000e-003 | 0.0245 | | 210.5898 | 210.5898 | 7.9700e-003 | 0.0307 | 219.9306 |
| Worker | 0.0530 | 0.0293 | 0.5885 | 1.9800e-003 | 0.2683 | 1.0600e-003 | 0.2693 | 0.0711 | 9.8000e-004 | 0.0721 | | 199.6501 | 199.6501 | 3.3100e-003 | 3.8800e-003 | 200.8902 |
| **Total** | **0.0649** | **0.4531** | **0.7488** | **3.9300e-003** | **0.3451** | **3.5700e-003** | **0.3487** | **0.0933** | **3.3800e-003** | **0.0966** | | **410.2399** | **410.2399** | **0.0113** | **0.0346** | **420.8207** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2696 | 5.0090 | 8.9880 | 0.0144 | | 0.0215 | 0.0215 | | 0.0215 | 0.0215 | 0.0000 | 1,379.7193 | 1,379.7193 | 0.2678 | | 1,386.4130 |
| **Total** | **0.2696** | **5.0090** | **8.9880** | **0.0144** | | **0.0215** | **0.0215** | | **0.0215** | **0.0215** | **0.0000** | **1,379.7193** | **1,379.7193** | **0.2678** | | **1,386.4130** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0119 | 0.4238 | 0.1603 | 1.9500e-003 | 0.0768 | 2.5100e-003 | 0.0794 | 0.0221 | 2.4000e-003 | 0.0245 | | 210.5898 | 210.5898 | 7.9700e-003 | 0.0307 | 219.9306 |
| Worker | 0.0530 | 0.0293 | 0.5885 | 1.9800e-003 | 0.2683 | 1.0600e-003 | 0.2693 | 0.0711 | 9.8000e-004 | 0.0721 | | 199.6501 | 199.6501 | 3.3100e-003 | 3.8800e-003 | 200.8902 |
| **Total** | **0.0649** | **0.4531** | **0.7488** | **3.9300e-003** | **0.3451** | **3.5700e-003** | **0.3487** | **0.0933** | **3.3800e-003** | **0.0966** | | **410.2399** | **410.2399** | **0.0113** | **0.0346** | **420.8207** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5732 | 5.3259 | 8.7951 | 0.0136 | | 0.2465 | 0.2465 | | 0.2276 | 0.2276 | | 1,297.8096 | 1,297.8096 | 0.4114 | | 1,308.0951 |
| Paving | 0.1048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.6780** | **5.3259** | **8.7951** | **0.0136** | | **0.2465** | **0.2465** | | **0.2276** | **0.2276** | | **1,297.8096** | **1,297.8096** | **0.4114** | | **1,308.0951** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0309 | 0.0171 | 0.3433 | 1.1500e-003 | 0.1565 | 6.2000e-004 | 0.1571 | 0.0415 | 5.7000e-004 | 0.0421 | | 116.4626 | 116.4626 | 1.9300e-003 | 2.2700e-003 | 117.1859 |
| **Total** | **0.0309** | **0.0171** | **0.3433** | **1.1500e-003** | **0.1565** | **6.2000e-004** | **0.1571** | **0.0415** | **5.7000e-004** | **0.0421** | | **116.4626** | **116.4626** | **1.9300e-003** | **2.2700e-003** | **117.1859** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2149 | 5.7133 | 9.8512 | 0.0136 | | 0.0213 | 0.0213 | | 0.0213 | 0.0213 | 0.0000 | 1,297.8096 | 1,297.8096 | 0.4114 | | 1,308.0951 |
| Paving | 0.1048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.3197** | **5.7133** | **9.8512** | **0.0136** | | **0.0213** | **0.0213** | | **0.0213** | **0.0213** | **0.0000** | **1,297.8096** | **1,297.8096** | **0.4114** | | **1,308.0951** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0309 | 0.0171 | 0.3433 | 1.1500e-003 | 0.1565 | 6.2000e-004 | 0.1571 | 0.0415 | 5.7000e-004 | 0.0421 | | 116.4626 | 116.4626 | 1.9300e-003 | 2.2700e-003 | 117.1859 |
| **Total** | **0.0309** | **0.0171** | **0.3433** | **1.1500e-003** | **0.1565** | **6.2000e-004** | **0.1571** | **0.0415** | **5.7000e-004** | **0.0421** | | **116.4626** | **116.4626** | **1.9300e-003** | **2.2700e-003** | **117.1859** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 17.4894 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **17.6603** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0133 | 7.3200e-003 | 0.1471 | 4.9000e-004 | 0.0671 | 2.6000e-004 | 0.0673 | 0.0178 | 2.4000e-004 | 0.0180 | | 49.9125 | 49.9125 | 8.3000e-004 | 9.7000e-004 | 50.2225 |
| **Total** | **0.0133** | **7.3200e-003** | **0.1471** | **4.9000e-004** | **0.0671** | **2.6000e-004** | **0.0673** | **0.0178** | **2.4000e-004** | **0.0180** | | **49.9125** | **49.9125** | **8.3000e-004** | **9.7000e-004** | **50.2225** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 17.4894 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0545 | 1.0598 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **17.5439** | **1.0598** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0133 | 7.3200e-003 | 0.1471 | 4.9000e-004 | 0.0671 | 2.6000e-004 | 0.0673 | 0.0178 | 2.4000e-004 | 0.0180 | | 49.9125 | 49.9125 | 8.3000e-004 | 9.7000e-004 | 50.2225 |
| **Total** | **0.0133** | **7.3200e-003** | **0.1471** | **4.9000e-004** | **0.0671** | **2.6000e-004** | **0.0673** | **0.0178** | **2.4000e-004** | **0.0180** | | **49.9125** | **49.9125** | **8.3000e-004** | **9.7000e-004** | **50.2225** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.3017 | 2.0854 | 20.8385 | 0.0469 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0279 | 1.5591 | | 4,789.4446 | 4,789.4446 | 0.3087 | 0.2055 | 4,858.3971 |
| Unmitigated | 2.3017 | 2.0854 | 20.8385 | 0.0469 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0279 | 1.5591 | | 4,789.4446 | 4,789.4446 | 0.3087 | 0.2055 | 4,858.3971 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Medical Office Building | 1,051.05 | 1,051.05 | 1051.05 | 2,726,275 | 2,726,275 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,051.05 | 1,051.05 | 1,051.05 | 2,726,275 | 2,726,275 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Medical Office Building | 16.60 | 8.40 | 6.90 | 29.60 | 51.40 | 19.00 | 60 | 30 | 10 |
| Parking Lot | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Medical Office Building | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |
| Parking Lot | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| NaturalGas Unmitigated | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Medical Office Building | 932.137 | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0101** | **0.0914** | **0.0768** | **5.5000e-004** | | **6.9500e-003** | **6.9500e-003** | | **6.9500e-003** | **6.9500e-003** | | **109.6632** | **109.6632** | **2.1000e-003** | **2.0100e-003** | **110.3149** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Medical Office Building | 0.932137 | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0101** | **0.0914** | **0.0768** | **5.5000e-004** | | **6.9500e-003** | **6.9500e-003** | | **6.9500e-003** | **6.9500e-003** | | **109.6632** | **109.6632** | **2.1000e-003** | **2.0100e-003** | **110.3149** |

## 6.0 Area Detail

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Unmitigated | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0863 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.0500e-003 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| **Total** | **0.7520** | **1.0000e-004** | **0.0115** | **0.0000** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **0.0247** | **0.0247** | **6.0000e-005** | | **0.0263** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0863 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.0500e-003 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| **Total** | **0.7520** | **1.0000e-004** | **0.0115** | **0.0000** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **0.0247** | **0.0247** | **6.0000e-005** | | **0.0263** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Medical Office Building

**South Coast AQMD Air District, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Medical Office Building | 33.00 | 1000sqft | 0.76 | 33,000.00 | 0 |
| Parking Lot | 80.00 | Space | 0.72 | 32,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2030 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific information.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults. Length adjusted to match contractor's projections.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Demolition - Basded on existing buildings onsite.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Trip rates calculated from traffic report.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | FuelType | Diesel | Electrical |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 8.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 200.00 | 350.00 |
| tblConstructionPhase | NumDays | 4.00 | 7.00 |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 2.00 | 4.00 |
| tblGrading | AcresOfGrading | 7.00 | 4.00 |
| tblGrading | AcresOfGrading | 3.75 | 1.88 |
| tblTripsAndVMT | VendorTripNumber | 11.00 | 12.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 14.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |
| tblVehicleTrips | ST_TR | 8.57 | 31.85 |
| tblVehicleTrips | SU_TR | 1.42 | 31.85 |
| tblVehicleTrips | WD_TR | 34.80 | 31.85 |

## 2.0 Emissions Summary

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 1.3962 | 12.4387 | 13.1649 | 0.0260 | 6.7399 | 0.4965 | 7.2364 | 3.4053 | 0.4568 | 3.8621 | 0.0000 | 2,409.8266 | 2,409.8266 | 0.6470 | 0.0356 | 2,428.9005 |
| 2029 | 17.6745 | 10.8898 | 13.1387 | 0.0259 | 0.3451 | 0.3961 | 0.7412 | 0.0933 | 0.3819 | 0.4752 | 0.0000 | 2,401.2524 | 2,401.2524 | 0.4134 | 0.0349 | 2,420.0982 |
| **Maximum** | **17.6745** | **12.4387** | **13.1649** | **0.0260** | **6.7399** | **0.4965** | **7.2364** | **3.4053** | **0.4568** | **3.8621** | **0.0000** | **2,409.8266** | **2,409.8266** | **0.6470** | **0.0356** | **2,428.9005** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 0.3131 | 5.5002 | 13.2624 | 0.0214 | 3.0944 | 3.1500e-003 | 2.9389 | 1.5487 | 4.8900e-003 | 1.4093 | 0.0000 | 2,076.0474 | 2,076.0474 | 0.6470 | 0.0356 | 2,092.7544 |
| 2029 | 17.5581 | 5.7437 | 10.2300 | 0.0182 | 0.3451 | 4.2300e-003 | 0.3482 | 0.0933 | 4.8100e-003 | 0.0981 | 0.0000 | 1,778.8192 | 1,778.8192 | 0.4134 | 0.0349 | 1,796.1864 |
| **Maximum** | **17.5581** | **5.7437** | **13.2624** | **0.0214** | **3.0944** | **4.2300e-003** | **2.9389** | **1.5487** | **4.8900e-003** | **1.4093** | **0.0000** | **2,076.0474** | **2,076.0474** | **0.6470** | **0.0356** | **2,092.7544** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 6.29 | 51.80 | 10.69 | 23.60 | 51.45 | 99.17 | 58.80 | 53.07 | 98.84 | 65.25 | 0.00 | 19.88 | 19.88 | 0.00 | 0.00 | 19.80 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Energy | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Mobile | 2.1992 | 2.2401 | 20.4519 | 0.0448 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0280 | 1.5591 | | 4,573.8519 | 4,573.8519 | 0.3184 | 0.2132 | 4,645.3489 |
| **Total** | **2.9613** | **2.3315** | **20.5401** | **0.0454** | **5.7452** | **0.0370** | **5.7822** | **1.5311** | **0.0349** | **1.5661** | | **4,683.5398** | **4,683.5398** | **0.3206** | **0.2152** | **4,755.6901** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Energy | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Mobile | 2.1992 | 2.2401 | 20.4519 | 0.0448 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0280 | 1.5591 | | 4,573.8519 | 4,573.8519 | 0.3184 | 0.2132 | 4,645.3489 |
| **Total** | **2.9613** | **2.3315** | **20.5401** | **0.0454** | **5.7452** | **0.0370** | **5.7822** | **1.5311** | **0.0349** | **1.5661** | | **4,683.5398** | **4,683.5398** | **0.3206** | **0.2152** | **4,755.6901** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 6/1/2028 | 6/6/2028 | 5 | 4 | |
| 2 | Grading | Grading | 6/7/2028 | 6/15/2028 | 5 | 7 | |
| 3 | Building Construction | Building Construction | 6/16/2028 | 10/18/2029 | 5 | 350 | |
| 4 | Paving | Paving | 10/19/2029 | 11/13/2029 | 5 | 18 | |
| 5 | Architectural Coating | Architectural Coating | 11/14/2029 | 12/7/2029 | 5 | 18 | |

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0.72**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,500; Non-Residential Outdoor: 16,500; Striped Parking Area: 1,920 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 4 | 10.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 24.00 | 12.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 14.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 6.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 5.7678 | 0.0000 | 5.7678 | 2.9503 | 0.0000 | 2.9503 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.0103 | 10.5940 | 6.4468 | 0.0172 | | 0.4192 | 0.4192 | | 0.3857 | 0.3857 | | 1,665.8856 | 1,665.8856 | 0.5388 | | 1,679.3551 |
| **Total** | **1.0103** | **10.5940** | **6.4468** | **0.0172** | **5.7678** | **0.4192** | **6.1870** | **2.9503** | **0.3857** | **3.3360** | | **1,665.8856** | **1,665.8856** | **0.5388** | | **1,679.3551** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0201 | 0.0115 | 0.1864 | 6.4000e-004 | 0.0894 | 3.8000e-004 | 0.0898 | 0.0237 | 3.5000e-004 | 0.0241 | | 64.2000 | 64.2000 | 1.2200e-003 | 1.4300e-003 | 64.6559 |
| **Total** | **0.0201** | **0.0115** | **0.1864** | **6.4000e-004** | **0.0894** | **3.8000e-004** | **0.0898** | **0.0237** | **3.5000e-004** | **0.0241** | | **64.2000** | **64.2000** | **1.2200e-003** | **1.4300e-003** | **64.6559** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.5955 | 0.0000 | 2.5955 | 1.3276 | 0.0000 | 1.3276 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0397 | 3.1599 | 10.5602 | 0.0172 | | -0.1222 | -0.1222 | | -0.1094 | -0.1094 | 0.0000 | 1,665.8856 | 1,665.8856 | 0.5388 | | 1,679.3551 |
| **Total** | **0.0397** | **3.1599** | **10.5602** | **0.0172** | **2.5955** | **-0.1222** | **2.4733** | **1.3276** | **-0.1094** | **1.2182** | **0.0000** | **1,665.8856** | **1,665.8856** | **0.5388** | | **1,679.3551** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0201 | 0.0115 | 0.1864 | 6.4000e-004 | 0.0894 | 3.8000e-004 | 0.0898 | 0.0237 | 3.5000e-004 | 0.0241 | | 64.2000 | 64.2000 | 1.2200e-003 | 1.4300e-003 | 64.6559 |
| **Total** | **0.0201** | **0.0115** | **0.1864** | **6.4000e-004** | **0.0894** | **3.8000e-004** | **0.0898** | **0.0237** | **3.5000e-004** | **0.0241** | | **64.2000** | **64.2000** | **1.2200e-003** | **1.4300e-003** | **64.6559** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.6281 | 0.0000 | 6.6281 | 3.3757 | 0.0000 | 3.3757 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.1904 | 12.4243 | 8.4937 | 0.0206 | | 0.4961 | 0.4961 | | 0.4564 | 0.4564 | | 1,995.7975 | 1,995.7975 | 0.6455 | | 2,011.9345 |
| **Total** | **1.1904** | **12.4243** | **8.4937** | **0.0206** | **6.6281** | **0.4961** | **7.1242** | **3.3757** | **0.4564** | **3.8320** | | **1,995.7975** | **1,995.7975** | **0.6455** | | **2,011.9345** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0251 | 0.0144 | 0.2329 | 7.9000e-004 | 0.1118 | 4.7000e-004 | 0.1123 | 0.0296 | 4.4000e-004 | 0.0301 | | 80.2499 | 80.2499 | 1.5300e-003 | 1.7800e-003 | 80.8199 |
| **Total** | **0.0251** | **0.0144** | **0.2329** | **7.9000e-004** | **0.1118** | **4.7000e-004** | **0.1123** | **0.0296** | **4.4000e-004** | **0.0301** | | **80.2499** | **80.2499** | **1.5300e-003** | **1.7800e-003** | **80.8199** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.9826 | 0.0000 | 2.9826 | 1.5191 | 0.0000 | 1.5191 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0495 | 4.1916 | 13.0295 | 0.0206 | | -0.1560 | -0.1560 | | -0.1398 | -0.1398 | 0.0000 | 1,995.7975 | 1,995.7975 | 0.6455 | | 2,011.9345 |
| **Total** | **0.0495** | **4.1916** | **13.0295** | **0.0206** | **2.9826** | **-0.1560** | **2.8267** | **1.5191** | **-0.1398** | **1.3792** | **0.0000** | **1,995.7975** | **1,995.7975** | **0.6455** | | **2,011.9345** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0251 | 0.0144 | 0.2329 | 7.9000e-004 | 0.1118 | 4.7000e-004 | 0.1123 | 0.0296 | 4.4000e-004 | 0.0301 | | 80.2499 | 80.2499 | 1.5300e-003 | 1.7800e-003 | 80.8199 |
| **Total** | **0.0251** | **0.0144** | **0.2329** | **7.9000e-004** | **0.1118** | **4.7000e-004** | **0.1123** | **0.0296** | **4.4000e-004** | **0.0301** | | **80.2499** | **80.2499** | **1.5300e-003** | **1.7800e-003** | **80.8199** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3246 | 10.4128 | 12.4393 | 0.0221 | | 0.3925 | 0.3925 | | 0.3785 | 0.3785 | | 2,002.1524 | 2,002.1524 | 0.3269 | | 2,010.3248 |
| **Total** | **1.3246** | **10.4128** | **12.4393** | **0.0221** | | **0.3925** | **0.3925** | | **0.3785** | **0.3785** | | **2,002.1524** | **2,002.1524** | **0.3269** | | **2,010.3248** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0114 | 0.4479 | 0.1665 | 1.9900e-003 | 0.0768 | 2.5300e-003 | 0.0794 | 0.0221 | 2.4200e-003 | 0.0246 | | 215.0744 | 215.0744 | 7.9100e-003 | 0.0313 | 224.6080 |
| Worker | 0.0602 | 0.0345 | 0.5590 | 1.9100e-003 | 0.2683 | 1.1400e-003 | 0.2694 | 0.0711 | 1.0500e-003 | 0.0722 | | 192.5998 | 192.5998 | 3.6600e-003 | 4.2800e-003 | 193.9677 |
| **Total** | **0.0716** | **0.4824** | **0.7255** | **3.9000e-003** | **0.3451** | **3.6700e-003** | **0.3488** | **0.0933** | **3.4700e-003** | **0.0967** | | **407.6742** | **407.6742** | **0.0116** | **0.0356** | **418.5757** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2415 | 5.0178 | 9.0386 | 0.0144 | | -0.0005 | -0.0005 | | 1.4200e-003 | 1.4200e-003 | 0.0000 | 1,379.7193 | 1,379.7193 | 0.2678 | | 1,386.4130 |
| **Total** | **0.2415** | **5.0178** | **9.0386** | **0.0144** | | **-0.0005** | **-0.0005** | | **1.4200e-003** | **1.4200e-003** | **0.0000** | **1,379.7193** | **1,379.7193** | **0.2678** | | **1,386.4130** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0114 | 0.4479 | 0.1665 | 1.9900e-003 | 0.0768 | 2.5300e-003 | 0.0794 | 0.0221 | 2.4200e-003 | 0.0246 | | 215.0744 | 215.0744 | 7.9100e-003 | 0.0313 | 224.6080 |
| Worker | 0.0602 | 0.0345 | 0.5590 | 1.9100e-003 | 0.2683 | 1.1400e-003 | 0.2694 | 0.0711 | 1.0500e-003 | 0.0722 | | 192.5998 | 192.5998 | 3.6600e-003 | 4.2800e-003 | 193.9677 |
| **Total** | **0.0716** | **0.4824** | **0.7255** | **3.9000e-003** | **0.3451** | **3.6700e-003** | **0.3488** | **0.0933** | **3.4700e-003** | **0.0967** | | **407.6742** | **407.6742** | **0.0116** | **0.0356** | **418.5757** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3246 | 10.4128 | 12.4393 | 0.0221 | | 0.3925 | 0.3925 | | 0.3785 | 0.3785 | | 2,002.1524 | 2,002.1524 | 0.3269 | | 2,010.3248 |
| **Total** | **1.3246** | **10.4128** | **12.4393** | **0.0221** | | **0.3925** | **0.3925** | | **0.3785** | **0.3785** | | **2,002.1524** | **2,002.1524** | **0.3269** | | **2,010.3248** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0112 | 0.4450 | 0.1655 | 1.9500e-003 | 0.0768 | 2.5200e-003 | 0.0794 | 0.0221 | 2.4100e-003 | 0.0245 | | 211.0012 | 211.0012 | 7.9300e-003 | 0.0308 | 220.3648 |
| Worker | 0.0569 | 0.0320 | 0.5339 | 1.8600e-003 | 0.2683 | 1.0600e-003 | 0.2693 | 0.0711 | 9.8000e-004 | 0.0721 | | 188.0988 | 188.0988 | 3.3800e-003 | 4.1100e-003 | 189.4086 |
| **Total** | **0.0681** | **0.4770** | **0.6993** | **3.8100e-003** | **0.3451** | **3.5800e-003** | **0.3487** | **0.0933** | **3.3900e-003** | **0.0967** | | **399.0999** | **399.0999** | **0.0113** | **0.0349** | **409.7734** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2415 | 5.0178 | 9.0386 | 0.0144 | | -0.0005 | -0.0005 | | 1.4200e-003 | 1.4200e-003 | 0.0000 | 1,379.7193 | 1,379.7193 | 0.2678 | | 1,386.4130 |
| **Total** | **0.2415** | **5.0178** | **9.0386** | **0.0144** | | **-0.0005** | **-0.0005** | | **1.4200e-003** | **1.4200e-003** | **0.0000** | **1,379.7193** | **1,379.7193** | **0.2678** | | **1,386.4130** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0112 | 0.4450 | 0.1655 | 1.9500e-003 | 0.0768 | 2.5200e-003 | 0.0794 | 0.0221 | 2.4100e-003 | 0.0245 | | 211.0012 | 211.0012 | 7.9300e-003 | 0.0308 | 220.3648 |
| Worker | 0.0569 | 0.0320 | 0.5339 | 1.8600e-003 | 0.2683 | 1.0600e-003 | 0.2693 | 0.0711 | 9.8000e-004 | 0.0721 | | 188.0988 | 188.0988 | 3.3800e-003 | 4.1100e-003 | 189.4086 |
| **Total** | **0.0681** | **0.4770** | **0.6993** | **3.8100e-003** | **0.3451** | **3.5800e-003** | **0.3487** | **0.0933** | **3.3900e-003** | **0.0967** | | **399.0999** | **399.0999** | **0.0113** | **0.0349** | **409.7734** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5732 | 5.3259 | 8.7951 | 0.0136 | | 0.2465 | 0.2465 | | 0.2276 | 0.2276 | | 1,297.8096 | 1,297.8096 | 0.4114 | | 1,308.0951 |
| Paving | 0.1048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.6780** | **5.3259** | **8.7951** | **0.0136** | | **0.2465** | **0.2465** | | **0.2276** | **0.2276** | | **1,297.8096** | **1,297.8096** | **0.4114** | | **1,308.0951** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0332 | 0.0186 | 0.3114 | 1.0900e-003 | 0.1565 | 6.2000e-004 | 0.1571 | 0.0415 | 5.7000e-004 | 0.0421 | | 109.7243 | 109.7243 | 1.9700e-003 | 2.4000e-003 | 110.4884 |
| **Total** | **0.0332** | **0.0186** | **0.3114** | **1.0900e-003** | **0.1565** | **6.2000e-004** | **0.1571** | **0.0415** | **5.7000e-004** | **0.0421** | | **109.7243** | **109.7243** | **1.9700e-003** | **2.4000e-003** | **110.4884** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.1774 | 5.7250 | 9.9186 | 0.0136 | | -0.0081 | -0.0081 | | -0.0055 | -0.0055 | 0.0000 | 1,297.8096 | 1,297.8096 | 0.4114 | | 1,308.0951 |
| Paving | 0.1048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.2822** | **5.7250** | **9.9186** | **0.0136** | | **-0.0081** | **-0.0081** | | **-0.0055** | **-0.0055** | **0.0000** | **1,297.8096** | **1,297.8096** | **0.4114** | | **1,308.0951** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0332 | 0.0186 | 0.3114 | 1.0900e-003 | 0.1565 | 6.2000e-004 | 0.1571 | 0.0415 | 5.7000e-004 | 0.0421 | | 109.7243 | 109.7243 | 1.9700e-003 | 2.4000e-003 | 110.4884 |
| **Total** | **0.0332** | **0.0186** | **0.3114** | **1.0900e-003** | **0.1565** | **6.2000e-004** | **0.1571** | **0.0415** | **5.7000e-004** | **0.0421** | | **109.7243** | **109.7243** | **1.9700e-003** | **2.4000e-003** | **110.4884** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 17.4894 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **17.6603** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0142 | 7.9900e-003 | 0.1335 | 4.7000e-004 | 0.0671 | 2.6000e-004 | 0.0673 | 0.0178 | 2.4000e-004 | 0.0180 | | 47.0247 | 47.0247 | 8.5000e-004 | 1.0300e-003 | 47.3522 |
| **Total** | **0.0142** | **7.9900e-003** | **0.1335** | **4.7000e-004** | **0.0671** | **2.6000e-004** | **0.0673** | **0.0178** | **2.4000e-004** | **0.0180** | | **47.0247** | **47.0247** | **8.5000e-004** | **1.0300e-003** | **47.3522** |

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 17.4894 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0545 | 1.0598 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **17.5439** | **1.0598** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0142 | 7.9900e-003 | 0.1335 | 4.7000e-004 | 0.0671 | 2.6000e-004 | 0.0673 | 0.0178 | 2.4000e-004 | 0.0180 | | 47.0247 | 47.0247 | 8.5000e-004 | 1.0300e-003 | 47.3522 |
| **Total** | **0.0142** | **7.9900e-003** | **0.1335** | **4.7000e-004** | **0.0671** | **2.6000e-004** | **0.0673** | **0.0178** | **2.4000e-004** | **0.0180** | | **47.0247** | **47.0247** | **8.5000e-004** | **1.0300e-003** | **47.3522** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.1992 | 2.2401 | 20.4519 | 0.0448 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0280 | 1.5591 | | 4,573.8519 | 4,573.8519 | 0.3184 | 0.2132 | 4,645.3489 |
| Unmitigated | 2.1992 | 2.2401 | 20.4519 | 0.0448 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0280 | 1.5591 | | 4,573.8519 | 4,573.8519 | 0.3184 | 0.2132 | 4,645.3489 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Medical Office Building | 1,051.05 | 1,051.05 | 1051.05 | 2,726,275 | 2,726,275 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,051.05 | 1,051.05 | 1,051.05 | 2,726,275 | 2,726,275 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Medical Office Building | 16.60 | 8.40 | 6.90 | 29.60 | 51.40 | 19.00 | 60 | 30 | 10 |
| Parking Lot | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Medical Office Building | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |
| Parking Lot | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| NaturalGas Unmitigated | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Medical Office Building | 932.137 | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0101** | **0.0914** | **0.0768** | **5.5000e-004** | | **6.9500e-003** | **6.9500e-003** | | **6.9500e-003** | **6.9500e-003** | | **109.6632** | **109.6632** | **2.1000e-003** | **2.0100e-003** | **110.3149** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Medical Office Building | 0.932137 | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0101** | **0.0914** | **0.0768** | **5.5000e-004** | | **6.9500e-003** | **6.9500e-003** | | **6.9500e-003** | **6.9500e-003** | | **109.6632** | **109.6632** | **2.1000e-003** | **2.0100e-003** | **110.3149** |

## 6.0 Area Detail

Kaiser Baldwin Park - Medical Office Building - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Unmitigated | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0863 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.0500e-003 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| **Total** | **0.7520** | **1.0000e-004** | **0.0115** | **0.0000** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **0.0247** | **0.0247** | **6.0000e-005** | | **0.0263** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0863 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.0500e-003 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| **Total** | **0.7520** | **1.0000e-004** | **0.0115** | **0.0000** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **0.0247** | **0.0247** | **6.0000e-005** | | **0.0263** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Emergency Room LST

**South Coast AQMD Air District, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 22.29 | 1000sqft | 0.51 | 22,293.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific values.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults adjusted to fit proposed construction schedule by multiplying each phase length by 4.1

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips. Trip lengths reduced to 0 for LST.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - 24790 sf of existing buildings to demo.

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading - 2,100 CU of cut/export

Architectural Coating - CalEEMod defaults.

Vehicle Trips - CalEEMod defaults.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower. Site watered twice a day.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
|---|---|---|---|
| tblConstructionPhase | NumDays | 10.00 | 40.00 |
| tblConstructionPhase | NumDays | 1.00 | 4.00 |
| tblConstructionPhase | NumDays | 2.00 | 8.00 |
| tblConstructionPhase | NumDays | 100.00 | 410.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblGrading | AcresOfGrading | 6.00 | 1.50 |
| tblGrading | AcresOfGrading | 2.00 | 0.50 |
| tblGrading | MaterialExported | 0.00 | 2,100.00 |
| tblLandUse | LandUseSquareFeet | 22,290.00 | 22,293.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripNumber | 113.00 | 114.00 |
| tblTripsAndVMT | HaulingTripNumber | 263.00 | 262.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 7.00 | 8.00 |
| tblTripsAndVMT | WorkerTripNumber | 1.00 | 2.00 |

## 2.0 Emissions Summary

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 0.9799 | 10.7781 | 7.4797 | 0.0150 | 4.7459 | 0.4205 | 5.1663 | 2.5089 | 0.3868 | 2.8958 | 0.0000 | 1,459.1459 | 1,459.1459 | 0.4449 | 0.0151 | 1,474.7766 |
| 2024 | 0.6071 | 6.0224 | 7.1378 | 0.0115 | 1.9000e-004 | 0.2824 | 0.2826 | 7.0000e-005 | 0.2598 | 0.2599 | 0.0000 | 1,112.8099 | 1,112.8099 | 0.3584 | 1.4400e-003 | 1,122.1994 |
| 2025 | 10.0140 | 5.5300 | 7.0980 | 0.0115 | 1.9000e-004 | 0.2413 | 0.2415 | 7.0000e-005 | 0.2220 | 0.2221 | 0.0000 | 1,113.2348 | 1,113.2348 | 0.3585 | 1.4000e-003 | 1,122.6158 |
| **Maximum** | **10.0140** | **10.7781** | **7.4797** | **0.0150** | **4.7459** | **0.4205** | **5.1663** | **2.5089** | **0.3868** | **2.8958** | **0.0000** | **1,459.1459** | **1,459.1459** | **0.4449** | **0.0151** | **1,474.7766** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 0.5411 | 6.6544 | 8.0566 | 0.0150 | 2.1361 | 0.1877 | 2.2925 | 1.1292 | 0.1834 | 1.2744 | 0.0000 | 1,459.1459 | 1,459.1459 | 0.4449 | 0.0151 | 1,474.7766 |
| 2024 | 0.2935 | 4.5818 | 7.9710 | 0.0115 | 1.9000e-004 | 0.0543 | 0.0545 | 7.0000e-005 | 0.0512 | 0.0513 | 0.0000 | 1,112.8099 | 1,112.8099 | 0.3584 | 1.4400e-003 | 1,122.1994 |
| 2025 | 9.8977 | 4.5157 | 7.9658 | 0.0115 | 1.9000e-004 | 0.0471 | 0.0473 | 7.0000e-005 | 0.0446 | 0.0447 | 0.0000 | 1,113.2348 | 1,113.2348 | 0.3585 | 1.4000e-003 | 1,122.6158 |
| **Maximum** | **9.8977** | **6.6544** | **8.0566** | **0.0150** | **2.1361** | **0.1877** | **2.2925** | **1.1292** | **0.1834** | **1.2744** | **0.0000** | **1,459.1459** | **1,459.1459** | **0.4449** | **0.0151** | **1,474.7766** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 7.49 | 29.46 | -10.49 | 0.00 | 54.99 | 69.39 | 57.92 | 54.99 | 67.86 | 59.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Energy | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| Mobile | 0.7111 | 0.7566 | 7.3807 | 0.0174 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,777.5787 | 1,777.5787 | 0.1048 | 0.0709 | 1,801.3284 |
| **Total** | **1.2516** | **1.1411** | **7.7059** | **0.0197** | **1.9520** | **0.0413** | **1.9933** | **0.5202** | **0.0404** | **0.5606** | | **2,238.9643** | **2,238.9643** | **0.1137** | **0.0794** | **2,265.4561** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Energy | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| Mobile | 0.7111 | 0.7566 | 7.3807 | 0.0174 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,777.5787 | 1,777.5787 | 0.1048 | 0.0709 | 1,801.3284 |
| **Total** | **1.2516** | **1.1411** | **7.7059** | **0.0197** | **1.9520** | **0.0413** | **1.9933** | **0.5202** | **0.0404** | **0.5606** | | **2,238.9643** | **2,238.9643** | **0.1137** | **0.0794** | **2,265.4561** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 5/1/2023 | 6/26/2023 | 5 | 40 | |
| 2 | Site Preparation | Site Preparation | 6/27/2023 | 6/30/2023 | 5 | 4 | |
| 3 | Grading | Grading | 7/1/2023 | 7/12/2023 | 5 | 8 | |
| 4 | Building Construction | Building Construction | 7/13/2023 | 2/5/2025 | 5 | 410 | |
| 5 | Paving | Paving | 2/6/2025 | 3/6/2025 | 5 | 21 | |
| 6 | Architectural Coating | Architectural Coating | 3/7/2025 | 4/4/2025 | 5 | 21 | |

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,440; Non-Residential Outdoor: 11,147; Striped Parking Area: 0 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 1.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | |
|---|---|---|---|---|---|
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 4.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 6.00 | 89 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 7.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 4 | 10.00 | 0.00 | 114.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 2 | 6.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 262.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 5 | 8.00 | 4.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 7 | 18.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.6101 | 0.0000 | 0.6101 | 0.0924 | 0.0000 | 0.0924 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.6463 | 5.7787 | 7.3926 | 0.0120 | | 0.2821 | 0.2821 | | 0.2698 | 0.2698 | | 1,148.4055 | 1,148.4055 | 0.2089 | | 1,153.6290 |
| **Total** | **0.6463** | **5.7787** | **7.3926** | **0.0120** | **0.6101** | **0.2821** | **0.8922** | **0.0924** | **0.2698** | **0.3622** | | **1,148.4055** | **1,148.4055** | **0.2089** | | **1,153.6290** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 3.1400e-003 | 0.0519 | 0.0435 | 7.0000e-005 | 6.0000e-005 | 3.0000e-005 | 9.0000e-005 | 2.0000e-005 | 3.0000e-005 | 5.0000e-005 | | 8.0791 | 8.0791 | 2.3000e-004 | 1.2800e-003 | 8.4654 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0128 | 4.3700e-003 | 0.0436 | 2.0000e-005 | 1.0000e-004 | 5.0000e-005 | 1.5000e-004 | 4.0000e-005 | 4.0000e-005 | 8.0000e-005 | | 1.9196 | 1.9196 | 1.0900e-003 | 5.7000e-004 | 2.1155 |
| **Total** | **0.0159** | **0.0562** | **0.0871** | **9.0000e-005** | **1.6000e-004** | **8.0000e-005** | **2.4000e-004** | **6.0000e-005** | **7.0000e-005** | **1.3000e-004** | | **9.9987** | **9.9987** | **1.3200e-003** | **1.8500e-003** | **10.5809** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.2745 | 0.0000 | 0.2745 | 0.0416 | 0.0000 | 0.0416 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5252 | 5.2809 | 7.5996 | 0.0120 | | 0.1876 | 0.1876 | | 0.1833 | 0.1833 | 0.0000 | 1,148.4055 | 1,148.4055 | 0.2089 | | 1,153.6290 |
| **Total** | **0.5252** | **5.2809** | **7.5996** | **0.0120** | **0.2745** | **0.1876** | **0.4621** | **0.0416** | **0.1833** | **0.2249** | **0.0000** | **1,148.4055** | **1,148.4055** | **0.2089** | | **1,153.6290** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 3.1400e-003 | 0.0519 | 0.0435 | 7.0000e-005 | 6.0000e-005 | 3.0000e-005 | 9.0000e-005 | 2.0000e-005 | 3.0000e-005 | 5.0000e-005 | | 8.0791 | 8.0791 | 2.3000e-004 | 1.2800e-003 | 8.4654 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0128 | 4.3700e-003 | 0.0436 | 2.0000e-005 | 1.0000e-004 | 5.0000e-005 | 1.5000e-004 | 4.0000e-005 | 4.0000e-005 | 8.0000e-005 | | 1.9196 | 1.9196 | 1.0900e-003 | 5.7000e-004 | 2.1155 |
| **Total** | **0.0159** | **0.0562** | **0.0871** | **9.0000e-005** | **1.6000e-004** | **8.0000e-005** | **2.4000e-004** | **6.0000e-005** | **7.0000e-005** | **1.3000e-004** | | **9.9987** | **9.9987** | **1.3200e-003** | **1.8500e-003** | **10.5809** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.1326 | 0.0000 | 0.1326 | 0.0143 | 0.0000 | 0.0143 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5348 | 6.1887 | 3.9239 | 9.7300e-003 | | 0.2266 | 0.2266 | | 0.2084 | 0.2084 | | 942.4317 | 942.4317 | 0.3048 | | 950.0517 |
| **Total** | **0.5348** | **6.1887** | **3.9239** | **9.7300e-003** | **0.1326** | **0.2266** | **0.3591** | **0.0143** | **0.2084** | **0.2228** | | **942.4317** | **942.4317** | **0.3048** | | **950.0517** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.6500e-003 | 2.6200e-003 | 0.0261 | 1.0000e-005 | 6.0000e-005 | 3.0000e-005 | 9.0000e-005 | 2.0000e-005 | 3.0000e-005 | 5.0000e-005 | | 1.1518 | 1.1518 | 6.5000e-004 | 3.4000e-004 | 1.2693 |
| **Total** | **7.6500e-003** | **2.6200e-003** | **0.0261** | **1.0000e-005** | **6.0000e-005** | **3.0000e-005** | **9.0000e-005** | **2.0000e-005** | **3.0000e-005** | **5.0000e-005** | | **1.1518** | **1.1518** | **6.5000e-004** | **3.4000e-004** | **1.2693** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0597 | 0.0000 | 0.0597 | 6.4400e-003 | 0.0000 | 6.4400e-003 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2015 | 3.1515 | 5.8257 | 9.7300e-003 | | 0.0364 | 0.0364 | | 0.0346 | 0.0346 | 0.0000 | 942.4317 | 942.4317 | 0.3048 | | 950.0517 |
| **Total** | **0.2015** | **3.1515** | **5.8257** | **9.7300e-003** | **0.0597** | **0.0364** | **0.0961** | **6.4400e-003** | **0.0346** | **0.0411** | **0.0000** | **942.4317** | **942.4317** | **0.3048** | | **950.0517** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.6500e-003 | 2.6200e-003 | 0.0261 | 1.0000e-005 | 6.0000e-005 | 3.0000e-005 | 9.0000e-005 | 2.0000e-005 | 3.0000e-005 | 5.0000e-005 | | 1.1518 | 1.1518 | 6.5000e-004 | 3.4000e-004 | 1.2693 |
| **Total** | **7.6500e-003** | **2.6200e-003** | **0.0261** | **1.0000e-005** | **6.0000e-005** | **3.0000e-005** | **9.0000e-005** | **2.0000e-005** | **3.0000e-005** | **5.0000e-005** | | **1.1518** | **1.1518** | **6.5000e-004** | **3.4000e-004** | **1.2693** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 4.7451 | 0.0000 | 4.7451 | 2.5086 | 0.0000 | 2.5086 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.9335 | 10.1789 | 5.5516 | 0.0141 | | 0.4201 | 0.4201 | | 0.3865 | 0.3865 | | 1,364.7713 | 1,364.7713 | 0.4414 | | 1,375.8062 |
| **Total** | **0.9335** | **10.1789** | **5.5516** | **0.0141** | **4.7451** | **0.4201** | **5.1652** | **2.5086** | **0.3865** | **2.8951** | | **1,364.7713** | **1,364.7713** | **0.4414** | | **1,375.8062** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0361 | 0.5958 | 0.4999 | 8.6000e-004 | 7.0000e-004 | 3.4000e-004 | 1.0300e-003 | 2.5000e-004 | 3.2000e-004 | 5.8000e-004 | | 92.8389 | 92.8389 | 2.6600e-003 | 0.0147 | 97.2780 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0102 | 3.5000e-003 | 0.0349 | 2.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.2000e-004 | 3.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.5357 | 1.5357 | 8.7000e-004 | 4.5000e-004 | 1.6924 |
| **Total** | **0.0463** | **0.5993** | **0.5347** | **8.8000e-004** | **7.8000e-004** | **3.8000e-004** | **1.1500e-003** | **2.8000e-004** | **3.5000e-004** | **6.5000e-004** | | **94.3746** | **94.3746** | **3.5300e-003** | **0.0151** | **98.9704** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.1353 | 0.0000 | 2.1353 | 1.1289 | 0.0000 | 1.1289 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.4718 | 6.0551 | 7.5219 | 0.0141 | | 0.1561 | 0.1561 | | 0.1449 | 0.1449 | 0.0000 | 1,364.7713 | 1,364.7713 | 0.4414 | | 1,375.8062 |
| **Total** | **0.4718** | **6.0551** | **7.5219** | **0.0141** | **2.1353** | **0.1561** | **2.2914** | **1.1289** | **0.1449** | **1.2738** | **0.0000** | **1,364.7713** | **1,364.7713** | **0.4414** | | **1,375.8062** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0361 | 0.5958 | 0.4999 | 8.6000e-004 | 7.0000e-004 | 3.4000e-004 | 1.0300e-003 | 2.5000e-004 | 3.2000e-004 | 5.8000e-004 | | 92.8389 | 92.8389 | 2.6600e-003 | 0.0147 | 97.2780 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0102 | 3.5000e-003 | 0.0349 | 2.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.2000e-004 | 3.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.5357 | 1.5357 | 8.7000e-004 | 4.5000e-004 | 1.6924 |
| **Total** | **0.0463** | **0.5993** | **0.5347** | **8.8000e-004** | **7.8000e-004** | **3.8000e-004** | **1.1500e-003** | **2.8000e-004** | **3.5000e-004** | **6.5000e-004** | | **94.3746** | **94.3746** | **3.5300e-003** | **0.0151** | **98.9704** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6322 | 6.4186 | 7.0970 | 0.0114 | | 0.3203 | 0.3203 | | 0.2946 | 0.2946 | | 1,104.6089 | 1,104.6089 | 0.3573 | | 1,113.5402 |
| **Total** | **0.6322** | **6.4186** | **7.0970** | **0.0114** | | **0.3203** | **0.3203** | | **0.2946** | **0.2946** | | **1,104.6089** | **1,104.6089** | **0.3573** | | **1,113.5402** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.6600e-003 | 0.0453 | 0.0372 | 6.0000e-005 | 1.1000e-004 | 3.0000e-005 | 1.3000e-004 | 4.0000e-005 | 2.0000e-005 | 7.0000e-005 | | 6.4359 | 6.4359 | 2.3000e-004 | 1.0300e-003 | 6.7472 |
| Worker | 0.0102 | 3.5000e-003 | 0.0349 | 2.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.2000e-004 | 3.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.5357 | 1.5357 | 8.7000e-004 | 4.5000e-004 | 1.6924 |
| **Total** | **0.0129** | **0.0488** | **0.0720** | **8.0000e-005** | **1.9000e-004** | **7.0000e-005** | **2.5000e-004** | **7.0000e-005** | **5.0000e-005** | **1.4000e-004** | | **7.9715** | **7.9715** | **1.1000e-003** | **1.4800e-003** | **8.4396** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2857 | 4.5840 | 7.8982 | 0.0114 | | 0.0597 | 0.0597 | | 0.0561 | 0.0561 | 0.0000 | 1,104.6089 | 1,104.6089 | 0.3573 | | 1,113.5402 |
| **Total** | **0.2857** | **4.5840** | **7.8982** | **0.0114** | | **0.0597** | **0.0597** | | **0.0561** | **0.0561** | **0.0000** | **1,104.6089** | **1,104.6089** | **0.3573** | | **1,113.5402** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.6600e-003 | 0.0453 | 0.0372 | 6.0000e-005 | 1.1000e-004 | 3.0000e-005 | 1.3000e-004 | 4.0000e-005 | 2.0000e-005 | 7.0000e-005 | | 6.4359 | 6.4359 | 2.3000e-004 | 1.0300e-003 | 6.7472 |
| Worker | 0.0102 | 3.5000e-003 | 0.0349 | 2.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.2000e-004 | 3.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.5357 | 1.5357 | 8.7000e-004 | 4.5000e-004 | 1.6924 |
| **Total** | **0.0129** | **0.0488** | **0.0720** | **8.0000e-005** | **1.9000e-004** | **7.0000e-005** | **2.5000e-004** | **7.0000e-005** | **5.0000e-005** | **1.4000e-004** | | **7.9715** | **7.9715** | **1.1000e-003** | **1.4800e-003** | **8.4396** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5950 | 5.9739 | 7.0675 | 0.0114 | | 0.2824 | 0.2824 | | 0.2598 | 0.2598 | | 1,104.9834 | 1,104.9834 | 0.3574 | | 1,113.9177 |
| **Total** | **0.5950** | **5.9739** | **7.0675** | **0.0114** | | **0.2824** | **0.2824** | | **0.2598** | **0.2598** | | **1,104.9834** | **1,104.9834** | **0.3574** | | **1,113.9177** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.6300e-003 | 0.0452 | 0.0368 | 6.0000e-005 | 1.1000e-004 | 2.0000e-005 | 1.3000e-004 | 4.0000e-005 | 2.0000e-005 | 6.0000e-005 | | 6.3391 | 6.3391 | 2.2000e-004 | 1.0100e-003 | 6.6458 |
| Worker | 9.4400e-003 | 3.2400e-003 | 0.0335 | 1.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.4874 | 1.4874 | 8.0000e-004 | 4.3000e-004 | 1.6359 |
| **Total** | **0.0121** | **0.0484** | **0.0703** | **7.0000e-005** | **1.9000e-004** | **6.0000e-005** | **2.4000e-004** | **7.0000e-005** | **5.0000e-005** | **1.2000e-004** | | **7.8265** | **7.8265** | **1.0200e-003** | **1.4400e-003** | **8.2817** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2814 | 4.5333 | 7.9007 | 0.0114 | | 0.0542 | 0.0542 | | 0.0512 | 0.0512 | 0.0000 | 1,104.9834 | 1,104.9834 | 0.3574 | | 1,113.9177 |
| **Total** | **0.2814** | **4.5333** | **7.9007** | **0.0114** | | **0.0542** | **0.0542** | | **0.0512** | **0.0512** | **0.0000** | **1,104.9834** | **1,104.9834** | **0.3574** | | **1,113.9177** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.6300e-003 | 0.0452 | 0.0368 | 6.0000e-005 | 1.1000e-004 | 2.0000e-005 | 1.3000e-004 | 4.0000e-005 | 2.0000e-005 | 6.0000e-005 | | 6.3391 | 6.3391 | 2.2000e-004 | 1.0100e-003 | 6.6458 |
| Worker | 9.4400e-003 | 3.2400e-003 | 0.0335 | 1.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.4874 | 1.4874 | 8.0000e-004 | 4.3000e-004 | 1.6359 |
| **Total** | **0.0121** | **0.0484** | **0.0703** | **7.0000e-005** | **1.9000e-004** | **6.0000e-005** | **2.4000e-004** | **7.0000e-005** | **5.0000e-005** | **1.2000e-004** | | **7.8265** | **7.8265** | **1.0200e-003** | **1.4400e-003** | **8.2817** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5510 | 5.4820 | 7.0282 | 0.0114 | | 0.2413 | 0.2413 | | 0.2220 | 0.2220 | | 1,105.5711 | 1,105.5711 | 0.3576 | | 1,114.5102 |
| **Total** | **0.5510** | **5.4820** | **7.0282** | **0.0114** | | **0.2413** | **0.2413** | | **0.2220** | **0.2220** | | **1,105.5711** | **1,105.5711** | **0.3576** | | **1,114.5102** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.6000e-003 | 0.0450 | 0.0364 | 6.0000e-005 | 1.1000e-004 | 2.0000e-005 | 1.3000e-004 | 4.0000e-005 | 2.0000e-005 | 6.0000e-005 | | 6.2264 | 6.2264 | 2.2000e-004 | 9.9000e-004 | 6.5278 |
| Worker | 8.7700e-003 | 3.0100e-003 | 0.0321 | 1.0000e-005 | 8.0000e-005 | 3.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.4373 | 1.4373 | 7.4000e-004 | 4.1000e-004 | 1.5779 |
| **Total** | **0.0114** | **0.0480** | **0.0685** | **7.0000e-005** | **1.9000e-004** | **5.0000e-005** | **2.4000e-004** | **7.0000e-005** | **5.0000e-005** | **1.2000e-004** | | **7.6637** | **7.6637** | **9.6000e-004** | **1.4000e-003** | **8.1057** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2746 | 4.4677 | 7.8973 | 0.0114 | | 0.0471 | 0.0471 | | 0.0446 | 0.0446 | 0.0000 | 1,105.5711 | 1,105.5711 | 0.3576 | | 1,114.5102 |
| **Total** | **0.2746** | **4.4677** | **7.8973** | **0.0114** | | **0.0471** | **0.0471** | | **0.0446** | **0.0446** | **0.0000** | **1,105.5711** | **1,105.5711** | **0.3576** | | **1,114.5102** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.6000e-003 | 0.0450 | 0.0364 | 6.0000e-005 | 1.1000e-004 | 2.0000e-005 | 1.3000e-004 | 4.0000e-005 | 2.0000e-005 | 6.0000e-005 | | 6.2264 | 6.2264 | 2.2000e-004 | 9.9000e-004 | 6.5278 |
| Worker | 8.7700e-003 | 3.0100e-003 | 0.0321 | 1.0000e-005 | 8.0000e-005 | 3.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.4373 | 1.4373 | 7.4000e-004 | 4.1000e-004 | 1.5779 |
| **Total** | **0.0114** | **0.0480** | **0.0685** | **7.0000e-005** | **1.9000e-004** | **5.0000e-005** | **2.4000e-004** | **7.0000e-005** | **5.0000e-005** | **1.2000e-004** | | **7.6637** | **7.6637** | **9.6000e-004** | **1.4000e-003** | **8.1057** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5638 | 4.9206 | 7.0257 | 0.0113 | | 0.2186 | 0.2186 | | 0.2046 | 0.2046 | | 1,036.2711 | 1,036.2711 | 0.3019 | | 1,043.8179 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5638** | **4.9206** | **7.0257** | **0.0113** | | **0.2186** | **0.2186** | | **0.2046** | **0.2046** | | **1,036.2711** | **1,036.2711** | **0.3019** | | **1,043.8179** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0197 | 6.7700e-003 | 0.0723 | 3.0000e-005 | 1.8000e-004 | 8.0000e-005 | 2.5000e-004 | 7.0000e-005 | 7.0000e-005 | 1.4000e-004 | | 3.2338 | 3.2338 | 1.6600e-003 | 9.2000e-004 | 3.5503 |
| **Total** | **0.0197** | **6.7700e-003** | **0.0723** | **3.0000e-005** | **1.8000e-004** | **8.0000e-005** | **2.5000e-004** | **7.0000e-005** | **7.0000e-005** | **1.4000e-004** | | **3.2338** | **3.2338** | **1.6600e-003** | **9.2000e-004** | **3.5503** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.1790 | 3.9959 | 6.8743 | 0.0113 | | 0.0274 | 0.0274 | | 0.0263 | 0.0263 | 0.0000 | 1,036.2711 | 1,036.2711 | 0.3019 | | 1,043.8179 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.1790** | **3.9959** | **6.8743** | **0.0113** | | **0.0274** | **0.0274** | | **0.0263** | **0.0263** | **0.0000** | **1,036.2711** | **1,036.2711** | **0.3019** | | **1,043.8179** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0197 | 6.7700e-003 | 0.0723 | 3.0000e-005 | 1.8000e-004 | 8.0000e-005 | 2.5000e-004 | 7.0000e-005 | 7.0000e-005 | 1.4000e-004 | | 3.2338 | 3.2338 | 1.6600e-003 | 9.2000e-004 | 3.5503 |
| **Total** | **0.0197** | **6.7700e-003** | **0.0723** | **3.0000e-005** | **1.8000e-004** | **8.0000e-005** | **2.5000e-004** | **7.0000e-005** | **7.0000e-005** | **1.4000e-004** | | **3.2338** | **3.2338** | **1.6600e-003** | **9.2000e-004** | **3.5503** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 9.8410 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **10.0119** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1900e-003 | 7.5000e-004 | 8.0300e-003 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 3.0000e-005 | 1.0000e-005 | 1.0000e-005 | 2.0000e-005 | | 0.3593 | 0.3593 | 1.8000e-004 | 1.0000e-004 | 0.3945 |
| **Total** | **2.1900e-003** | **7.5000e-004** | **8.0300e-003** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **3.0000e-005** | **1.0000e-005** | **1.0000e-005** | **2.0000e-005** | | **0.3593** | **0.3593** | **1.8000e-004** | **1.0000e-004** | **0.3945** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 9.8410 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0545 | 1.0598 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **9.8955** | **1.0598** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1900e-003 | 7.5000e-004 | 8.0300e-003 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 3.0000e-005 | 1.0000e-005 | 1.0000e-005 | 2.0000e-005 | | 0.3593 | 0.3593 | 1.8000e-004 | 1.0000e-004 | 0.3945 |
| **Total** | **2.1900e-003** | **7.5000e-004** | **8.0300e-003** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **3.0000e-005** | **1.0000e-005** | **1.0000e-005** | **2.0000e-005** | | **0.3593** | **0.3593** | **1.8000e-004** | **1.0000e-004** | **0.3945** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.7111 | 0.7566 | 7.3807 | 0.0174 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,777.5787 | 1,777.5787 | 0.1048 | 0.0709 | 1,801.3284 |
| Unmitigated | 0.7111 | 0.7566 | 7.3807 | 0.0174 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,777.5787 | 1,777.5787 | 0.1048 | 0.0709 | 1,801.3284 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Hospital | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |
| Total | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Hospital | 16.60 | 8.40 | 6.90 | 64.90 | 16.10 | 19.00 | 73 | 25 | 2 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hospital | 0.540893 | 0.062748 | 0.186142 | 0.127785 | 0.023768 | 0.006610 | 0.012333 | 0.009205 | 0.000817 | 0.000491 | 0.024860 | 0.000754 | 0.003594 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| NaturalGas Unmitigated | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Hospital | 3921.74 | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| **Total** | | **0.0423** | **0.3845** | **0.3230** | **2.3100e-003** | | **0.0292** | **0.0292** | | **0.0292** | **0.0292** | | **461.3807** | **461.3807** | **8.8400e-003** | **8.4600e-003** | **464.1224** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Hospital | 3.92174 | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| **Total** | | **0.0423** | **0.3845** | **0.3230** | **2.3100e-003** | | **0.0292** | **0.0292** | | **0.0292** | **0.0292** | | **461.3807** | **461.3807** | **8.8400e-003** | **8.4600e-003** | **464.1224** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Unmitigated | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0566 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.4414 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.1000e-004 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| **Total** | **0.4982** | **2.0000e-005** | **2.2700e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | | **4.8800e-003** | **4.8800e-003** | **1.0000e-005** | | **5.2000e-003** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0566 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.4414 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.1000e-004 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| **Total** | **0.4982** | **2.0000e-005** | **2.2700e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | | **4.8800e-003** | **4.8800e-003** | **1.0000e-005** | | **5.2000e-003** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Emergency Room LST

**South Coast AQMD Air District, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 22.29 | 1000sqft | 0.51 | 22,293.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific values.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults adjusted to fit proposed construction schedule by multiplying each phase length by 4.1

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips. Trip lengths reduced to 0 for LST.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - 24790 sf of existing buildings to demo.

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading - 2,100 CU of cut/export

Architectural Coating - CalEEMod defaults.

Vehicle Trips - CalEEMod defaults.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower. Site watered twice a day.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
|---|---|---|---|
| tblConstructionPhase | NumDays | 10.00 | 40.00 |
| tblConstructionPhase | NumDays | 1.00 | 4.00 |
| tblConstructionPhase | NumDays | 2.00 | 8.00 |
| tblConstructionPhase | NumDays | 100.00 | 410.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblGrading | AcresOfGrading | 6.00 | 1.50 |
| tblGrading | AcresOfGrading | 2.00 | 0.50 |
| tblGrading | MaterialExported | 0.00 | 2,100.00 |
| tblLandUse | LandUseSquareFeet | 22,290.00 | 22,293.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripNumber | 113.00 | 114.00 |
| tblTripsAndVMT | HaulingTripNumber | 263.00 | 262.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 7.00 | 8.00 |
| tblTripsAndVMT | WorkerTripNumber | 1.00 | 2.00 |

## 2.0 Emissions Summary

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 0.9743 | 10.8245 | 7.4892 | 0.0150 | 4.7459 | 0.4205 | 5.1664 | 2.5089 | 0.3869 | 2.8958 | 0.0000 | 1,461.4470 | 1,461.4470 | 0.4448 | 0.0155 | 1,477.1912 |
| 2024 | 0.6060 | 6.0256 | 7.1460 | 0.0115 | 1.9000e-004 | 0.2824 | 0.2826 | 7.0000e-005 | 0.2598 | 0.2599 | 0.0000 | 1,112.9340 | 1,112.9340 | 0.3585 | 1.4900e-003 | 1,122.3408 |
| 2025 | 10.0139 | 5.5332 | 7.1113 | 0.0115 | 1.9000e-004 | 0.2413 | 0.2415 | 7.0000e-005 | 0.2220 | 0.2221 | 0.0000 | 1,113.3587 | 1,113.3587 | 0.3586 | 1.4500e-003 | 1,122.7565 |
| **Maximum** | **10.0139** | **10.8245** | **7.4892** | **0.0150** | **4.7459** | **0.4205** | **5.1664** | **2.5089** | **0.3869** | **2.8958** | **0.0000** | **1,461.4470** | **1,461.4470** | **0.4448** | **0.0155** | **1,477.1912** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 0.5397 | 6.7008 | 8.0801 | 0.0150 | 2.1361 | 0.1877 | 2.2926 | 1.1292 | 0.1834 | 1.2745 | 0.0000 | 1,461.4470 | 1,461.4470 | 0.4448 | 0.0155 | 1,477.1912 |
| 2024 | 0.2924 | 4.5850 | 7.9791 | 0.0115 | 1.9000e-004 | 0.0543 | 0.0545 | 7.0000e-005 | 0.0512 | 0.0513 | 0.0000 | 1,112.9340 | 1,112.9340 | 0.3585 | 1.4900e-003 | 1,122.3408 |
| 2025 | 9.8975 | 4.5190 | 7.9736 | 0.0115 | 1.9000e-004 | 0.0471 | 0.0473 | 7.0000e-005 | 0.0446 | 0.0447 | 0.0000 | 1,113.3587 | 1,113.3587 | 0.3586 | 1.4500e-003 | 1,122.7565 |
| **Maximum** | **9.8975** | **6.7008** | **8.0801** | **0.0150** | **2.1361** | **0.1877** | **2.2926** | **1.1292** | **0.1834** | **1.2745** | **0.0000** | **1,461.4470** | **1,461.4470** | **0.4448** | **0.0155** | **1,477.1912** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 7.46 | 29.39 | -10.51 | 0.00 | 54.99 | 69.39 | 57.92 | 54.99 | 67.86 | 59.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Energy | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| Mobile | 0.6873 | 0.8126 | 7.1148 | 0.0166 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,695.8838 | 1,695.8838 | 0.1073 | 0.0736 | 1,720.4839 |
| **Total** | **1.2278** | **1.1971** | **7.4401** | **0.0189** | **1.9520** | **0.0413** | **1.9933** | **0.5202** | **0.0404** | **0.5606** | | **2,157.2693** | **2,157.2693** | **0.1161** | **0.0820** | **2,184.6115** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Energy | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| Mobile | 0.6873 | 0.8126 | 7.1148 | 0.0166 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,695.8838 | 1,695.8838 | 0.1073 | 0.0736 | 1,720.4839 |
| **Total** | **1.2278** | **1.1971** | **7.4401** | **0.0189** | **1.9520** | **0.0413** | **1.9933** | **0.5202** | **0.0404** | **0.5606** | | **2,157.2693** | **2,157.2693** | **0.1161** | **0.0820** | **2,184.6115** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 5/1/2023 | 6/26/2023 | 5 | 40 | |
| 2 | Site Preparation | Site Preparation | 6/27/2023 | 6/30/2023 | 5 | 4 | |
| 3 | Grading | Grading | 7/1/2023 | 7/12/2023 | 5 | 8 | |
| 4 | Building Construction | Building Construction | 7/13/2023 | 2/5/2025 | 5 | 410 | |
| 5 | Paving | Paving | 2/6/2025 | 3/6/2025 | 5 | 21 | |
| 6 | Architectural Coating | Architectural Coating | 3/7/2025 | 4/4/2025 | 5 | 21 | |

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,440; Non-Residential Outdoor: 11,147; Striped Parking Area: 0 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 1.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | |
|---|---|---|---|---|---|
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 4.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 6.00 | 89 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 7.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 4 | 10.00 | 0.00 | 114.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 2 | 6.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 8.00 | 0.00 | 262.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 5 | 8.00 | 4.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 7 | 18.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.6101 | 0.0000 | 0.6101 | 0.0924 | 0.0000 | 0.0924 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.6463 | 5.7787 | 7.3926 | 0.0120 | | 0.2821 | 0.2821 | | 0.2698 | 0.2698 | | 1,148.4055 | 1,148.4055 | 0.2089 | | 1,153.6290 |
| **Total** | **0.6463** | **5.7787** | **7.3926** | **0.0120** | **0.6101** | **0.2821** | **0.8922** | **0.0924** | **0.2698** | **0.3622** | | **1,148.4055** | **1,148.4055** | **0.2089** | | **1,153.6290** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 2.7300e-003 | 0.0559 | 0.0450 | 8.0000e-005 | 6.0000e-005 | 4.0000e-005 | 1.0000e-004 | 2.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 8.2810 | 8.2810 | 2.1000e-004 | 1.3100e-003 | 8.6762 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0117 | 4.7600e-003 | 0.0516 | 2.0000e-005 | 1.0000e-004 | 5.0000e-005 | 1.5000e-004 | 4.0000e-005 | 4.0000e-005 | 8.0000e-005 | | 1.8964 | 1.8964 | 1.2400e-003 | 6.0000e-004 | 2.1063 |
| **Total** | **0.0145** | **0.0606** | **0.0966** | **1.0000e-004** | **1.6000e-004** | **9.0000e-005** | **2.5000e-004** | **6.0000e-005** | **7.0000e-005** | **1.4000e-004** | | **10.1774** | **10.1774** | **1.4500e-003** | **1.9100e-003** | **10.7825** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.2745 | 0.0000 | 0.2745 | 0.0416 | 0.0000 | 0.0416 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5252 | 5.2809 | 7.5996 | 0.0120 | | 0.1876 | 0.1876 | | 0.1833 | 0.1833 | 0.0000 | 1,148.4055 | 1,148.4055 | 0.2089 | | 1,153.6290 |
| **Total** | **0.5252** | **5.2809** | **7.5996** | **0.0120** | **0.2745** | **0.1876** | **0.4621** | **0.0416** | **0.1833** | **0.2249** | **0.0000** | **1,148.4055** | **1,148.4055** | **0.2089** | | **1,153.6290** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 2.7300e-003 | 0.0559 | 0.0450 | 8.0000e-005 | 6.0000e-005 | 4.0000e-005 | 1.0000e-004 | 2.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 8.2810 | 8.2810 | 2.1000e-004 | 1.3100e-003 | 8.6762 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0117 | 4.7600e-003 | 0.0516 | 2.0000e-005 | 1.0000e-004 | 5.0000e-005 | 1.5000e-004 | 4.0000e-005 | 4.0000e-005 | 8.0000e-005 | | 1.8964 | 1.8964 | 1.2400e-003 | 6.0000e-004 | 2.1063 |
| **Total** | **0.0145** | **0.0606** | **0.0966** | **1.0000e-004** | **1.6000e-004** | **9.0000e-005** | **2.5000e-004** | **6.0000e-005** | **7.0000e-005** | **1.4000e-004** | | **10.1774** | **10.1774** | **1.4500e-003** | **1.9100e-003** | **10.7825** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.1326 | 0.0000 | 0.1326 | 0.0143 | 0.0000 | 0.0143 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.5348 | 6.1887 | 3.9239 | 9.7300e-003 | | 0.2266 | 0.2266 | | 0.2084 | 0.2084 | | 942.4317 | 942.4317 | 0.3048 | | 950.0517 |
| **Total** | **0.5348** | **6.1887** | **3.9239** | **9.7300e-003** | **0.1326** | **0.2266** | **0.3591** | **0.0143** | **0.2084** | **0.2228** | | **942.4317** | **942.4317** | **0.3048** | | **950.0517** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.0300e-003 | 2.8500e-003 | 0.0310 | 1.0000e-005 | 6.0000e-005 | 3.0000e-005 | 9.0000e-005 | 2.0000e-005 | 3.0000e-005 | 5.0000e-005 | | 1.1379 | 1.1379 | 7.4000e-004 | 3.6000e-004 | 1.2638 |
| **Total** | **7.0300e-003** | **2.8500e-003** | **0.0310** | **1.0000e-005** | **6.0000e-005** | **3.0000e-005** | **9.0000e-005** | **2.0000e-005** | **3.0000e-005** | **5.0000e-005** | | **1.1379** | **1.1379** | **7.4000e-004** | **3.6000e-004** | **1.2638** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.0597 | 0.0000 | 0.0597 | 6.4400e-003 | 0.0000 | 6.4400e-003 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2015 | 3.1515 | 5.8257 | 9.7300e-003 | | 0.0364 | 0.0364 | | 0.0346 | 0.0346 | 0.0000 | 942.4317 | 942.4317 | 0.3048 | | 950.0517 |
| **Total** | **0.2015** | **3.1515** | **5.8257** | **9.7300e-003** | **0.0597** | **0.0364** | **0.0961** | **6.4400e-003** | **0.0346** | **0.0411** | **0.0000** | **942.4317** | **942.4317** | **0.3048** | | **950.0517** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.0300e-003 | 2.8500e-003 | 0.0310 | 1.0000e-005 | 6.0000e-005 | 3.0000e-005 | 9.0000e-005 | 2.0000e-005 | 3.0000e-005 | 5.0000e-005 | | 1.1379 | 1.1379 | 7.4000e-004 | 3.6000e-004 | 1.2638 |
| **Total** | **7.0300e-003** | **2.8500e-003** | **0.0310** | **1.0000e-005** | **6.0000e-005** | **3.0000e-005** | **9.0000e-005** | **2.0000e-005** | **3.0000e-005** | **5.0000e-005** | | **1.1379** | **1.1379** | **7.4000e-004** | **3.6000e-004** | **1.2638** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 4.7451 | 0.0000 | 4.7451 | 2.5086 | 0.0000 | 2.5086 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.9335 | 10.1789 | 5.5516 | 0.0141 | | 0.4201 | 0.4201 | | 0.3865 | 0.3865 | | 1,364.7713 | 1,364.7713 | 0.4414 | | 1,375.8062 |
| **Total** | **0.9335** | **10.1789** | **5.5516** | **0.0141** | **4.7451** | **0.4201** | **5.1652** | **2.5086** | **0.3865** | **2.8951** | | **1,364.7713** | **1,364.7713** | **0.4414** | | **1,375.8062** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0314 | 0.6419 | 0.5169 | 8.8000e-004 | 7.0000e-004 | 4.0000e-004 | 1.1000e-003 | 2.5000e-004 | 3.9000e-004 | 6.4000e-004 | | 95.1586 | 95.1586 | 2.4100e-003 | 0.0150 | 99.6999 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.3800e-003 | 3.8100e-003 | 0.0413 | 2.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.2000e-004 | 3.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.5171 | 1.5171 | 9.9000e-004 | 4.8000e-004 | 1.6850 |
| **Total** | **0.0408** | **0.6457** | **0.5582** | **9.0000e-004** | **7.8000e-004** | **4.4000e-004** | **1.2200e-003** | **2.8000e-004** | **4.2000e-004** | **7.1000e-004** | | **96.6757** | **96.6757** | **3.4000e-003** | **0.0155** | **101.3850** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.1353 | 0.0000 | 2.1353 | 1.1289 | 0.0000 | 1.1289 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.4718 | 6.0551 | 7.5219 | 0.0141 | | 0.1561 | 0.1561 | | 0.1449 | 0.1449 | 0.0000 | 1,364.7713 | 1,364.7713 | 0.4414 | | 1,375.8062 |
| **Total** | **0.4718** | **6.0551** | **7.5219** | **0.0141** | **2.1353** | **0.1561** | **2.2914** | **1.1289** | **0.1449** | **1.2738** | **0.0000** | **1,364.7713** | **1,364.7713** | **0.4414** | | **1,375.8062** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0314 | 0.6419 | 0.5169 | 8.8000e-004 | 7.0000e-004 | 4.0000e-004 | 1.1000e-003 | 2.5000e-004 | 3.9000e-004 | 6.4000e-004 | | 95.1586 | 95.1586 | 2.4100e-003 | 0.0150 | 99.6999 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.3800e-003 | 3.8100e-003 | 0.0413 | 2.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.2000e-004 | 3.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.5171 | 1.5171 | 9.9000e-004 | 4.8000e-004 | 1.6850 |
| **Total** | **0.0408** | **0.6457** | **0.5582** | **9.0000e-004** | **7.8000e-004** | **4.4000e-004** | **1.2200e-003** | **2.8000e-004** | **4.2000e-004** | **7.1000e-004** | | **96.6757** | **96.6757** | **3.4000e-003** | **0.0155** | **101.3850** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.6322 | 6.4186 | 7.0970 | 0.0114 | | 0.3203 | 0.3203 | | 0.2946 | 0.2946 | | 1,104.6089 | 1,104.6089 | 0.3573 | | 1,113.5402 |
| **Total** | **0.6322** | **6.4186** | **7.0970** | **0.0114** | | **0.3203** | **0.3203** | | **0.2946** | **0.2946** | | **1,104.6089** | **1,104.6089** | **0.3573** | | **1,113.5402** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.3900e-003 | 0.0483 | 0.0392 | 6.0000e-005 | 1.1000e-004 | 3.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 6.5779 | 6.5779 | 2.2000e-004 | 1.0500e-003 | 6.8961 |
| Worker | 9.3800e-003 | 3.8100e-003 | 0.0413 | 2.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.2000e-004 | 3.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.5171 | 1.5171 | 9.9000e-004 | 4.8000e-004 | 1.6850 |
| **Total** | **0.0118** | **0.0521** | **0.0805** | **8.0000e-005** | **1.9000e-004** | **7.0000e-005** | **2.5000e-004** | **7.0000e-005** | **6.0000e-005** | **1.4000e-004** | | **8.0951** | **8.0951** | **1.2100e-003** | **1.5300e-003** | **8.5811** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2857 | 4.5840 | 7.8982 | 0.0114 | | 0.0597 | 0.0597 | | 0.0561 | 0.0561 | 0.0000 | 1,104.6089 | 1,104.6089 | 0.3573 | | 1,113.5402 |
| **Total** | **0.2857** | **4.5840** | **7.8982** | **0.0114** | | **0.0597** | **0.0597** | | **0.0561** | **0.0561** | **0.0000** | **1,104.6089** | **1,104.6089** | **0.3573** | | **1,113.5402** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.3900e-003 | 0.0483 | 0.0392 | 6.0000e-005 | 1.1000e-004 | 3.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 6.5779 | 6.5779 | 2.2000e-004 | 1.0500e-003 | 6.8961 |
| Worker | 9.3800e-003 | 3.8100e-003 | 0.0413 | 2.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.2000e-004 | 3.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.5171 | 1.5171 | 9.9000e-004 | 4.8000e-004 | 1.6850 |
| **Total** | **0.0118** | **0.0521** | **0.0805** | **8.0000e-005** | **1.9000e-004** | **7.0000e-005** | **2.5000e-004** | **7.0000e-005** | **6.0000e-005** | **1.4000e-004** | | **8.0951** | **8.0951** | **1.2100e-003** | **1.5300e-003** | **8.5811** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5950 | 5.9739 | 7.0675 | 0.0114 | | 0.2824 | 0.2824 | | 0.2598 | 0.2598 | | 1,104.9834 | 1,104.9834 | 0.3574 | | 1,113.9177 |
| **Total** | **0.5950** | **5.9739** | **7.0675** | **0.0114** | | **0.2824** | **0.2824** | | **0.2598** | **0.2598** | | **1,104.9834** | **1,104.9834** | **0.3574** | | **1,113.9177** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.3600e-003 | 0.0481 | 0.0387 | 6.0000e-005 | 1.1000e-004 | 3.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 6.4814 | 6.4814 | 2.1000e-004 | 1.0300e-003 | 6.7949 |
| Worker | 8.6500e-003 | 3.5200e-003 | 0.0397 | 1.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.4692 | 1.4692 | 9.1000e-004 | 4.6000e-004 | 1.6282 |
| **Total** | **0.0110** | **0.0517** | **0.0784** | **7.0000e-005** | **1.9000e-004** | **7.0000e-005** | **2.4000e-004** | **7.0000e-005** | **6.0000e-005** | **1.3000e-004** | | **7.9506** | **7.9506** | **1.1200e-003** | **1.4900e-003** | **8.4231** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2814 | 4.5333 | 7.9007 | 0.0114 | | 0.0542 | 0.0542 | | 0.0512 | 0.0512 | 0.0000 | 1,104.9834 | 1,104.9834 | 0.3574 | | 1,113.9177 |
| **Total** | **0.2814** | **4.5333** | **7.9007** | **0.0114** | | **0.0542** | **0.0542** | | **0.0512** | **0.0512** | **0.0000** | **1,104.9834** | **1,104.9834** | **0.3574** | | **1,113.9177** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.3600e-003 | 0.0481 | 0.0387 | 6.0000e-005 | 1.1000e-004 | 3.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 6.4814 | 6.4814 | 2.1000e-004 | 1.0300e-003 | 6.7949 |
| Worker | 8.6500e-003 | 3.5200e-003 | 0.0397 | 1.0000e-005 | 8.0000e-005 | 4.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.4692 | 1.4692 | 9.1000e-004 | 4.6000e-004 | 1.6282 |
| **Total** | **0.0110** | **0.0517** | **0.0784** | **7.0000e-005** | **1.9000e-004** | **7.0000e-005** | **2.4000e-004** | **7.0000e-005** | **6.0000e-005** | **1.3000e-004** | | **7.9506** | **7.9506** | **1.1200e-003** | **1.4900e-003** | **8.4231** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5510 | 5.4820 | 7.0282 | 0.0114 | | 0.2413 | 0.2413 | | 0.2220 | 0.2220 | | 1,105.5711 | 1,105.5711 | 0.3576 | | 1,114.5102 |
| **Total** | **0.5510** | **5.4820** | **7.0282** | **0.0114** | | **0.2413** | **0.2413** | | **0.2220** | **0.2220** | | **1,105.5711** | **1,105.5711** | **0.3576** | | **1,114.5102** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.3300e-003 | 0.0480 | 0.0383 | 6.0000e-005 | 1.1000e-004 | 3.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 6.3682 | 6.3682 | 2.1000e-004 | 1.0200e-003 | 6.6763 |
| Worker | 8.0000e-003 | 3.2700e-003 | 0.0381 | 1.0000e-005 | 8.0000e-005 | 3.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.4195 | 1.4195 | 8.4000e-004 | 4.3000e-004 | 1.5700 |
| **Total** | **0.0103** | **0.0513** | **0.0763** | **7.0000e-005** | **1.9000e-004** | **6.0000e-005** | **2.4000e-004** | **7.0000e-005** | **6.0000e-005** | **1.3000e-004** | | **7.7877** | **7.7877** | **1.0500e-003** | **1.4500e-003** | **8.2463** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2746 | 4.4677 | 7.8973 | 0.0114 | | 0.0471 | 0.0471 | | 0.0446 | 0.0446 | 0.0000 | 1,105.5711 | 1,105.5711 | 0.3576 | | 1,114.5102 |
| **Total** | **0.2746** | **4.4677** | **7.8973** | **0.0114** | | **0.0471** | **0.0471** | | **0.0446** | **0.0446** | **0.0000** | **1,105.5711** | **1,105.5711** | **0.3576** | | **1,114.5102** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.3300e-003 | 0.0480 | 0.0383 | 6.0000e-005 | 1.1000e-004 | 3.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 6.3682 | 6.3682 | 2.1000e-004 | 1.0200e-003 | 6.6763 |
| Worker | 8.0000e-003 | 3.2700e-003 | 0.0381 | 1.0000e-005 | 8.0000e-005 | 3.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.4195 | 1.4195 | 8.4000e-004 | 4.3000e-004 | 1.5700 |
| **Total** | **0.0103** | **0.0513** | **0.0763** | **7.0000e-005** | **1.9000e-004** | **6.0000e-005** | **2.4000e-004** | **7.0000e-005** | **6.0000e-005** | **1.3000e-004** | | **7.7877** | **7.7877** | **1.0500e-003** | **1.4500e-003** | **8.2463** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5638 | 4.9206 | 7.0257 | 0.0113 | | 0.2186 | 0.2186 | | 0.2046 | 0.2046 | | 1,036.2711 | 1,036.2711 | 0.3019 | | 1,043.8179 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.5638** | **4.9206** | **7.0257** | **0.0113** | | **0.2186** | **0.2186** | | **0.2046** | **0.2046** | | **1,036.2711** | **1,036.2711** | **0.3019** | | **1,043.8179** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0180 | 7.3600e-003 | 0.0856 | 3.0000e-005 | 1.8000e-004 | 8.0000e-005 | 2.5000e-004 | 7.0000e-005 | 7.0000e-005 | 1.4000e-004 | | 3.1939 | 3.1939 | 1.8900e-003 | 9.8000e-004 | 3.5325 |
| **Total** | **0.0180** | **7.3600e-003** | **0.0856** | **3.0000e-005** | **1.8000e-004** | **8.0000e-005** | **2.5000e-004** | **7.0000e-005** | **7.0000e-005** | **1.4000e-004** | | **3.1939** | **3.1939** | **1.8900e-003** | **9.8000e-004** | **3.5325** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.1790 | 3.9959 | 6.8743 | 0.0113 | | 0.0274 | 0.0274 | | 0.0263 | 0.0263 | 0.0000 | 1,036.2711 | 1,036.2711 | 0.3019 | | 1,043.8179 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.1790** | **3.9959** | **6.8743** | **0.0113** | | **0.0274** | **0.0274** | | **0.0263** | **0.0263** | **0.0000** | **1,036.2711** | **1,036.2711** | **0.3019** | | **1,043.8179** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0180 | 7.3600e-003 | 0.0856 | 3.0000e-005 | 1.8000e-004 | 8.0000e-005 | 2.5000e-004 | 7.0000e-005 | 7.0000e-005 | 1.4000e-004 | | 3.1939 | 3.1939 | 1.8900e-003 | 9.8000e-004 | 3.5325 |
| **Total** | **0.0180** | **7.3600e-003** | **0.0856** | **3.0000e-005** | **1.8000e-004** | **8.0000e-005** | **2.5000e-004** | **7.0000e-005** | **7.0000e-005** | **1.4000e-004** | | **3.1939** | **3.1939** | **1.8900e-003** | **9.8000e-004** | **3.5325** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 9.8410 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **10.0119** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.0000e-003 | 8.2000e-004 | 9.5100e-003 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 3.0000e-005 | 1.0000e-005 | 1.0000e-005 | 2.0000e-005 | | 0.3549 | 0.3549 | 2.1000e-004 | 1.1000e-004 | 0.3925 |
| **Total** | **2.0000e-003** | **8.2000e-004** | **9.5100e-003** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **3.0000e-005** | **1.0000e-005** | **1.0000e-005** | **2.0000e-005** | | **0.3549** | **0.3549** | **2.1000e-004** | **1.1000e-004** | **0.3925** |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 9.8410 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0545 | 1.0598 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **9.8955** | **1.0598** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.0000e-003 | 8.2000e-004 | 9.5100e-003 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 3.0000e-005 | 1.0000e-005 | 1.0000e-005 | 2.0000e-005 | | 0.3549 | 0.3549 | 2.1000e-004 | 1.1000e-004 | 0.3925 |
| **Total** | **2.0000e-003** | **8.2000e-004** | **9.5100e-003** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **3.0000e-005** | **1.0000e-005** | **1.0000e-005** | **2.0000e-005** | | **0.3549** | **0.3549** | **2.1000e-004** | **1.1000e-004** | **0.3925** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.6873 | 0.8126 | 7.1148 | 0.0166 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,695.8838 | 1,695.8838 | 0.1073 | 0.0736 | 1,720.4839 |
| Unmitigated | 0.6873 | 0.8126 | 7.1148 | 0.0166 | 1.9520 | 0.0120 | 1.9641 | 0.5202 | 0.0112 | 0.5314 | | 1,695.8838 | 1,695.8838 | 0.1073 | 0.0736 | 1,720.4839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Hospital | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |
| Total | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Hospital | 16.60 | 8.40 | 6.90 | 64.90 | 16.10 | 19.00 | 73 | 25 | 2 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hospital | 0.540893 | 0.062748 | 0.186142 | 0.127785 | 0.023768 | 0.006610 | 0.012333 | 0.009205 | 0.000817 | 0.000491 | 0.024860 | 0.000754 | 0.003594 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| NaturalGas Unmitigated | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Hospital | 3921.74 | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| **Total** | | **0.0423** | **0.3845** | **0.3230** | **2.3100e-003** | | **0.0292** | **0.0292** | | **0.0292** | **0.0292** | | **461.3807** | **461.3807** | **8.8400e-003** | **8.4600e-003** | **464.1224** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Hospital | 3.92174 | 0.0423 | 0.3845 | 0.3230 | 2.3100e-003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | 461.3807 | 461.3807 | 8.8400e-003 | 8.4600e-003 | 464.1224 |
| **Total** | | **0.0423** | **0.3845** | **0.3230** | **2.3100e-003** | | **0.0292** | **0.0292** | | **0.0292** | **0.0292** | | **461.3807** | **461.3807** | **8.8400e-003** | **8.4600e-003** | **464.1224** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| Unmitigated | 0.4982 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |

Kaiser Baldwin Park - Emergency Room LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0566 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.4414 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.1000e-004 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| **Total** | **0.4982** | **2.0000e-005** | **2.2700e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | | **4.8800e-003** | **4.8800e-003** | **1.0000e-005** | | **5.2000e-003** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0566 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.4414 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 2.1000e-004 | 2.0000e-005 | 2.2700e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | | 4.8800e-003 | 4.8800e-003 | 1.0000e-005 | | 5.2000e-003 |
| **Total** | **0.4982** | **2.0000e-005** | **2.2700e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | | **4.8800e-003** | **4.8800e-003** | **1.0000e-005** | | **5.2000e-003** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Medical Office Building LST

**South Coast AQMD Air District, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Medical Office Building | 33.00 | 1000sqft | 0.76 | 33,000.00 | 0 |
| Parking Lot | 80.00 | Space | 0.72 | 32,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2030 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific information.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults. Length adjusted to match contractor's projections.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips. Trip lengths zeroed out for LST.

On-road Fugitive Dust - CalEEMod defaults.

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Demolition - Basded on existing buildings onsite.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Trip rates calculated from traffic report.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | FuelType | Diesel | Electrical |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 8.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstructionPhase | NumDays | 2.00 | 4.00 |
| tblConstructionPhase | NumDays | 4.00 | 7.00 |
| tblConstructionPhase | NumDays | 200.00 | 350.00 |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblGrading | AcresOfGrading | 7.00 | 4.00 |
| tblGrading | AcresOfGrading | 3.75 | 1.88 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripNumber | 11.00 | 12.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 14.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |
| tblVehicleTrips | ST_TR | 8.57 | 31.85 |
| tblVehicleTrips | SU_TR | 1.42 | 31.85 |
| tblVehicleTrips | WD_TR | 34.80 | 31.85 |

## 2.0 Emissions Summary

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 1.3537 | 12.4274 | 12.6325 | 0.0223 | 6.6282 | 0.4961 | 7.1243 | 3.3757 | 0.4564 | 3.8321 | 0.0000 | 2,023.7374 | 2,023.7374 | 0.6462 | 3.9000e-003 | 2,033.1351 |
| 2029 | 17.6653 | 10.5536 | 12.6293 | 0.0223 | 5.6000e-004 | 0.3926 | 0.3932 | 2.1000e-004 | 0.3787 | 0.3789 | 0.0000 | 2,023.3043 | 2,023.3043 | 0.4124 | 3.8200e-003 | 2,032.6739 |
| **Maximum** | **17.6653** | **12.4274** | **12.6325** | **0.0223** | **6.6282** | **0.4961** | **7.1243** | **3.3757** | **0.4564** | **3.8321** | **0.0000** | **2,023.7374** | **2,023.7374** | **0.6462** | **3.9000e-003** | **2,033.1351** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 0.2706 | 5.1592 | 13.0655 | 0.0206 | 2.9827 | -0.0004 | 2.8268 | 1.5191 | 1.5700e-003 | 1.3793 | 0.0000 | 1,997.4434 | 1,997.4434 | 0.6462 | 3.9000e-003 | 2,013.7347 |
| 2029 | 17.5489 | 5.7292 | 9.9675 | 0.0146 | 5.6000e-004 | 3.9800e-003 | 4.0400e-003 | 2.1000e-004 | 3.9800e-003 | 4.0000e-003 | 0.0000 | 1,400.8711 | 1,400.8711 | 0.4124 | 3.8200e-003 | 1,408.7621 |
| **Maximum** | **17.5489** | **5.7292** | **13.0655** | **0.0206** | **2.9827** | **3.9800e-003** | **2.8268** | **1.5191** | **3.9800e-003** | **1.3793** | **0.0000** | **1,997.4434** | **1,997.4434** | **0.6462** | **3.9000e-003** | **2,013.7347** |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 6.31 | 52.62 | 8.82 | 20.89 | 54.99 | 99.59 | 62.34 | 55.00 | 99.34 | 67.15 | 0.00 | 16.03 | 16.03 | 0.00 | 0.00 | 15.82 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Energy | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Mobile | 2.3017 | 2.0854 | 20.8385 | 0.0469 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0279 | 1.5591 | | 4,789.4446 | 4,789.4446 | 0.3087 | 0.2055 | 4,858.3971 |
| **Total** | **3.0638** | **2.1769** | **20.9267** | **0.0475** | **5.7452** | **0.0370** | **5.7822** | **1.5311** | **0.0349** | **1.5661** | | **4,899.1325** | **4,899.1325** | **0.3109** | **0.2075** | **4,968.7382** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Energy | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Mobile | 2.3017 | 2.0854 | 20.8385 | 0.0469 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0279 | 1.5591 | | 4,789.4446 | 4,789.4446 | 0.3087 | 0.2055 | 4,858.3971 |
| **Total** | **3.0638** | **2.1769** | **20.9267** | **0.0475** | **5.7452** | **0.0370** | **5.7822** | **1.5311** | **0.0349** | **1.5661** | | **4,899.1325** | **4,899.1325** | **0.3109** | **0.2075** | **4,968.7382** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 6/1/2028 | 6/6/2028 | 5 | 4 | |
| 2 | Grading | Grading | 6/7/2028 | 6/15/2028 | 5 | 7 | |
| 3 | Building Construction | Building Construction | 6/16/2028 | 10/18/2029 | 5 | 350 | |
| 4 | Paving | Paving | 10/19/2029 | 11/13/2029 | 5 | 18 | |
| 5 | Architectural Coating | Architectural Coating | 11/14/2029 | 12/7/2029 | 5 | 18 | |

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0.72**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,500; Non-Residential Outdoor: 16,500; Striped Parking Area: 1,920 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 4 | 10.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 24.00 | 12.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 14.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 6.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 5.7678 | 0.0000 | 5.7678 | 2.9503 | 0.0000 | 2.9503 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.0103 | 10.5940 | 6.4468 | 0.0172 | | 0.4192 | 0.4192 | | 0.3857 | 0.3857 | | 1,665.8856 | 1,665.8856 | 0.5388 | | 1,679.3551 |
| **Total** | **1.0103** | **10.5940** | **6.4468** | **0.0172** | **5.7678** | **0.4192** | **6.1870** | **2.9503** | **0.3857** | **3.3360** | | **1,665.8856** | **1,665.8856** | **0.5388** | | **1,679.3551** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.1600e-003 | 2.5100e-003 | 0.0288 | 1.0000e-005 | 8.0000e-005 | 3.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.3168 | 1.3168 | 5.9000e-004 | 3.6000e-004 | 1.4402 |
| **Total** | **7.1600e-003** | **2.5100e-003** | **0.0288** | **1.0000e-005** | **8.0000e-005** | **3.0000e-005** | **1.1000e-004** | **3.0000e-005** | **3.0000e-005** | **6.0000e-005** | | **1.3168** | **1.3168** | **5.9000e-004** | **3.6000e-004** | **1.4402** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.5955 | 0.0000 | 2.5955 | 1.3276 | 0.0000 | 1.3276 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0397 | 3.1599 | 10.5602 | 0.0172 | | -0.1222 | -0.1222 | | -0.1094 | -0.1094 | 0.0000 | 1,665.8856 | 1,665.8856 | 0.5388 | | 1,679.3551 |
| **Total** | **0.0397** | **3.1599** | **10.5602** | **0.0172** | **2.5955** | **-0.1222** | **2.4733** | **1.3276** | **-0.1094** | **1.2182** | **0.0000** | **1,665.8856** | **1,665.8856** | **0.5388** | | **1,679.3551** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.1600e-003 | 2.5100e-003 | 0.0288 | 1.0000e-005 | 8.0000e-005 | 3.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.3168 | 1.3168 | 5.9000e-004 | 3.6000e-004 | 1.4402 |
| **Total** | **7.1600e-003** | **2.5100e-003** | **0.0288** | **1.0000e-005** | **8.0000e-005** | **3.0000e-005** | **1.1000e-004** | **3.0000e-005** | **3.0000e-005** | **6.0000e-005** | | **1.3168** | **1.3168** | **5.9000e-004** | **3.6000e-004** | **1.4402** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.6281 | 0.0000 | 6.6281 | 3.3757 | 0.0000 | 3.3757 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.1904 | 12.4243 | 8.4937 | 0.0206 | | 0.4961 | 0.4961 | | 0.4564 | 0.4564 | | 1,995.7975 | 1,995.7975 | 0.6455 | | 2,011.9345 |
| **Total** | **1.1904** | **12.4243** | **8.4937** | **0.0206** | **6.6281** | **0.4961** | **7.1242** | **3.3757** | **0.4564** | **3.8320** | | **1,995.7975** | **1,995.7975** | **0.6455** | | **2,011.9345** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.9500e-003 | 3.1400e-003 | 0.0360 | 2.0000e-005 | 1.0000e-004 | 4.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.6460 | 1.6460 | 7.4000e-004 | 4.6000e-004 | 1.8002 |
| **Total** | **8.9500e-003** | **3.1400e-003** | **0.0360** | **2.0000e-005** | **1.0000e-004** | **4.0000e-005** | **1.3000e-004** | **4.0000e-005** | **3.0000e-005** | **7.0000e-005** | | **1.6460** | **1.6460** | **7.4000e-004** | **4.6000e-004** | **1.8002** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.9826 | 0.0000 | 2.9826 | 1.5191 | 0.0000 | 1.5191 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0495 | 4.1916 | 13.0295 | 0.0206 | | -0.1560 | -0.1560 | | -0.1398 | -0.1398 | 0.0000 | 1,995.7975 | 1,995.7975 | 0.6455 | | 2,011.9345 |
| **Total** | **0.0495** | **4.1916** | **13.0295** | **0.0206** | **2.9826** | **-0.1560** | **2.8267** | **1.5191** | **-0.1398** | **1.3792** | **0.0000** | **1,995.7975** | **1,995.7975** | **0.6455** | | **2,011.9345** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.9500e-003 | 3.1400e-003 | 0.0360 | 2.0000e-005 | 1.0000e-004 | 4.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.6460 | 1.6460 | 7.4000e-004 | 4.6000e-004 | 1.8002 |
| **Total** | **8.9500e-003** | **3.1400e-003** | **0.0360** | **2.0000e-005** | **1.0000e-004** | **4.0000e-005** | **1.3000e-004** | **4.0000e-005** | **3.0000e-005** | **7.0000e-005** | | **1.6460** | **1.6460** | **7.4000e-004** | **4.6000e-004** | **1.8002** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3246 | 10.4128 | 12.4393 | 0.0221 | | 0.3925 | 0.3925 | | 0.3785 | 0.3785 | | 2,002.1524 | 2,002.1524 | 0.3269 | | 2,010.3248 |
| **Total** | **1.3246** | **10.4128** | **12.4393** | **0.0221** | | **0.3925** | **0.3925** | | **0.3785** | **0.3785** | | **2,002.1524** | **2,002.1524** | **0.3269** | | **2,010.3248** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.6100e-003 | 0.1339 | 0.1067 | 1.6000e-004 | 3.2000e-004 | 7.0000e-005 | 3.8000e-004 | 1.2000e-004 | 7.0000e-005 | 1.9000e-004 | | 17.6347 | 17.6347 | 6.5000e-004 | 2.8100e-003 | 18.4898 |
| Worker | 0.0215 | 7.5400e-003 | 0.0864 | 4.0000e-005 | 2.4000e-004 | 9.0000e-005 | 3.2000e-004 | 9.0000e-005 | 8.0000e-005 | 1.7000e-004 | | 3.9503 | 3.9503 | 1.7700e-003 | 1.0900e-003 | 4.3206 |
| **Total** | **0.0291** | **0.1414** | **0.1931** | **2.0000e-004** | **5.6000e-004** | **1.6000e-004** | **7.0000e-004** | **2.1000e-004** | **1.5000e-004** | **3.6000e-004** | | **21.5850** | **21.5850** | **2.4200e-003** | **3.9000e-003** | **22.8103** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2415 | 5.0178 | 9.0386 | 0.0144 | | -0.0005 | -0.0005 | | 1.4200e-003 | 1.4200e-003 | 0.0000 | 1,379.7193 | 1,379.7193 | 0.2678 | | 1,386.4130 |
| **Total** | **0.2415** | **5.0178** | **9.0386** | **0.0144** | | **-0.0005** | **-0.0005** | | **1.4200e-003** | **1.4200e-003** | **0.0000** | **1,379.7193** | **1,379.7193** | **0.2678** | | **1,386.4130** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.6100e-003 | 0.1339 | 0.1067 | 1.6000e-004 | 3.2000e-004 | 7.0000e-005 | 3.8000e-004 | 1.2000e-004 | 7.0000e-005 | 1.9000e-004 | | 17.6347 | 17.6347 | 6.5000e-004 | 2.8100e-003 | 18.4898 |
| Worker | 0.0215 | 7.5400e-003 | 0.0864 | 4.0000e-005 | 2.4000e-004 | 9.0000e-005 | 3.2000e-004 | 9.0000e-005 | 8.0000e-005 | 1.7000e-004 | | 3.9503 | 3.9503 | 1.7700e-003 | 1.0900e-003 | 4.3206 |
| **Total** | **0.0291** | **0.1414** | **0.1931** | **2.0000e-004** | **5.6000e-004** | **1.6000e-004** | **7.0000e-004** | **2.1000e-004** | **1.5000e-004** | **3.6000e-004** | | **21.5850** | **21.5850** | **2.4200e-003** | **3.9000e-003** | **22.8103** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3246 | 10.4128 | 12.4393 | 0.0221 | | 0.3925 | 0.3925 | | 0.3785 | 0.3785 | | 2,002.1524 | 2,002.1524 | 0.3269 | | 2,010.3248 |
| **Total** | **1.3246** | **10.4128** | **12.4393** | **0.0221** | | **0.3925** | **0.3925** | | **0.3785** | **0.3785** | | **2,002.1524** | **2,002.1524** | **0.3269** | | **2,010.3248** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.5600e-003 | 0.1336 | 0.1062 | 1.6000e-004 | 3.2000e-004 | 7.0000e-005 | 3.8000e-004 | 1.2000e-004 | 6.0000e-005 | 1.9000e-004 | | 17.2980 | 17.2980 | 6.5000e-004 | 2.7600e-003 | 18.1375 |
| Worker | 0.0201 | 7.1800e-003 | 0.0838 | 4.0000e-005 | 2.4000e-004 | 8.0000e-005 | 3.2000e-004 | 9.0000e-005 | 8.0000e-005 | 1.7000e-004 | | 3.8539 | 3.8539 | 1.6600e-003 | 1.0600e-003 | 4.2117 |
| **Total** | **0.0277** | **0.1408** | **0.1900** | **2.0000e-004** | **5.6000e-004** | **1.5000e-004** | **7.0000e-004** | **2.1000e-004** | **1.4000e-004** | **3.6000e-004** | | **21.1519** | **21.1519** | **2.3100e-003** | **3.8200e-003** | **22.3491** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2415 | 5.0178 | 9.0386 | 0.0144 | | -0.0005 | -0.0005 | | 1.4200e-003 | 1.4200e-003 | 0.0000 | 1,379.7193 | 1,379.7193 | 0.2678 | | 1,386.4130 |
| **Total** | **0.2415** | **5.0178** | **9.0386** | **0.0144** | | **-0.0005** | **-0.0005** | | **1.4200e-003** | **1.4200e-003** | **0.0000** | **1,379.7193** | **1,379.7193** | **0.2678** | | **1,386.4130** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.5600e-003 | 0.1336 | 0.1062 | 1.6000e-004 | 3.2000e-004 | 7.0000e-005 | 3.8000e-004 | 1.2000e-004 | 6.0000e-005 | 1.9000e-004 | | 17.2980 | 17.2980 | 6.5000e-004 | 2.7600e-003 | 18.1375 |
| Worker | 0.0201 | 7.1800e-003 | 0.0838 | 4.0000e-005 | 2.4000e-004 | 8.0000e-005 | 3.2000e-004 | 9.0000e-005 | 8.0000e-005 | 1.7000e-004 | | 3.8539 | 3.8539 | 1.6600e-003 | 1.0600e-003 | 4.2117 |
| **Total** | **0.0277** | **0.1408** | **0.1900** | **2.0000e-004** | **5.6000e-004** | **1.5000e-004** | **7.0000e-004** | **2.1000e-004** | **1.4000e-004** | **3.6000e-004** | | **21.1519** | **21.1519** | **2.3100e-003** | **3.8200e-003** | **22.3491** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5732 | 5.3259 | 8.7951 | 0.0136 | | 0.2465 | 0.2465 | | 0.2276 | 0.2276 | | 1,297.8096 | 1,297.8096 | 0.4114 | | 1,308.0951 |
| Paving | 0.1048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.6780** | **5.3259** | **8.7951** | **0.0136** | | **0.2465** | **0.2465** | | **0.2276** | **0.2276** | | **1,297.8096** | **1,297.8096** | **0.4114** | | **1,308.0951** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0117 | 4.1900e-003 | 0.0489 | 2.0000e-005 | 1.4000e-004 | 5.0000e-005 | 1.9000e-004 | 5.0000e-005 | 4.0000e-005 | 1.0000e-004 | | 2.2481 | 2.2481 | 9.7000e-004 | 6.2000e-004 | 2.4568 |
| **Total** | **0.0117** | **4.1900e-003** | **0.0489** | **2.0000e-005** | **1.4000e-004** | **5.0000e-005** | **1.9000e-004** | **5.0000e-005** | **4.0000e-005** | **1.0000e-004** | | **2.2481** | **2.2481** | **9.7000e-004** | **6.2000e-004** | **2.4568** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.1774 | 5.7250 | 9.9186 | 0.0136 | | -0.0081 | -0.0081 | | -0.0055 | -0.0055 | 0.0000 | 1,297.8096 | 1,297.8096 | 0.4114 | | 1,308.0951 |
| Paving | 0.1048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.2822** | **5.7250** | **9.9186** | **0.0136** | | **-0.0081** | **-0.0081** | | **-0.0055** | **-0.0055** | **0.0000** | **1,297.8096** | **1,297.8096** | **0.4114** | | **1,308.0951** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0117 | 4.1900e-003 | 0.0489 | 2.0000e-005 | 1.4000e-004 | 5.0000e-005 | 1.9000e-004 | 5.0000e-005 | 4.0000e-005 | 1.0000e-004 | | 2.2481 | 2.2481 | 9.7000e-004 | 6.2000e-004 | 2.4568 |
| **Total** | **0.0117** | **4.1900e-003** | **0.0489** | **2.0000e-005** | **1.4000e-004** | **5.0000e-005** | **1.9000e-004** | **5.0000e-005** | **4.0000e-005** | **1.0000e-004** | | **2.2481** | **2.2481** | **9.7000e-004** | **6.2000e-004** | **2.4568** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 17.4894 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **17.6603** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.0300e-003 | 1.8000e-003 | 0.0209 | 1.0000e-005 | 6.0000e-005 | 2.0000e-005 | 8.0000e-005 | 2.0000e-005 | 2.0000e-005 | 4.0000e-005 | | 0.9635 | 0.9635 | 4.2000e-004 | 2.7000e-004 | 1.0529 |
| **Total** | **5.0300e-003** | **1.8000e-003** | **0.0209** | **1.0000e-005** | **6.0000e-005** | **2.0000e-005** | **8.0000e-005** | **2.0000e-005** | **2.0000e-005** | **4.0000e-005** | | **0.9635** | **0.9635** | **4.2000e-004** | **2.7000e-004** | **1.0529** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 17.4894 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0545 | 1.0598 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **17.5439** | **1.0598** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.0300e-003 | 1.8000e-003 | 0.0209 | 1.0000e-005 | 6.0000e-005 | 2.0000e-005 | 8.0000e-005 | 2.0000e-005 | 2.0000e-005 | 4.0000e-005 | | 0.9635 | 0.9635 | 4.2000e-004 | 2.7000e-004 | 1.0529 |
| **Total** | **5.0300e-003** | **1.8000e-003** | **0.0209** | **1.0000e-005** | **6.0000e-005** | **2.0000e-005** | **8.0000e-005** | **2.0000e-005** | **2.0000e-005** | **4.0000e-005** | | **0.9635** | **0.9635** | **4.2000e-004** | **2.7000e-004** | **1.0529** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.3017 | 2.0854 | 20.8385 | 0.0469 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0279 | 1.5591 | | 4,789.4446 | 4,789.4446 | 0.3087 | 0.2055 | 4,858.3971 |
| Unmitigated | 2.3017 | 2.0854 | 20.8385 | 0.0469 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0279 | 1.5591 | | 4,789.4446 | 4,789.4446 | 0.3087 | 0.2055 | 4,858.3971 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Medical Office Building | 1,051.05 | 1,051.05 | 1051.05 | 2,726,275 | 2,726,275 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,051.05 | 1,051.05 | 1,051.05 | 2,726,275 | 2,726,275 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Medical Office Building | 16.60 | 8.40 | 6.90 | 29.60 | 51.40 | 19.00 | 60 | 30 | 10 |
| Parking Lot | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Medical Office Building | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |
| Parking Lot | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| NaturalGas Unmitigated | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Medical Office Building | 932.137 | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0101** | **0.0914** | **0.0768** | **5.5000e-004** | | **6.9500e-003** | **6.9500e-003** | | **6.9500e-003** | **6.9500e-003** | | **109.6632** | **109.6632** | **2.1000e-003** | **2.0100e-003** | **110.3149** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Medical Office Building | 0.932137 | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0101** | **0.0914** | **0.0768** | **5.5000e-004** | | **6.9500e-003** | **6.9500e-003** | | **6.9500e-003** | **6.9500e-003** | | **109.6632** | **109.6632** | **2.1000e-003** | **2.0100e-003** | **110.3149** |

## 6.0 Area Detail

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Unmitigated | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0863 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.0500e-003 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| **Total** | **0.7520** | **1.0000e-004** | **0.0115** | **0.0000** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **0.0247** | **0.0247** | **6.0000e-005** | | **0.0263** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0863 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.0500e-003 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| **Total** | **0.7520** | **1.0000e-004** | **0.0115** | **0.0000** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **0.0247** | **0.0247** | **6.0000e-005** | | **0.0263** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Medical Office Building LST

**South Coast AQMD Air District, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Medical Office Building | 33.00 | 1000sqft | 0.76 | 33,000.00 | 0 |
| Parking Lot | 80.00 | Space | 0.72 | 32,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2030 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific information.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults. Length adjusted to match contractor's projections.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips. Trip lengths zeroed out for LST.

On-road Fugitive Dust - CalEEMod defaults.

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Demolition - Basded on existing buildings onsite.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Trip rates calculated from traffic report.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | FuelType | Diesel | Electrical |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 8.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstructionPhase | NumDays | 2.00 | 4.00 |
| tblConstructionPhase | NumDays | 4.00 | 7.00 |
| tblConstructionPhase | NumDays | 200.00 | 350.00 |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblGrading | AcresOfGrading | 7.00 | 4.00 |
| tblGrading | AcresOfGrading | 3.75 | 1.88 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.00 |
| tblTripsAndVMT | VendorTripNumber | 11.00 | 12.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 14.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 6.00 |
| tblVehicleTrips | ST_TR | 8.57 | 31.85 |
| tblVehicleTrips | SU_TR | 1.42 | 31.85 |
| tblVehicleTrips | WD_TR | 34.80 | 31.85 |

## 2.0 Emissions Summary

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 1.3508 | 12.4277 | 12.6537 | 0.0223 | 6.6282 | 0.4961 | 7.1243 | 3.3757 | 0.4564 | 3.8321 | 0.0000 | 2,024.1028 | 2,024.1028 | 0.6463 | 4.0400e-003 | 2,033.5459 |
| 2029 | 17.6648 | 10.5633 | 12.6499 | 0.0223 | 5.6000e-004 | 0.3926 | 0.3932 | 2.1000e-004 | 0.3787 | 0.3789 | 0.0000 | 2,023.6664 | 2,023.6664 | 0.4125 | 3.9600e-003 | 2,033.0802 |
| **Maximum** | **17.6648** | **12.4277** | **12.6537** | **0.0223** | **6.6282** | **0.4961** | **7.1243** | **3.3757** | **0.4564** | **3.8321** | **0.0000** | **2,024.1028** | **2,024.1028** | **0.6463** | **4.0400e-003** | **2,033.5459** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2028 | 0.2677 | 5.1689 | 13.0720 | 0.0206 | 2.9827 | -0.0004 | 2.8268 | 1.5191 | 1.5800e-003 | 1.3793 | 0.0000 | 1,997.4224 | 1,997.4224 | 0.6463 | 4.0400e-003 | 2,013.7244 |
| 2029 | 17.5484 | 5.7296 | 9.9764 | 0.0146 | 5.6000e-004 | 3.9800e-003 | 4.0400e-003 | 2.1000e-004 | 3.9800e-003 | 4.0000e-003 | 0.0000 | 1,401.2332 | 1,401.2332 | 0.4125 | 3.9600e-003 | 1,409.1684 |
| **Maximum** | **17.5484** | **5.7296** | **13.0720** | **0.0206** | **2.9827** | **3.9800e-003** | **2.8268** | **1.5191** | **3.9800e-003** | **1.3793** | **0.0000** | **1,997.4224** | **1,997.4224** | **0.6463** | **4.0400e-003** | **2,013.7244** |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 6.31 | 52.60 | 8.91 | 20.91 | 54.99 | 99.59 | 62.34 | 55.00 | 99.33 | 67.15 | 0.00 | 16.04 | 16.04 | 0.00 | 0.00 | 15.83 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Energy | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Mobile | 2.1992 | 2.2401 | 20.4519 | 0.0448 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0280 | 1.5591 | | 4,573.8519 | 4,573.8519 | 0.3184 | 0.2132 | 4,645.3489 |
| **Total** | **2.9613** | **2.3315** | **20.5401** | **0.0454** | **5.7452** | **0.0370** | **5.7822** | **1.5311** | **0.0349** | **1.5661** | | **4,683.5398** | **4,683.5398** | **0.3206** | **0.2152** | **4,755.6901** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Energy | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Mobile | 2.1992 | 2.2401 | 20.4519 | 0.0448 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0280 | 1.5591 | | 4,573.8519 | 4,573.8519 | 0.3184 | 0.2132 | 4,645.3489 |
| **Total** | **2.9613** | **2.3315** | **20.5401** | **0.0454** | **5.7452** | **0.0370** | **5.7822** | **1.5311** | **0.0349** | **1.5661** | | **4,683.5398** | **4,683.5398** | **0.3206** | **0.2152** | **4,755.6901** |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 6/1/2028 | 6/6/2028 | 5 | 4 | |
| 2 | Grading | Grading | 6/7/2028 | 6/15/2028 | 5 | 7 | |
| 3 | Building Construction | Building Construction | 6/16/2028 | 10/18/2029 | 5 | 350 | |
| 4 | Paving | Paving | 10/19/2029 | 11/13/2029 | 5 | 18 | |
| 5 | Architectural Coating | Architectural Coating | 11/14/2029 | 12/7/2029 | 5 | 18 | |

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0.72**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,500; Non-Residential Outdoor: 16,500; Striped Parking Area: 1,920 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 8.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 4 | 10.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 24.00 | 12.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 14.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 6.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 5.7678 | 0.0000 | 5.7678 | 2.9503 | 0.0000 | 2.9503 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.0103 | 10.5940 | 6.4468 | 0.0172 | | 0.4192 | 0.4192 | | 0.3857 | 0.3857 | | 1,665.8856 | 1,665.8856 | 0.5388 | | 1,679.3551 |
| **Total** | **1.0103** | **10.5940** | **6.4468** | **0.0172** | **5.7678** | **0.4192** | **6.1870** | **2.9503** | **0.3857** | **3.3360** | | **1,665.8856** | **1,665.8856** | **0.5388** | | **1,679.3551** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4700e-003 | 2.7300e-003 | 0.0341 | 1.0000e-005 | 8.0000e-005 | 3.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.3000 | 1.3000 | 6.7000e-004 | 3.9000e-004 | 1.4319 |
| **Total** | **6.4700e-003** | **2.7300e-003** | **0.0341** | **1.0000e-005** | **8.0000e-005** | **3.0000e-005** | **1.1000e-004** | **3.0000e-005** | **3.0000e-005** | **6.0000e-005** | | **1.3000** | **1.3000** | **6.7000e-004** | **3.9000e-004** | **1.4319** |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.5955 | 0.0000 | 2.5955 | 1.3276 | 0.0000 | 1.3276 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0397 | 3.1599 | 10.5602 | 0.0172 | | -0.1222 | -0.1222 | | -0.1094 | -0.1094 | 0.0000 | 1,665.8856 | 1,665.8856 | 0.5388 | | 1,679.3551 |
| **Total** | **0.0397** | **3.1599** | **10.5602** | **0.0172** | **2.5955** | **-0.1222** | **2.4733** | **1.3276** | **-0.1094** | **1.2182** | **0.0000** | **1,665.8856** | **1,665.8856** | **0.5388** | | **1,679.3551** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4700e-003 | 2.7300e-003 | 0.0341 | 1.0000e-005 | 8.0000e-005 | 3.0000e-005 | 1.1000e-004 | 3.0000e-005 | 3.0000e-005 | 6.0000e-005 | | 1.3000 | 1.3000 | 6.7000e-004 | 3.9000e-004 | 1.4319 |
| **Total** | **6.4700e-003** | **2.7300e-003** | **0.0341** | **1.0000e-005** | **8.0000e-005** | **3.0000e-005** | **1.1000e-004** | **3.0000e-005** | **3.0000e-005** | **6.0000e-005** | | **1.3000** | **1.3000** | **6.7000e-004** | **3.9000e-004** | **1.4319** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.6281 | 0.0000 | 6.6281 | 3.3757 | 0.0000 | 3.3757 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.1904 | 12.4243 | 8.4937 | 0.0206 | | 0.4961 | 0.4961 | | 0.4564 | 0.4564 | | 1,995.7975 | 1,995.7975 | 0.6455 | | 2,011.9345 |
| **Total** | **1.1904** | **12.4243** | **8.4937** | **0.0206** | **6.6281** | **0.4961** | **7.1242** | **3.3757** | **0.4564** | **3.8320** | | **1,995.7975** | **1,995.7975** | **0.6455** | | **2,011.9345** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.0900e-003 | 3.4200e-003 | 0.0426 | 2.0000e-005 | 1.0000e-004 | 4.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.6250 | 1.6250 | 8.4000e-004 | 4.8000e-004 | 1.7899 |
| **Total** | **8.0900e-003** | **3.4200e-003** | **0.0426** | **2.0000e-005** | **1.0000e-004** | **4.0000e-005** | **1.3000e-004** | **4.0000e-005** | **3.0000e-005** | **7.0000e-005** | | **1.6250** | **1.6250** | **8.4000e-004** | **4.8000e-004** | **1.7899** |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.9826 | 0.0000 | 2.9826 | 1.5191 | 0.0000 | 1.5191 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0495 | 4.1916 | 13.0295 | 0.0206 | | -0.1560 | -0.1560 | | -0.1398 | -0.1398 | 0.0000 | 1,995.7975 | 1,995.7975 | 0.6455 | | 2,011.9345 |
| **Total** | **0.0495** | **4.1916** | **13.0295** | **0.0206** | **2.9826** | **-0.1560** | **2.8267** | **1.5191** | **-0.1398** | **1.3792** | **0.0000** | **1,995.7975** | **1,995.7975** | **0.6455** | | **2,011.9345** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 8.0900e-003 | 3.4200e-003 | 0.0426 | 2.0000e-005 | 1.0000e-004 | 4.0000e-005 | 1.3000e-004 | 4.0000e-005 | 3.0000e-005 | 7.0000e-005 | | 1.6250 | 1.6250 | 8.4000e-004 | 4.8000e-004 | 1.7899 |
| **Total** | **8.0900e-003** | **3.4200e-003** | **0.0426** | **2.0000e-005** | **1.0000e-004** | **4.0000e-005** | **1.3000e-004** | **4.0000e-005** | **3.0000e-005** | **7.0000e-005** | | **1.6250** | **1.6250** | **8.4000e-004** | **4.8000e-004** | **1.7899** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3246 | 10.4128 | 12.4393 | 0.0221 | | 0.3925 | 0.3925 | | 0.3785 | 0.3785 | | 2,002.1524 | 2,002.1524 | 0.3269 | | 2,010.3248 |
| **Total** | **1.3246** | **10.4128** | **12.4393** | **0.0221** | | **0.3925** | **0.3925** | | **0.3785** | **0.3785** | | **2,002.1524** | **2,002.1524** | **0.3269** | | **2,010.3248** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 6.7900e-003 | 0.1429 | 0.1122 | 1.7000e-004 | 3.2000e-004 | 8.0000e-005 | 3.9000e-004 | 1.2000e-004 | 7.0000e-005 | 2.0000e-004 | | 18.0505 | 18.0505 | 6.2000e-004 | 2.8800e-003 | 18.9253 |
| Worker | 0.0194 | 8.2000e-003 | 0.1022 | 4.0000e-005 | 2.4000e-004 | 9.0000e-005 | 3.2000e-004 | 9.0000e-005 | 8.0000e-005 | 1.7000e-004 | | 3.8999 | 3.8999 | 2.0200e-003 | 1.1600e-003 | 4.2958 |
| **Total** | **0.0262** | **0.1511** | **0.2144** | **2.1000e-004** | **5.6000e-004** | **1.7000e-004** | **7.1000e-004** | **2.1000e-004** | **1.5000e-004** | **3.7000e-004** | | **21.9504** | **21.9504** | **2.6400e-003** | **4.0400e-003** | **23.2211** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2415 | 5.0178 | 9.0386 | 0.0144 | | -0.0005 | -0.0005 | | 1.4200e-003 | 1.4200e-003 | 0.0000 | 1,379.7193 | 1,379.7193 | 0.2678 | | 1,386.4130 |
| **Total** | **0.2415** | **5.0178** | **9.0386** | **0.0144** | | **-0.0005** | **-0.0005** | | **1.4200e-003** | **1.4200e-003** | **0.0000** | **1,379.7193** | **1,379.7193** | **0.2678** | | **1,386.4130** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 6.7900e-003 | 0.1429 | 0.1122 | 1.7000e-004 | 3.2000e-004 | 8.0000e-005 | 3.9000e-004 | 1.2000e-004 | 7.0000e-005 | 2.0000e-004 | | 18.0505 | 18.0505 | 6.2000e-004 | 2.8800e-003 | 18.9253 |
| Worker | 0.0194 | 8.2000e-003 | 0.1022 | 4.0000e-005 | 2.4000e-004 | 9.0000e-005 | 3.2000e-004 | 9.0000e-005 | 8.0000e-005 | 1.7000e-004 | | 3.8999 | 3.8999 | 2.0200e-003 | 1.1600e-003 | 4.2958 |
| **Total** | **0.0262** | **0.1511** | **0.2144** | **2.1000e-004** | **5.6000e-004** | **1.7000e-004** | **7.1000e-004** | **2.1000e-004** | **1.5000e-004** | **3.7000e-004** | | **21.9504** | **21.9504** | **2.6400e-003** | **4.0400e-003** | **23.2211** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3246 | 10.4128 | 12.4393 | 0.0221 | | 0.3925 | 0.3925 | | 0.3785 | 0.3785 | | 2,002.1524 | 2,002.1524 | 0.3269 | | 2,010.3248 |
| **Total** | **1.3246** | **10.4128** | **12.4393** | **0.0221** | | **0.3925** | **0.3925** | | **0.3785** | **0.3785** | | **2,002.1524** | **2,002.1524** | **0.3269** | | **2,010.3248** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 6.7400e-003 | 0.1427 | 0.1115 | 1.6000e-004 | 3.2000e-004 | 8.0000e-005 | 3.9000e-004 | 1.2000e-004 | 7.0000e-005 | 2.0000e-004 | | 17.7097 | 17.7097 | 6.1000e-004 | 2.8300e-003 | 18.5688 |
| Worker | 0.0181 | 7.8100e-003 | 0.0991 | 4.0000e-005 | 2.4000e-004 | 8.0000e-005 | 3.2000e-004 | 9.0000e-005 | 8.0000e-005 | 1.7000e-004 | | 3.8042 | 3.8042 | 1.8900e-003 | 1.1300e-003 | 4.1866 |
| **Total** | **0.0249** | **0.1505** | **0.2106** | **2.0000e-004** | **5.6000e-004** | **1.6000e-004** | **7.1000e-004** | **2.1000e-004** | **1.5000e-004** | **3.7000e-004** | | **21.5139** | **21.5139** | **2.5000e-003** | **3.9600e-003** | **22.7554** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2415 | 5.0178 | 9.0386 | 0.0144 | | -0.0005 | -0.0005 | | 1.4200e-003 | 1.4200e-003 | 0.0000 | 1,379.7193 | 1,379.7193 | 0.2678 | | 1,386.4130 |
| **Total** | **0.2415** | **5.0178** | **9.0386** | **0.0144** | | **-0.0005** | **-0.0005** | | **1.4200e-003** | **1.4200e-003** | **0.0000** | **1,379.7193** | **1,379.7193** | **0.2678** | | **1,386.4130** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 6.7400e-003 | 0.1427 | 0.1115 | 1.6000e-004 | 3.2000e-004 | 8.0000e-005 | 3.9000e-004 | 1.2000e-004 | 7.0000e-005 | 2.0000e-004 | | 17.7097 | 17.7097 | 6.1000e-004 | 2.8300e-003 | 18.5688 |
| Worker | 0.0181 | 7.8100e-003 | 0.0991 | 4.0000e-005 | 2.4000e-004 | 8.0000e-005 | 3.2000e-004 | 9.0000e-005 | 8.0000e-005 | 1.7000e-004 | | 3.8042 | 3.8042 | 1.8900e-003 | 1.1300e-003 | 4.1866 |
| **Total** | **0.0249** | **0.1505** | **0.2106** | **2.0000e-004** | **5.6000e-004** | **1.6000e-004** | **7.1000e-004** | **2.1000e-004** | **1.5000e-004** | **3.7000e-004** | | **21.5139** | **21.5139** | **2.5000e-003** | **3.9600e-003** | **22.7554** |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.5732 | 5.3259 | 8.7951 | 0.0136 | | 0.2465 | 0.2465 | | 0.2276 | 0.2276 | | 1,297.8096 | 1,297.8096 | 0.4114 | | 1,308.0951 |
| Paving | 0.1048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.6780** | **5.3259** | **8.7951** | **0.0136** | | **0.2465** | **0.2465** | | **0.2276** | **0.2276** | | **1,297.8096** | **1,297.8096** | **0.4114** | | **1,308.0951** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0106 | 4.5600e-003 | 0.0578 | 2.0000e-005 | 1.4000e-004 | 5.0000e-005 | 1.9000e-004 | 5.0000e-005 | 4.0000e-005 | 1.0000e-004 | | 2.2191 | 2.2191 | 1.1000e-003 | 6.6000e-004 | 2.4422 |
| **Total** | **0.0106** | **4.5600e-003** | **0.0578** | **2.0000e-005** | **1.4000e-004** | **5.0000e-005** | **1.9000e-004** | **5.0000e-005** | **4.0000e-005** | **1.0000e-004** | | **2.2191** | **2.2191** | **1.1000e-003** | **6.6000e-004** | **2.4422** |

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.1774 | 5.7250 | 9.9186 | 0.0136 | | -0.0081 | -0.0081 | | -0.0055 | -0.0055 | 0.0000 | 1,297.8096 | 1,297.8096 | 0.4114 | | 1,308.0951 |
| Paving | 0.1048 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.2822** | **5.7250** | **9.9186** | **0.0136** | | **-0.0081** | **-0.0081** | | **-0.0055** | **-0.0055** | **0.0000** | **1,297.8096** | **1,297.8096** | **0.4114** | | **1,308.0951** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0106 | 4.5600e-003 | 0.0578 | 2.0000e-005 | 1.4000e-004 | 5.0000e-005 | 1.9000e-004 | 5.0000e-005 | 4.0000e-005 | 1.0000e-004 | | 2.2191 | 2.2191 | 1.1000e-003 | 6.6000e-004 | 2.4422 |
| **Total** | **0.0106** | **4.5600e-003** | **0.0578** | **2.0000e-005** | **1.4000e-004** | **5.0000e-005** | **1.9000e-004** | **5.0000e-005** | **4.0000e-005** | **1.0000e-004** | | **2.2191** | **2.2191** | **1.1000e-003** | **6.6000e-004** | **2.4422** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 17.4894 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **17.6603** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.5300e-003 | 1.9500e-003 | 0.0248 | 1.0000e-005 | 6.0000e-005 | 2.0000e-005 | 8.0000e-005 | 2.0000e-005 | 2.0000e-005 | 4.0000e-005 | | 0.9511 | 0.9511 | 4.7000e-004 | 2.8000e-004 | 1.0467 |
| **Total** | **4.5300e-003** | **1.9500e-003** | **0.0248** | **1.0000e-005** | **6.0000e-005** | **2.0000e-005** | **8.0000e-005** | **2.0000e-005** | **2.0000e-005** | **4.0000e-005** | | **0.9511** | **0.9511** | **4.7000e-004** | **2.8000e-004** | **1.0467** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 17.4894 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.0545 | 1.0598 | 1.8324 | 2.9700e-003 | | 3.9600e-003 | 3.9600e-003 | | 3.9600e-003 | 3.9600e-003 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **17.5439** | **1.0598** | **1.8324** | **2.9700e-003** | | **3.9600e-003** | **3.9600e-003** | | **3.9600e-003** | **3.9600e-003** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.5300e-003 | 1.9500e-003 | 0.0248 | 1.0000e-005 | 6.0000e-005 | 2.0000e-005 | 8.0000e-005 | 2.0000e-005 | 2.0000e-005 | 4.0000e-005 | | 0.9511 | 0.9511 | 4.7000e-004 | 2.8000e-004 | 1.0467 |
| **Total** | **4.5300e-003** | **1.9500e-003** | **0.0248** | **1.0000e-005** | **6.0000e-005** | **2.0000e-005** | **8.0000e-005** | **2.0000e-005** | **2.0000e-005** | **4.0000e-005** | | **0.9511** | **0.9511** | **4.7000e-004** | **2.8000e-004** | **1.0467** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.1992 | 2.2401 | 20.4519 | 0.0448 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0280 | 1.5591 | | 4,573.8519 | 4,573.8519 | 0.3184 | 0.2132 | 4,645.3489 |
| Unmitigated | 2.1992 | 2.2401 | 20.4519 | 0.0448 | 5.7452 | 0.0300 | 5.7752 | 1.5311 | 0.0280 | 1.5591 | | 4,573.8519 | 4,573.8519 | 0.3184 | 0.2132 | 4,645.3489 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Medical Office Building | 1,051.05 | 1,051.05 | 1051.05 | 2,726,275 | 2,726,275 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,051.05 | 1,051.05 | 1,051.05 | 2,726,275 | 2,726,275 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Medical Office Building | 16.60 | 8.40 | 6.90 | 29.60 | 51.40 | 19.00 | 60 | 30 | 10 |
| Parking Lot | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Medical Office Building | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |
| Parking Lot | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| NaturalGas Unmitigated | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Medical Office Building | 932.137 | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0101** | **0.0914** | **0.0768** | **5.5000e-004** | | **6.9500e-003** | **6.9500e-003** | | **6.9500e-003** | **6.9500e-003** | | **109.6632** | **109.6632** | **2.1000e-003** | **2.0100e-003** | **110.3149** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Medical Office Building | 0.932137 | 0.0101 | 0.0914 | 0.0768 | 5.5000e-004 | | 6.9500e-003 | 6.9500e-003 | | 6.9500e-003 | 6.9500e-003 | | 109.6632 | 109.6632 | 2.1000e-003 | 2.0100e-003 | 110.3149 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0101** | **0.0914** | **0.0768** | **5.5000e-004** | | **6.9500e-003** | **6.9500e-003** | | **6.9500e-003** | **6.9500e-003** | | **109.6632** | **109.6632** | **2.1000e-003** | **2.0100e-003** | **110.3149** |

## 6.0 Area Detail

Kaiser Baldwin Park - Medical Office Building LST - South Coast AQMD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| Unmitigated | 0.7520 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0863 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.0500e-003 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| **Total** | **0.7520** | **1.0000e-004** | **0.0115** | **0.0000** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **0.0247** | **0.0247** | **6.0000e-005** | | **0.0263** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0863 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.6647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.0500e-003 | 1.0000e-004 | 0.0115 | 0.0000 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 0.0247 | 0.0247 | 6.0000e-005 | | 0.0263 |
| **Total** | **0.7520** | **1.0000e-004** | **0.0115** | **0.0000** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **0.0247** | **0.0247** | **6.0000e-005** | | **0.0263** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Emergency Room HRA

**South Coast AQMD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 22.29 | 1000sqft | 0.51 | 22,293.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific values.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults adjusted to fit proposed construction schedule by multiplying each phase length by 4.1

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Demolition - 24790 sf of existing buildings to demo.

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading - 2,100 CU of cut/export

Architectural Coating - CalEEMod defaults.

Vehicle Trips - CalEEMod defaults.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower. Site watered twice a day.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

Kaiser Baldwin Park - Emergency Room HRA - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
|---|---|---|---|
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 100.00 | 410.00 |
| tblConstructionPhase | NumDays | 10.00 | 40.00 |
| tblConstructionPhase | NumDays | 2.00 | 8.00 |
| tblConstructionPhase | NumDays | 5.00 | 21.00 |
| tblConstructionPhase | NumDays | 1.00 | 4.00 |
| tblGrading | AcresOfGrading | 6.00 | 1.50 |
| tblGrading | AcresOfGrading | 2.00 | 0.50 |
| tblGrading | MaterialExported | 0.00 | 2,100.00 |
| tblLandUse | LandUseSquareFeet | 22,290.00 | 22,293.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.25 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.25 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.25 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.25 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.25 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.25 |
| tblTripsAndVMT | HaulingTripNumber | 113.00 | 114.00 |
| tblTripsAndVMT | HaulingTripNumber | 263.00 | 262.00 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.25 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.25 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.25 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.25 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.25 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.25 |
| tblTripsAndVMT | WorkerTripNumber | 10.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 8.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 7.00 | 0.00 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblTripsAndVMT | WorkerTripNumber | 18.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1.00 | 0.00 |

## 2.0 Emissions Summary

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.0570 | 0.5700 | 0.6199 | 1.0300e-003 | 0.0319 | 0.0275 | 0.0593 | 0.0120 | 0.0255 | 0.0375 | 0.0000 | 90.2716 | 90.2716 | 0.0259 | 1.8000e-004 | 90.9704 |
| 2024 | 0.0783 | 0.7892 | 0.9309 | 1.5100e-003 | 1.3000e-004 | 0.0370 | 0.0371 | 4.0000e-005 | 0.0340 | 0.0341 | 0.0000 | 132.3835 | 132.3835 | 0.0425 | 1.7000e-004 | 133.4954 |
| 2025 | 0.1182 | 0.1356 | 0.1846 | 3.0000e-004 | 1.0000e-005 | 5.9700e-003 | 5.9900e-003 | 0.0000 | 5.5800e-003 | 5.5800e-003 | 0.0000 | 25.6942 | 25.6942 | 7.2400e-003 | 2.0000e-005 | 25.8801 |
| **Maximum** | **0.1182** | **0.7892** | **0.9309** | **1.5100e-003** | **0.0319** | **0.0370** | **0.0593** | **0.0120** | **0.0340** | **0.0375** | **0.0000** | **132.3835** | **132.3835** | **0.0425** | **1.8000e-004** | **133.4954** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.0309 | 0.4253 | 0.6847 | 1.0300e-003 | 0.0144 | 8.1900e-003 | 0.0226 | 5.4100e-003 | 7.8400e-003 | 0.0133 | 0.0000 | 90.2715 | 90.2715 | 0.0259 | 1.8000e-004 | 90.9703 |
| 2024 | 0.0372 | 0.6005 | 1.0400 | 1.5100e-003 | 1.3000e-004 | 7.1100e-003 | 7.2500e-003 | 4.0000e-005 | 6.7100e-003 | 6.7500e-003 | 0.0000 | 132.3834 | 132.3834 | 0.0425 | 1.7000e-004 | 133.4953 |
| 2025 | 0.1094 | 0.1118 | 0.1946 | 3.0000e-004 | 1.0000e-005 | 9.4000e-004 | 9.5000e-004 | 0.0000 | 9.0000e-004 | 9.0000e-004 | 0.0000 | 25.6942 | 25.6942 | 7.2400e-003 | 2.0000e-005 | 25.8800 |
| **Maximum** | **0.1094** | **0.6005** | **1.0400** | **1.5100e-003** | **0.0144** | **8.1900e-003** | **0.0226** | **5.4100e-003** | **7.8400e-003** | **0.0133** | **0.0000** | **132.3834** | **132.3834** | **0.0425** | **1.8000e-004** | **133.4953** |

Kaiser Baldwin Park - Emergency Room HRA - South Coast AQMD Air District, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 30.01 | 23.90 | -10.60 | 0.00 | 54.59 | 76.94 | 69.95 | 54.70 | 76.26 | 72.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 5-1-2023 | 7-31-2023 | 0.2403 | 0.1884 |
| 2 | 8-1-2023 | 10-31-2023 | 0.2334 | 0.1617 |
| 3 | 11-1-2023 | 1-31-2024 | 0.2281 | 0.1612 |
| 4 | 2-1-2024 | 4-30-2024 | 0.2129 | 0.1565 |
| 5 | 5-1-2024 | 7-31-2024 | 0.2175 | 0.1599 |
| 6 | 8-1-2024 | 10-31-2024 | 0.2176 | 0.1599 |
| 7 | 11-1-2024 | 1-31-2025 | 0.2117 | 0.1592 |
| 8 | 2-1-2025 | 4-30-2025 | 0.1832 | 0.1653 |
| | | Highest | 0.2403 | 0.1884 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0909 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| Energy | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 162.3768 | 162.3768 | 8.7200e-003 | 2.2800e-003 | 163.2743 |
| Mobile | 0.1121 | 0.1360 | 1.1887 | 2.7800e-003 | 0.3165 | 1.9800e-003 | 0.3185 | 0.0845 | 1.8500e-003 | 0.0863 | 0.0000 | 256.7848 | 256.7848 | 0.0160 | 0.0111 | 260.4893 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 48.8660 | 0.0000 | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.8874 | 7.5085 | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| **Total** | **0.2107** | **0.2061** | **1.2479** | **3.2000e-003** | **0.3165** | **7.3100e-003** | **0.3238** | **0.0845** | **7.1800e-003** | **0.0916** | **49.7534** | **426.6706** | **476.4239** | **3.0044** | **0.0156** | **556.1820** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0909 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| Energy | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 162.3768 | 162.3768 | 8.7200e-003 | 2.2800e-003 | 163.2743 |
| Mobile | 0.1121 | 0.1360 | 1.1887 | 2.7800e-003 | 0.3165 | 1.9800e-003 | 0.3185 | 0.0845 | 1.8500e-003 | 0.0863 | 0.0000 | 256.7848 | 256.7848 | 0.0160 | 0.0111 | 260.4893 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 48.8660 | 0.0000 | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.8874 | 7.5085 | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| **Total** | **0.2107** | **0.2061** | **1.2479** | **3.2000e-003** | **0.3165** | **7.3100e-003** | **0.3238** | **0.0845** | **7.1800e-003** | **0.0916** | **49.7534** | **426.6706** | **476.4239** | **3.0044** | **0.0156** | **556.1820** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 5/1/2023 | 6/26/2023 | 5 | 40 | |
| 2 | Site Preparation | Site Preparation | 6/27/2023 | 6/30/2023 | 5 | 4 | |
| 3 | Grading | Grading | 7/1/2023 | 7/12/2023 | 5 | 8 | |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | Building Construction | Building Construction | 7/13/2023 | 2/5/2025 | 5 | 410 | |
| 5 | Paving | Paving | 2/6/2025 | 3/6/2025 | 5 | 21 | |
| 6 | Architectural Coating | Architectural Coating | 3/7/2025 | 4/4/2025 | 5 | 21 | |

**Acres of Grading (Site Preparation Phase): 0.5**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,440; Non-Residential Outdoor: 11,147; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Rubber Tired Dozers | 1 | 1.00 | 247 | 0.40 |
| Demolition | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 4.00 | 231 | 0.29 |
| Building Construction | Forklifts | 2 | 6.00 | 89 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 7.00 | 130 | 0.42 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 4 | 0.00 | 0.00 | 114.00 | 14.70 | 0.25 | 0.25 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 2 | 0.00 | 0.00 | 0.00 | 14.70 | 0.25 | 0.25 | LD_Mix | HDT_Mix | HHDT |
| Grading | 3 | 0.00 | 0.00 | 262.00 | 14.70 | 0.25 | 0.25 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 5 | 0.00 | 4.00 | 0.00 | 14.70 | 0.25 | 0.25 | LD_Mix | HDT_Mix | HHDT |
| Paving | 7 | 0.00 | 0.00 | 0.00 | 14.70 | 0.25 | 0.25 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 14.70 | 0.25 | 0.25 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

## 3.2 Demolition - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0125 | 0.0000 | 0.0125 | 1.8900e-003 | 0.0000 | 1.8900e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0133 | 0.1185 | 0.1516 | 2.5000e-004 | | 5.7800e-003 | 5.7800e-003 | | 5.5300e-003 | 5.5300e-003 | 0.0000 | 21.3572 | 21.3572 | 3.8900e-003 | 0.0000 | 21.4544 |
| **Total** | **0.0133** | **0.1185** | **0.1516** | **2.5000e-004** | **0.0125** | **5.7800e-003** | **0.0183** | **1.8900e-003** | **5.5300e-003** | **7.4200e-003** | **0.0000** | **21.3572** | **21.3572** | **3.8900e-003** | **0.0000** | **21.4544** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 6.0000e-005 | 1.1800e-003 | 9.2000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 1.0000e-005 | 0.0000 | 0.1916 | 0.1916 | 1.0000e-005 | 3.0000e-005 | 0.2008 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.0000e-005** | **1.1800e-003** | **9.2000e-004** | **0.0000** | **1.0000e-005** | **0.0000** | **2.0000e-005** | **0.0000** | **0.0000** | **1.0000e-005** | **0.0000** | **0.1916** | **0.1916** | **1.0000e-005** | **3.0000e-005** | **0.2008** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 5.6300e-003 | 0.0000 | 5.6300e-003 | 8.5000e-004 | 0.0000 | 8.5000e-004 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0108 | 0.1083 | 0.1558 | 2.5000e-004 | | 3.8500e-003 | 3.8500e-003 | | 3.7600e-003 | 3.7600e-003 | 0.0000 | 21.3572 | 21.3572 | 3.8900e-003 | 0.0000 | 21.4543 |
| **Total** | **0.0108** | **0.1083** | **0.1558** | **2.5000e-004** | **5.6300e-003** | **3.8500e-003** | **9.4800e-003** | **8.5000e-004** | **3.7600e-003** | **4.6100e-003** | **0.0000** | **21.3572** | **21.3572** | **3.8900e-003** | **0.0000** | **21.4543** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Demolition - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 6.0000e-005 | 1.1800e-003 | 9.2000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 1.0000e-005 | 0.0000 | 0.1916 | 0.1916 | 1.0000e-005 | 3.0000e-005 | 0.2008 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.0000e-005** | **1.1800e-003** | **9.2000e-004** | **0.0000** | **1.0000e-005** | **0.0000** | **2.0000e-005** | **0.0000** | **0.0000** | **1.0000e-005** | **0.0000** | **0.1916** | **0.1916** | **1.0000e-005** | **3.0000e-005** | **0.2008** |

## 3.3 Site Preparation - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.7000e-004 | 0.0000 | 2.7000e-004 | 3.0000e-005 | 0.0000 | 3.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.0700e-003 | 0.0124 | 7.8500e-003 | 2.0000e-005 | | 4.5000e-004 | 4.5000e-004 | | 4.2000e-004 | 4.2000e-004 | 0.0000 | 1.7099 | 1.7099 | 5.5000e-004 | 0.0000 | 1.7237 |
| **Total** | **1.0700e-003** | **0.0124** | **7.8500e-003** | **2.0000e-005** | **2.7000e-004** | **4.5000e-004** | **7.2000e-004** | **3.0000e-005** | **4.2000e-004** | **4.5000e-004** | **0.0000** | **1.7099** | **1.7099** | **5.5000e-004** | **0.0000** | **1.7237** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 1.2000e-004 | 0.0000 | 1.2000e-004 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.0000e-004 | 6.3000e-003 | 0.0117 | 2.0000e-005 | | 7.0000e-005 | 7.0000e-005 | | 7.0000e-005 | 7.0000e-005 | 0.0000 | 1.7099 | 1.7099 | 5.5000e-004 | 0.0000 | 1.7237 |
| **Total** | **4.0000e-004** | **6.3000e-003** | **0.0117** | **2.0000e-005** | **1.2000e-004** | **7.0000e-005** | **1.9000e-004** | **1.0000e-005** | **7.0000e-005** | **8.0000e-005** | **0.0000** | **1.7099** | **1.7099** | **5.5000e-004** | **0.0000** | **1.7237** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Site Preparation - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.4 Grading - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0190 | 0.0000 | 0.0190 | 0.0100 | 0.0000 | 0.0100 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.7300e-003 | 0.0407 | 0.0222 | 6.0000e-005 | | 1.6800e-003 | 1.6800e-003 | | 1.5500e-003 | 1.5500e-003 | 0.0000 | 4.9524 | 4.9524 | 1.6000e-003 | 0.0000 | 4.9924 |
| **Total** | **3.7300e-003** | **0.0407** | **0.0222** | **6.0000e-005** | **0.0190** | **1.6800e-003** | **0.0207** | **0.0100** | **1.5500e-003** | **0.0116** | **0.0000** | **4.9524** | **4.9524** | **1.6000e-003** | **0.0000** | **4.9924** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.4000e-004 | 2.6400e-003 | 2.0600e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 3.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.4296 | 0.4296 | 1.0000e-005 | 7.0000e-005 | 0.4502 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **1.4000e-004** | **2.6400e-003** | **2.0600e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **3.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.4296** | **0.4296** | **1.0000e-005** | **7.0000e-005** | **0.4502** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 8.5400e-003 | 0.0000 | 8.5400e-003 | 4.5200e-003 | 0.0000 | 4.5200e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.8900e-003 | 0.0242 | 0.0301 | 6.0000e-005 | | 6.2000e-004 | 6.2000e-004 | | 5.8000e-004 | 5.8000e-004 | 0.0000 | 4.9524 | 4.9524 | 1.6000e-003 | 0.0000 | 4.9924 |
| **Total** | **1.8900e-003** | **0.0242** | **0.0301** | **6.0000e-005** | **8.5400e-003** | **6.2000e-004** | **9.1600e-003** | **4.5200e-003** | **5.8000e-004** | **5.1000e-003** | **0.0000** | **4.9524** | **4.9524** | **1.6000e-003** | **0.0000** | **4.9924** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Grading - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.4000e-004 | 2.6400e-003 | 2.0600e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 3.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.4296 | 0.4296 | 1.0000e-005 | 7.0000e-005 | 0.4502 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **1.4000e-004** | **2.6400e-003** | **2.0600e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **3.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.4296** | **0.4296** | **1.0000e-005** | **7.0000e-005** | **0.4502** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0386 | 0.3915 | 0.4329 | 7.0000e-004 | | 0.0195 | 0.0195 | | 0.0180 | 0.0180 | 0.0000 | 61.1271 | 61.1271 | 0.0198 | 0.0000 | 61.6214 |
| **Total** | **0.0386** | **0.3915** | **0.4329** | **7.0000e-004** | | **0.0195** | **0.0195** | | **0.0180** | **0.0180** | **0.0000** | **61.1271** | **61.1271** | **0.0198** | **0.0000** | **61.6214** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.6000e-004 | 3.0800e-003 | 2.3700e-003 | 1.0000e-005 | 6.0000e-005 | 0.0000 | 7.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.5038 | 0.5038 | 2.0000e-005 | 8.0000e-005 | 0.5275 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **1.6000e-004** | **3.0800e-003** | **2.3700e-003** | **1.0000e-005** | **6.0000e-005** | **0.0000** | **7.0000e-005** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **0.0000** | **0.5038** | **0.5038** | **2.0000e-005** | **8.0000e-005** | **0.5275** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0174 | 0.2796 | 0.4818 | 7.0000e-004 | | 3.6400e-003 | 3.6400e-003 | | 3.4200e-003 | 3.4200e-003 | 0.0000 | 61.1271 | 61.1271 | 0.0198 | 0.0000 | 61.6213 |
| **Total** | **0.0174** | **0.2796** | **0.4818** | **7.0000e-004** | | **3.6400e-003** | **3.6400e-003** | | **3.4200e-003** | **3.4200e-003** | **0.0000** | **61.1271** | **61.1271** | **0.0198** | **0.0000** | **61.6213** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.6000e-004 | 3.0800e-003 | 2.3700e-003 | 1.0000e-005 | 6.0000e-005 | 0.0000 | 7.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.5038 | 0.5038 | 2.0000e-005 | 8.0000e-005 | 0.5275 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **1.6000e-004** | **3.0800e-003** | **2.3700e-003** | **1.0000e-005** | **6.0000e-005** | **0.0000** | **7.0000e-005** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **0.0000** | **0.5038** | **0.5038** | **2.0000e-005** | **8.0000e-005** | **0.5275** |

## 3.5 Building Construction - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0780 | 0.7826 | 0.9258 | 1.5000e-003 | | 0.0370 | 0.0370 | | 0.0340 | 0.0340 | 0.0000 | 131.3176 | 131.3176 | 0.0425 | 0.0000 | 132.3793 |
| **Total** | **0.0780** | **0.7826** | **0.9258** | **1.5000e-003** | | **0.0370** | **0.0370** | | **0.0340** | **0.0340** | **0.0000** | **131.3176** | **131.3176** | **0.0425** | **0.0000** | **132.3793** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 3.4000e-004 | 6.6000e-003 | 5.0300e-003 | 1.0000e-005 | 1.3000e-004 | 1.0000e-005 | 1.4000e-004 | 4.0000e-005 | 1.0000e-005 | 5.0000e-005 | 0.0000 | 1.0660 | 1.0660 | 4.0000e-005 | 1.7000e-004 | 1.1161 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **3.4000e-004** | **6.6000e-003** | **5.0300e-003** | **1.0000e-005** | **1.3000e-004** | **1.0000e-005** | **1.4000e-004** | **4.0000e-005** | **1.0000e-005** | **5.0000e-005** | **0.0000** | **1.0660** | **1.0660** | **4.0000e-005** | **1.7000e-004** | **1.1161** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0369 | 0.5939 | 1.0350 | 1.5000e-003 | | 7.1000e-003 | 7.1000e-003 | | 6.7000e-003 | 6.7000e-003 | 0.0000 | 131.3174 | 131.3174 | 0.0425 | 0.0000 | 132.3792 |
| **Total** | **0.0369** | **0.5939** | **1.0350** | **1.5000e-003** | | **7.1000e-003** | **7.1000e-003** | | **6.7000e-003** | **6.7000e-003** | **0.0000** | **131.3174** | **131.3174** | **0.0425** | **0.0000** | **132.3792** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 3.4000e-004 | 6.6000e-003 | 5.0300e-003 | 1.0000e-005 | 1.3000e-004 | 1.0000e-005 | 1.4000e-004 | 4.0000e-005 | 1.0000e-005 | 5.0000e-005 | 0.0000 | 1.0660 | 1.0660 | 4.0000e-005 | 1.7000e-004 | 1.1161 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **3.4000e-004** | **6.6000e-003** | **5.0300e-003** | **1.0000e-005** | **1.3000e-004** | **1.0000e-005** | **1.4000e-004** | **4.0000e-005** | **1.0000e-005** | **5.0000e-005** | **0.0000** | **1.0660** | **1.0660** | **4.0000e-005** | **1.7000e-004** | **1.1161** |

## 3.5 Building Construction - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 7.1600e-003 | 0.0713 | 0.0914 | 1.5000e-004 | | 3.1400e-003 | 3.1400e-003 | | 2.8900e-003 | 2.8900e-003 | 0.0000 | 13.0384 | 13.0384 | 4.2200e-003 | 0.0000 | 13.1439 |
| **Total** | **7.1600e-003** | **0.0713** | **0.0914** | **1.5000e-004** | | **3.1400e-003** | **3.1400e-003** | | **2.8900e-003** | **2.8900e-003** | **0.0000** | **13.0384** | **13.0384** | **4.2200e-003** | **0.0000** | **13.1439** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 3.0000e-005 | 6.5000e-004 | 4.9000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1039 | 0.1039 | 0.0000 | 2.0000e-005 | 0.1088 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **3.0000e-005** | **6.5000e-004** | **4.9000e-004** | **0.0000** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.1039** | **0.1039** | **0.0000** | **2.0000e-005** | **0.1088** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 3.5700e-003 | 0.0581 | 0.1027 | 1.5000e-004 | | 6.1000e-004 | 6.1000e-004 | | 5.8000e-004 | 5.8000e-004 | 0.0000 | 13.0384 | 13.0384 | 4.2200e-003 | 0.0000 | 13.1439 |
| **Total** | **3.5700e-003** | **0.0581** | **0.1027** | **1.5000e-004** | | **6.1000e-004** | **6.1000e-004** | | **5.8000e-004** | **5.8000e-004** | **0.0000** | **13.0384** | **13.0384** | **4.2200e-003** | **0.0000** | **13.1439** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Building Construction - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 3.0000e-005 | 6.5000e-004 | 4.9000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1039 | 0.1039 | 0.0000 | 2.0000e-005 | 0.1088 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **3.0000e-005** | **6.5000e-004** | **4.9000e-004** | **0.0000** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.1039** | **0.1039** | **0.0000** | **2.0000e-005** | **0.1088** |

## 3.6 Paving - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 5.9200e-003 | 0.0517 | 0.0738 | 1.2000e-004 | | 2.3000e-003 | 2.3000e-003 | | 2.1500e-003 | 2.1500e-003 | 0.0000 | 9.8709 | 9.8709 | 2.8800e-003 | 0.0000 | 9.9428 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **5.9200e-003** | **0.0517** | **0.0738** | **1.2000e-004** | | **2.3000e-003** | **2.3000e-003** | | **2.1500e-003** | **2.1500e-003** | **0.0000** | **9.8709** | **9.8709** | **2.8800e-003** | **0.0000** | **9.9428** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.8800e-003 | 0.0420 | 0.0722 | 1.2000e-004 | | 2.9000e-004 | 2.9000e-004 | | 2.8000e-004 | 2.8000e-004 | 0.0000 | 9.8709 | 9.8709 | 2.8800e-003 | 0.0000 | 9.9428 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **1.8800e-003** | **0.0420** | **0.0722** | **1.2000e-004** | | **2.9000e-004** | **2.9000e-004** | | **2.8000e-004** | **2.8000e-004** | **0.0000** | **9.8709** | **9.8709** | **2.8800e-003** | **0.0000** | **9.9428** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Paving - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.7 Architectural Coating - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1033 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.7900e-003 | 0.0120 | 0.0190 | 3.0000e-005 | | 5.4000e-004 | 5.4000e-004 | | 5.4000e-004 | 5.4000e-004 | 0.0000 | 2.6809 | 2.6809 | 1.5000e-004 | 0.0000 | 2.6846 |
| **Total** | **0.1051** | **0.0120** | **0.0190** | **3.0000e-005** | | **5.4000e-004** | **5.4000e-004** | | **5.4000e-004** | **5.4000e-004** | **0.0000** | **2.6809** | **2.6809** | **1.5000e-004** | **0.0000** | **2.6846** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1033 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 5.7000e-004 | 0.0111 | 0.0192 | 3.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | 0.0000 | 2.6809 | 2.6809 | 1.5000e-004 | 0.0000 | 2.6846 |
| **Total** | **0.1039** | **0.0111** | **0.0192** | **3.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | **0.0000** | **2.6809** | **2.6809** | **1.5000e-004** | **0.0000** | **2.6846** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.7 Architectural Coating - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.1121 | 0.1360 | 1.1887 | 2.7800e-003 | 0.3165 | 1.9800e-003 | 0.3185 | 0.0845 | 1.8500e-003 | 0.0863 | 0.0000 | 256.7848 | 256.7848 | 0.0160 | 0.0111 | 260.4893 |
| Unmitigated | 0.1121 | 0.1360 | 1.1887 | 2.7800e-003 | 0.3165 | 1.9800e-003 | 0.3185 | 0.0845 | 1.8500e-003 | 0.0863 | 0.0000 | 256.7848 | 256.7848 | 0.0160 | 0.0111 | 260.4893 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Hospital | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |
| Total | 238.95 | 172.08 | 150.90 | 840,569 | 840,569 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Hospital | 16.60 | 8.40 | 6.90 | 64.90 | 16.10 | 19.00 | 73 | 25 | 2 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hospital | 0.540893 | 0.062748 | 0.186142 | 0.127785 | 0.023768 | 0.006610 | 0.012333 | 0.009205 | 0.000817 | 0.000491 | 0.024860 | 0.000754 | 0.003594 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 85.9900 | 85.9900 | 7.2600e-003 | 8.8000e-004 | 86.4336 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 85.9900 | 85.9900 | 7.2600e-003 | 8.8000e-004 | 86.4336 |
| NaturalGas Mitigated | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 76.3867 | 76.3867 | 1.4600e-003 | 1.4000e-003 | 76.8407 |
| NaturalGas Unmitigated | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 76.3867 | 76.3867 | 1.4600e-003 | 1.4000e-003 | 76.8407 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hospital | 1.43143e+006 | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 76.3867 | 76.3867 | 1.4600e-003 | 1.4000e-003 | 76.8407 |
| **Total** | | **7.7200e-003** | **0.0702** | **0.0589** | **4.2000e-004** | | **5.3300e-003** | **5.3300e-003** | | **5.3300e-003** | **5.3300e-003** | **0.0000** | **76.3867** | **76.3867** | **1.4600e-003** | **1.4000e-003** | **76.8407** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hospital | 1.43143e+006 | 7.7200e-003 | 0.0702 | 0.0589 | 4.2000e-004 | | 5.3300e-003 | 5.3300e-003 | | 5.3300e-003 | 5.3300e-003 | 0.0000 | 76.3867 | 76.3867 | 1.4600e-003 | 1.4000e-003 | 76.8407 |
| **Total** | | **7.7200e-003** | **0.0702** | **0.0589** | **4.2000e-004** | | **5.3300e-003** | **5.3300e-003** | | **5.3300e-003** | **5.3300e-003** | **0.0000** | **76.3867** | **76.3867** | **1.4600e-003** | **1.4000e-003** | **76.8407** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Hospital | 484873 | 85.9900 | 7.2600e-003 | 8.8000e-004 | 86.4336 |
| **Total** | | **85.9900** | **7.2600e-003** | **8.8000e-004** | **86.4336** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Hospital | 484873 | 85.9900 | 7.2600e-003 | 8.8000e-004 | 86.4336 |
| **Total** | | **85.9900** | **7.2600e-003** | **8.8000e-004** | **86.4336** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0909 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| Unmitigated | 0.0909 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0103 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0806 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 3.0000e-005 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| **Total** | **0.0909** | **0.0000** | **2.8000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **5.5000e-004** | **5.5000e-004** | **0.0000** | **0.0000** | **5.9000e-004** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0103 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0806 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 3.0000e-005 | 0.0000 | 2.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 5.5000e-004 | 5.5000e-004 | 0.0000 | 0.0000 | 5.9000e-004 |
| **Total** | **0.0909** | **0.0000** | **2.8000e-004** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **5.5000e-004** | **5.5000e-004** | **0.0000** | **0.0000** | **5.9000e-004** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| Unmitigated | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Hospital | 2.79696 / 0.532755 | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| **Total** | | **8.3958** | **0.0918** | **2.2300e-003** | **11.3543** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Hospital | 2.79696 / 0.532755 | 8.3958 | 0.0918 | 2.2300e-003 | 11.3543 |
| **Total** | | **8.3958** | **0.0918** | **2.2300e-003** | **11.3543** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| Unmitigated | 48.8660 | 2.8879 | 0.0000 | 121.0635 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Hospital | 240.73 | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| **Total** | | **48.8660** | **2.8879** | **0.0000** | **121.0635** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Hospital | 240.73 | 48.8660 | 2.8879 | 0.0000 | 121.0635 |
| **Total** | | **48.8660** | **2.8879** | **0.0000** | **121.0635** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

Kaiser Baldwin Park - Medical Office Building HRA - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

# Kaiser Baldwin Park - Medical Office Building HRA

**South Coast AQMD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Medical Office Building | 33.00 | 1000sqft | 0.76 | 33,000.00 | 0 |
| Parking Lot | 80.00 | Space | 0.72 | 32,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 31 |
| **Climate Zone** | 9 | | | **Operational Year** | 2030 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project-specific information.

Land Use - Based on site plan for project.

Construction Phase - CalEEMod defaults. Length adjusted to match contractor's projections.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Off-road Equipment - CalEEMod defaults.

Trips and VMT - CalEEMod defaults. Odd trips rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Kaiser Baldwin Park - Medical Office Building HRA - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Demolition - Basded on existing buildings onsite.

Grading - CalEEMod default values.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - Trip rates calculated from traffic report.

Consumer Products - CalEEMod defaults.

Area Coating - CalEEMod defaults.

Landscape Equipment - CalEEMod defaults.

Energy Use - CalEEMod defaults.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Construction Off-road Equipment Mitigation - In accordance with SCAQMD Rule 403. Project applicant has committed to using Tier 4 Interim equipment for equipment over 50 horsepower.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | FuelType | Diesel | Electrical |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 5.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Interim |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 200.00 | 350.00 |
| tblConstructionPhase | NumDays | 4.00 | 7.00 |
| tblConstructionPhase | NumDays | 10.00 | 18.00 |
| tblConstructionPhase | NumDays | 2.00 | 4.00 |
| tblGrading | AcresOfGrading | 7.00 | 4.00 |
| tblGrading | AcresOfGrading | 3.75 | 1.88 |
| tblTripsAndVMT | VendorTripLength | 6.90 | 0.25 |
| tblTripsAndVMT | VendorTripNumber | 11.00 | 12.00 |
| tblTripsAndVMT | WorkerTripNumber | 8.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 10.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 24.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 13.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 5.00 | 0.00 |
| tblVehicleTrips | ST_TR | 8.57 | 31.85 |
| tblVehicleTrips | SU_TR | 1.42 | 31.85 |
| tblVehicleTrips | WD_TR | 34.80 | 31.85 |

## 2.0 Emissions Summary

Kaiser Baldwin Park - Medical Office Building HRA - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2028 | 0.1001 | 0.8093 | 0.9274 | 1.6800e-003 | 0.0350 | 0.0303 | 0.0652 | 0.0178 | 0.0291 | 0.0469 | 0.0000 | 139.0058 | 139.0058 | 0.0240 | 2.5000e-004 | 139.6795 |
| 2029 | 0.3042 | 1.1619 | 1.4069 | 2.4800e-003 | 3.2000e-004 | 0.0437 | 0.0440 | 1.0000e-004 | 0.0421 | 0.0422 | 0.0000 | 205.0200 | 205.0200 | 0.0346 | 3.6000e-004 | 205.9915 |
| **Maximum** | **0.3042** | **1.1619** | **1.4069** | **2.4800e-003** | **0.0350** | **0.0437** | **0.0652** | **0.0178** | **0.0421** | **0.0469** | **0.0000** | **205.0200** | **205.0200** | **0.0346** | **3.6000e-004** | **205.9915** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2028 | 0.0214 | 0.3961 | 0.7037 | 1.1400e-003 | 0.0158 | 1.7000e-003 | 0.0176 | 8.0400e-003 | 1.7000e-003 | 9.7400e-003 | 0.0000 | 99.1970 | 99.1970 | 0.0202 | 2.5000e-004 | 99.7761 |
| 2029 | 0.1897 | 0.5999 | 1.0560 | 1.6800e-003 | 3.2000e-004 | 2.5000e-003 | 2.8100e-003 | 1.0000e-004 | 2.4900e-003 | 2.5900e-003 | 0.0000 | 146.0127 | 146.0127 | 0.0290 | 3.6000e-004 | 146.8439 |
| **Maximum** | **0.1897** | **0.5999** | **1.0560** | **1.6800e-003** | **0.0158** | **2.5000e-003** | **0.0176** | **8.0400e-003** | **2.4900e-003** | **9.7400e-003** | **0.0000** | **146.0127** | **146.0127** | **0.0290** | **3.6000e-004** | **146.8439** |

Kaiser Baldwin Park - Medical Office Building HRA - South Coast AQMD Air District, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **47.78** | **49.47** | **24.62** | **32.21** | **54.18** | **94.32** | **81.36** | **54.47** | **94.11** | **86.15** | **0.00** | **28.72** | **28.72** | **16.04** | **0.00** | **28.65** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **6-1-2028** | **8-31-2028** | 0.3956 | 0.1825 |
| **2** | **9-1-2028** | **11-30-2028** | 0.3866 | 0.1767 |
| **3** | **12-1-2028** | **2-28-2029** | 0.3824 | 0.1748 |
| **4** | **3-1-2029** | **5-31-2029** | 0.3907 | 0.1785 |
| **5** | **6-1-2029** | **8-31-2029** | 0.3906 | 0.1784 |
| **6** | **9-1-2029** | **9-30-2029** | 0.1274 | 0.0582 |
| | | **Highest** | 0.3956 | 0.1825 |

Kaiser Baldwin Park - Medical Office Building HRA - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.1372 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| Energy | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 93.2973 | 93.2973 | 6.6900e-003 | 1.1000e-003 | 93.7928 |
| Mobile | 0.3943 | 0.4116 | 3.7509 | 8.2400e-003 | 1.0265 | 5.4500e-003 | 1.0320 | 0.2740 | 5.0800e-003 | 0.2791 | 0.0000 | 763.0303 | 763.0303 | 0.0523 | 0.0354 | 774.8723 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 72.3460 | 0.0000 | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.3137 | 11.1162 | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| **Total** | **0.5333** | **0.4282** | **3.7664** | **8.3400e-003** | **1.0265** | **6.7300e-003** | **1.0332** | **0.2740** | **6.3600e-003** | **0.2803** | **73.6597** | **867.4466** | **941.1062** | **4.4704** | **0.0398** | **1,064.7121** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 2.2 Overall Operational

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.1372 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| Energy | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 93.2973 | 93.2973 | 6.6900e-003 | 1.1000e-003 | 93.7928 |
| Mobile | 0.3943 | 0.4116 | 3.7509 | 8.2400e-003 | 1.0265 | 5.4500e-003 | 1.0320 | 0.2740 | 5.0800e-003 | 0.2791 | 0.0000 | 763.0303 | 763.0303 | 0.0523 | 0.0354 | 774.8723 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 72.3460 | 0.0000 | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.3137 | 11.1162 | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| **Total** | **0.5333** | **0.4282** | **3.7664** | **8.3400e-003** | **1.0265** | **6.7300e-003** | **1.0332** | **0.2740** | **6.3600e-003** | **0.2803** | **73.6597** | **867.4466** | **941.1062** | **4.4704** | **0.0398** | **1,064.7121** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 6/1/2028 | 6/6/2028 | 5 | 4 | |
| 2 | Grading | Grading | 6/7/2028 | 6/15/2028 | 5 | 7 | |
| 3 | Building Construction | Building Construction | 6/16/2028 | 10/18/2029 | 5 | 350 | |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | Paving | Paving | 10/19/2029 | 11/13/2029 | 5 | 18 | |
| 5 | Architectural Coating | Architectural Coating | 11/14/2029 | 12/7/2029 | 5 | 18 | |

**Acres of Grading (Site Preparation Phase): 1.88**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 0.72**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,500; Non-Residential Outdoor: 16,500; Striped Parking Area: 1,920 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| Site Preparation | Rubber Tired Dozers | 1 | 7.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 2 | 7.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 3 | 0.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 4 | 0.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 0.00 | 12.00 | 0.00 | 14.70 | 0.25 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 0.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

## 3.2 Site Preparation - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0115 | 0.0000 | 0.0115 | 5.9000e-003 | 0.0000 | 5.9000e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.0200e-003 | 0.0212 | 0.0129 | 3.0000e-005 | | 8.4000e-004 | 8.4000e-004 | | 7.7000e-004 | 7.7000e-004 | 0.0000 | 3.0225 | 3.0225 | 9.8000e-004 | 0.0000 | 3.0470 |
| **Total** | **2.0200e-003** | **0.0212** | **0.0129** | **3.0000e-005** | **0.0115** | **8.4000e-004** | **0.0124** | **5.9000e-003** | **7.7000e-004** | **6.6700e-003** | **0.0000** | **3.0225** | **3.0225** | **9.8000e-004** | **0.0000** | **3.0470** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 5.1900e-003 | 0.0000 | 5.1900e-003 | 2.6600e-003 | 0.0000 | 2.6600e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 6.0000e-004 | 0.0101 | 0.0196 | 3.0000e-005 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | 0.0000 | 3.0225 | 3.0225 | 9.8000e-004 | 0.0000 | 3.0470 |
| **Total** | **6.0000e-004** | **0.0101** | **0.0196** | **3.0000e-005** | **5.1900e-003** | **6.0000e-005** | **5.2500e-003** | **2.6600e-003** | **6.0000e-005** | **2.7200e-003** | **0.0000** | **3.0225** | **3.0225** | **9.8000e-004** | **0.0000** | **3.0470** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.2 Site Preparation - 2028

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.3 Grading - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0232 | 0.0000 | 0.0232 | 0.0118 | 0.0000 | 0.0118 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.1700e-003 | 0.0435 | 0.0297 | 7.0000e-005 | | 1.7400e-003 | 1.7400e-003 | | 1.6000e-003 | 1.6000e-003 | 0.0000 | 6.3370 | 6.3370 | 2.0500e-003 | 0.0000 | 6.3882 |
| **Total** | **4.1700e-003** | **0.0435** | **0.0297** | **7.0000e-005** | **0.0232** | **1.7400e-003** | **0.0249** | **0.0118** | **1.6000e-003** | **0.0134** | **0.0000** | **6.3370** | **6.3370** | **2.0500e-003** | **0.0000** | **6.3882** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0104 | 0.0000 | 0.0104 | 5.3200e-003 | 0.0000 | 5.3200e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.2900e-003 | 0.0223 | 0.0425 | 7.0000e-005 | | 1.2000e-004 | 1.2000e-004 | | 1.2000e-004 | 1.2000e-004 | 0.0000 | 6.3369 | 6.3369 | 2.0500e-003 | 0.0000 | 6.3882 |
| **Total** | **1.2900e-003** | **0.0223** | **0.0425** | **7.0000e-005** | **0.0104** | **1.2000e-004** | **0.0106** | **5.3200e-003** | **1.2000e-004** | **5.4400e-003** | **0.0000** | **6.3369** | **6.3369** | **2.0500e-003** | **0.0000** | **6.3882** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.3 Grading - 2028

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.4 Building Construction - 2028

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0934 | 0.7341 | 0.8770 | 1.5600e-003 | | 0.0277 | 0.0277 | | 0.0267 | 0.0267 | 0.0000 | 128.0507 | 128.0507 | 0.0209 | 0.0000 | 128.5734 |
| **Total** | **0.0934** | **0.7341** | **0.8770** | **1.5600e-003** | | **0.0277** | **0.0277** | | **0.0267** | **0.0267** | **0.0000** | **128.0507** | **128.0507** | **0.0209** | **0.0000** | **128.5734** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 5.2000e-004 | 0.0105 | 7.8500e-003 | 2.0000e-005 | 2.1000e-004 | 1.0000e-005 | 2.3000e-004 | 6.0000e-005 | 1.0000e-005 | 8.0000e-005 | 0.0000 | 1.5956 | 1.5956 | 6.0000e-005 | 2.5000e-004 | 1.6709 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **5.2000e-004** | **0.0105** | **7.8500e-003** | **2.0000e-005** | **2.1000e-004** | **1.0000e-005** | **2.3000e-004** | **6.0000e-005** | **1.0000e-005** | **8.0000e-005** | **0.0000** | **1.5956** | **1.5956** | **6.0000e-005** | **2.5000e-004** | **1.6709** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0190 | 0.3531 | 0.6337 | 1.0100e-003 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 88.2419 | 88.2419 | 0.0171 | 0.0000 | 88.6701 |
| **Total** | **0.0190** | **0.3531** | **0.6337** | **1.0100e-003** | | **1.5200e-003** | **1.5200e-003** | | **1.5200e-003** | **1.5200e-003** | **0.0000** | **88.2419** | **88.2419** | **0.0171** | **0.0000** | **88.6701** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2028

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 5.2000e-004 | 0.0105 | 7.8500e-003 | 2.0000e-005 | 2.1000e-004 | 1.0000e-005 | 2.3000e-004 | 6.0000e-005 | 1.0000e-005 | 8.0000e-005 | 0.0000 | 1.5956 | 1.5956 | 6.0000e-005 | 2.5000e-004 | 1.6709 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **5.2000e-004** | **0.0105** | **7.8500e-003** | **2.0000e-005** | **2.1000e-004** | **1.0000e-005** | **2.3000e-004** | **6.0000e-005** | **1.0000e-005** | **8.0000e-005** | **0.0000** | **1.5956** | **1.5956** | **6.0000e-005** | **2.5000e-004** | **1.6709** |

## 3.4 Building Construction - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1384 | 1.0881 | 1.2999 | 2.3100e-003 | | 0.0410 | 0.0410 | | 0.0396 | 0.0396 | 0.0000 | 189.8057 | 189.8057 | 0.0310 | 0.0000 | 190.5804 |
| **Total** | **0.1384** | **1.0881** | **1.2999** | **2.3100e-003** | | **0.0410** | **0.0410** | | **0.0396** | **0.0396** | **0.0000** | **189.8057** | **189.8057** | **0.0310** | **0.0000** | **190.5804** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.7000e-004 | 0.0155 | 0.0116 | 2.0000e-005 | 3.2000e-004 | 2.0000e-005 | 3.3000e-004 | 1.0000e-004 | 2.0000e-005 | 1.1000e-004 | 0.0000 | 2.3202 | 2.3202 | 9.0000e-005 | 3.6000e-004 | 2.4298 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **7.7000e-004** | **0.0155** | **0.0116** | **2.0000e-005** | **3.2000e-004** | **2.0000e-005** | **3.3000e-004** | **1.0000e-004** | **2.0000e-005** | **1.1000e-004** | **0.0000** | **2.3202** | **2.3202** | **9.0000e-005** | **3.6000e-004** | **2.4298** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0282 | 0.5234 | 0.9393 | 1.5000e-003 | | 2.2500e-003 | 2.2500e-003 | | 2.2500e-003 | 2.2500e-003 | 0.0000 | 130.7983 | 130.7983 | 0.0254 | 0.0000 | 131.4329 |
| **Total** | **0.0282** | **0.5234** | **0.9393** | **1.5000e-003** | | **2.2500e-003** | **2.2500e-003** | | **2.2500e-003** | **2.2500e-003** | **0.0000** | **130.7983** | **130.7983** | **0.0254** | **0.0000** | **131.4329** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.4 Building Construction - 2029

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.7000e-004 | 0.0155 | 0.0116 | 2.0000e-005 | 3.2000e-004 | 2.0000e-005 | 3.3000e-004 | 1.0000e-004 | 2.0000e-005 | 1.1000e-004 | 0.0000 | 2.3202 | 2.3202 | 9.0000e-005 | 3.6000e-004 | 2.4298 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **7.7000e-004** | **0.0155** | **0.0116** | **2.0000e-005** | **3.2000e-004** | **2.0000e-005** | **3.3000e-004** | **1.0000e-004** | **2.0000e-005** | **1.1000e-004** | **0.0000** | **2.3202** | **2.3202** | **9.0000e-005** | **3.6000e-004** | **2.4298** |

## 3.5 Paving - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 5.1600e-003 | 0.0479 | 0.0792 | 1.2000e-004 | | 2.2200e-003 | 2.2200e-003 | | 2.0500e-003 | 2.0500e-003 | 0.0000 | 10.5962 | 10.5962 | 3.3600e-003 | 0.0000 | 10.6802 |
| Paving | 9.4000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.1000e-003** | **0.0479** | **0.0792** | **1.2000e-004** | | **2.2200e-003** | **2.2200e-003** | | **2.0500e-003** | **2.0500e-003** | **0.0000** | **10.5962** | **10.5962** | **3.3600e-003** | **0.0000** | **10.6802** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.9300e-003 | 0.0514 | 0.0887 | 1.2000e-004 | | 1.9000e-004 | 1.9000e-004 | | 1.9000e-004 | 1.9000e-004 | 0.0000 | 10.5962 | 10.5962 | 3.3600e-003 | 0.0000 | 10.6801 |
| Paving | 9.4000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **2.8700e-003** | **0.0514** | **0.0887** | **1.2000e-004** | | **1.9000e-004** | **1.9000e-004** | | **1.9000e-004** | **1.9000e-004** | **0.0000** | **10.5962** | **10.5962** | **3.3600e-003** | **0.0000** | **10.6801** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.5 Paving - 2029

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 3.6 Architectural Coating - 2029

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1574 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.5400e-003 | 0.0103 | 0.0163 | 3.0000e-005 | | 4.6000e-004 | 4.6000e-004 | | 4.6000e-004 | 4.6000e-004 | 0.0000 | 2.2979 | 2.2979 | 1.3000e-004 | 0.0000 | 2.3011 |
| **Total** | **0.1589** | **0.0103** | **0.0163** | **3.0000e-005** | | **4.6000e-004** | **4.6000e-004** | | **4.6000e-004** | **4.6000e-004** | **0.0000** | **2.2979** | **2.2979** | **1.3000e-004** | **0.0000** | **2.3011** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 3.6 Architectural Coating - 2029

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1574 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.9000e-004 | 9.5400e-003 | 0.0165 | 3.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | 0.0000 | 2.2979 | 2.2979 | 1.3000e-004 | 0.0000 | 2.3011 |
| **Total** | **0.1579** | **9.5400e-003** | **0.0165** | **3.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | **0.0000** | **2.2979** | **2.2979** | **1.3000e-004** | **0.0000** | **2.3011** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

### 3.6 Architectural Coating - 2029

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.3943 | 0.4116 | 3.7509 | 8.2400e-003 | 1.0265 | 5.4500e-003 | 1.0320 | 0.2740 | 5.0800e-003 | 0.2791 | 0.0000 | 763.0303 | 763.0303 | 0.0523 | 0.0354 | 774.8723 |
| Unmitigated | 0.3943 | 0.4116 | 3.7509 | 8.2400e-003 | 1.0265 | 5.4500e-003 | 1.0320 | 0.2740 | 5.0800e-003 | 0.2791 | 0.0000 | 763.0303 | 763.0303 | 0.0523 | 0.0354 | 774.8723 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Medical Office Building | 1,051.05 | 1,051.05 | 1051.05 | 2,726,275 | 2,726,275 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 1,051.05 | 1,051.05 | 1,051.05 | 2,726,275 | 2,726,275 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Medical Office Building | 16.60 | 8.40 | 6.90 | 29.60 | 51.40 | 19.00 | 60 | 30 | 10 |
| Parking Lot | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Medical Office Building | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |
| Parking Lot | 0.537356 | 0.064746 | 0.188411 | 0.126034 | 0.023886 | 0.006883 | 0.012812 | 0.008954 | 0.000819 | 0.000470 | 0.025457 | 0.000765 | 0.003406 |

# 5.0 Energy Detail

Kaiser Baldwin Park - Medical Office Building HRA - South Coast AQMD Air District, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 75.1413 | 75.1413 | 6.3400e-003 | 7.7000e-004 | 75.5290 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 75.1413 | 75.1413 | 6.3400e-003 | 7.7000e-004 | 75.5290 |
| NaturalGas Mitigated | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 18.1560 | 18.1560 | 3.5000e-004 | 3.3000e-004 | 18.2639 |
| NaturalGas Unmitigated | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 18.1560 | 18.1560 | 3.5000e-004 | 3.3000e-004 | 18.2639 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Medical Office Building | 340230 | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 18.1560 | 18.1560 | 3.5000e-004 | 3.3000e-004 | 18.2639 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.8300e-003** | **0.0167** | **0.0140** | **1.0000e-004** | | **1.2700e-003** | **1.2700e-003** | | **1.2700e-003** | **1.2700e-003** | **0.0000** | **18.1560** | **18.1560** | **3.5000e-004** | **3.3000e-004** | **18.2639** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Medical Office Building | 340230 | 1.8300e-003 | 0.0167 | 0.0140 | 1.0000e-004 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 18.1560 | 18.1560 | 3.5000e-004 | 3.3000e-004 | 18.2639 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **1.8300e-003** | **0.0167** | **0.0140** | **1.0000e-004** | | **1.2700e-003** | **1.2700e-003** | | **1.2700e-003** | **1.2700e-003** | **0.0000** | **18.1560** | **18.1560** | **3.5000e-004** | **3.3000e-004** | **18.2639** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Medical Office Building | 412500 | 73.1550 | 6.1700e-003 | 7.5000e-004 | 73.5324 |
| Parking Lot | 11200 | 1.9863 | 1.7000e-004 | 2.0000e-005 | 1.9965 |
| **Total** | | **75.1413** | **6.3400e-003** | **7.7000e-004** | **75.5290** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Medical Office Building | 412500 | 73.1550 | 6.1700e-003 | 7.5000e-004 | 73.5324 |
| Parking Lot | 11200 | 1.9863 | 1.7000e-004 | 2.0000e-005 | 1.9965 |
| **Total** | | **75.1413** | **6.3400e-003** | **7.7000e-004** | **75.5290** |

## 6.0 Area Detail

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.1372 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| Unmitigated | 0.1372 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0157 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.1213 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.3000e-004 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| **Total** | **0.1372** | **1.0000e-005** | **1.4300e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | **0.0000** | **2.8000e-003** | **2.8000e-003** | **1.0000e-005** | **0.0000** | **2.9900e-003** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0157 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.1213 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.3000e-004 | 1.0000e-005 | 1.4300e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 2.8000e-003 | 2.8000e-003 | 1.0000e-005 | 0.0000 | 2.9900e-003 |
| **Total** | **0.1372** | **1.0000e-005** | **1.4300e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | **0.0000** | **2.8000e-003** | **2.8000e-003** | **1.0000e-005** | **0.0000** | **2.9900e-003** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| Unmitigated | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Medical Office Building | 4.14086 / 0.788735 | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **12.4299** | **0.1359** | **3.3000e-003** | **16.8099** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Medical Office Building | 4.14086 / 0.788735 | 12.4299 | 0.1359 | 3.3000e-003 | 16.8099 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **12.4299** | **0.1359** | **3.3000e-003** | **16.8099** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Unmitigated | 72.3460 | 4.2755 | 0.0000 | 179.2341 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Medical Office Building | 356.4 | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **72.3460** | **4.2755** | **0.0000** | **179.2341** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Medical Office Building | 356.4 | 72.3460 | 4.2755 | 0.0000 | 179.2341 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **72.3460** | **4.2755** | **0.0000** | **179.2341** |

## 9.0 Operational Offroad

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

```
** Lakes Environmental AERMOD MPI
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 10.2.1
** Lakes Environmental Software Inc.
** Date: 8/2/2022
** File: C:\Users\apoll\Desktop\HARP2\HARP\Kaiser Baldwin Park\Kaiser BP\Kaiser
BP.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\apoll\Desktop\HARP2\HARP\Kaiser Baldwin Park\Kaiser BP\Kais
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   URBANOPT 9818605
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL "Kaiser BP.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** ------------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Emergency Room
** PREFIX
** Length of Side = 8.60
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 6.80
** SZINIT = 3.16
** Nodes = 6
** 409186.563, 3769886.089, 98.09, 3.40, 4.00
** 409138.712, 3769827.962, 98.22, 3.40, 4.00
```

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** 409152.509, 3769816.219, 97.87, 3.40, 4.00
** 409199.774, 3769874.052, 97.97, 3.40, 4.00
** 409192.141, 3769879.924, 98.00, 3.40, 4.00
** 409150.161, 3769825.907, 98.02, 3.40, 4.00
** ----------------------------------------------------------------------
   LOCATION L0000001     VOLUME   409183.830 3769882.769 98.19
   LOCATION L0000002     VOLUME   409178.364 3769876.129 98.37
   LOCATION L0000003     VOLUME   409172.899 3769869.490 98.36
   LOCATION L0000004     VOLUME   409167.433 3769862.850 98.31
   LOCATION L0000005     VOLUME   409161.967 3769856.211 98.28
   LOCATION L0000006     VOLUME   409156.501 3769849.571 98.32
   LOCATION L0000007     VOLUME   409151.035 3769842.932 98.38
   LOCATION L0000008     VOLUME   409145.569 3769836.292 98.38
   LOCATION L0000009     VOLUME   409140.103 3769829.652 98.30
   LOCATION L0000010     VOLUME   409143.593 3769823.807 98.17
   LOCATION L0000011     VOLUME   409150.143 3769818.233 97.93
   LOCATION L0000012     VOLUME   409155.985 3769820.472 97.86
   LOCATION L0000013     VOLUME   409161.427 3769827.131 97.86
   LOCATION L0000014     VOLUME   409166.869 3769833.790 97.84
   LOCATION L0000015     VOLUME   409172.311 3769840.449 97.85
   LOCATION L0000016     VOLUME   409177.754 3769847.108 97.87
   LOCATION L0000017     VOLUME   409183.196 3769853.767 97.90
   LOCATION L0000018     VOLUME   409188.638 3769860.426 97.91
   LOCATION L0000019     VOLUME   409194.080 3769867.085 97.90
   LOCATION L0000020     VOLUME   409199.522 3769873.744 97.92
   LOCATION L0000021     VOLUME   409193.273 3769879.053 98.03
   LOCATION L0000022     VOLUME   409187.740 3769874.261 98.13
   LOCATION L0000023     VOLUME   409182.462 3769867.470 98.13
   LOCATION L0000024     VOLUME   409177.185 3769860.680 98.12
   LOCATION L0000025     VOLUME   409171.908 3769853.889 98.08
   LOCATION L0000026     VOLUME   409166.630 3769847.099 98.06
   LOCATION L0000027     VOLUME   409161.353 3769840.308 98.08
   LOCATION L0000028     VOLUME   409156.076 3769833.518 98.09
   LOCATION L0000029     VOLUME   409150.798 3769826.728 98.08
** End of LINE VOLUME Source ID = SLINE1
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE2
** DESCRSRC MOB
** PREFIX
** Length of Side = 8.60
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 6.80
** SZINIT = 3.16
** Nodes = 27
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** 408784.269, 3769909.434, 97.21, 3.40, 4.00
** 408779.527, 3769894.462, 96.77, 3.40, 4.00
** 408775.784, 3769887.724, 96.82, 3.40, 4.00
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** 408827.191, 3769856.530, 95.25, 3.40, 4.00
** 408876.102, 3769913.178, 95.72, 3.40, 4.00
** 408820.952, 3769928.400, 97.32, 3.40, 4.00
** 408792.504, 3769924.158, 97.22, 3.40, 4.00
** 408793.003, 3769908.436, 97.21, 3.40, 4.00
** 408786.764, 3769889.970, 96.75, 3.40, 4.00
** 408824.196, 3769867.261, 96.07, 3.40, 4.00
** 408863.375, 3769909.684, 96.60, 3.40, 4.00
** 408822.200, 3769921.662, 97.14, 3.40, 4.00
** 408800.489, 3769918.917, 97.23, 3.40, 4.00
** 408801.487, 3769904.194, 97.16, 3.40, 4.00
** 408796.247, 3769892.465, 96.57, 3.40, 4.00
** 408821.950, 3769876.993, 96.21, 3.40, 4.00
** 408848.901, 3769906.689, 96.75, 3.40, 4.00
** 408822.949, 3769914.675, 97.14, 3.40, 4.00
** 408807.976, 3769912.179, 97.37, 3.40, 4.00
** 408809.723, 3769902.198, 97.18, 3.40, 4.00
** 408806.229, 3769894.961, 96.65, 3.40, 4.00
** 408818.706, 3769887.973, 96.31, 3.40, 4.00
** 408831.932, 3769902.697, 96.86, 3.40, 4.00
** 408821.451, 3769908.436, 97.16, 3.40, 4.00
** 408814.963, 3769906.440, 97.29, 3.40, 4.00
** 408818.457, 3769897.207, 96.71, 3.40, 4.00
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   LOCATION L0000031     VOLUME   408784.210 3769910.527 97.19
   LOCATION L0000032     VOLUME   408782.003 3769902.279 97.10
   LOCATION L0000033     VOLUME   408779.333 3769894.112 97.02
   LOCATION L0000034     VOLUME   408776.889 3769887.054 96.97
   LOCATION L0000035     VOLUME   408784.241 3769882.592 96.85
   LOCATION L0000036     VOLUME   408791.593 3769878.131 96.62
   LOCATION L0000037     VOLUME   408798.946 3769873.670 96.40
   LOCATION L0000038     VOLUME   408806.298 3769869.208 96.21
   LOCATION L0000039     VOLUME   408813.650 3769864.747 96.05
   LOCATION L0000040     VOLUME   408821.003 3769860.285 95.82
   LOCATION L0000041     VOLUME   408828.081 3769857.561 95.56
   LOCATION L0000042     VOLUME   408833.701 3769864.070 95.58
   LOCATION L0000043     VOLUME   408839.321 3769870.580 95.64
   LOCATION L0000044     VOLUME   408844.942 3769877.089 95.63
   LOCATION L0000045     VOLUME   408850.562 3769883.598 95.64
   LOCATION L0000046     VOLUME   408856.183 3769890.108 95.74
   LOCATION L0000047     VOLUME   408861.803 3769896.617 95.90
   LOCATION L0000048     VOLUME   408867.423 3769903.126 96.00
   LOCATION L0000049     VOLUME   408873.044 3769909.636 96.00
   LOCATION L0000050     VOLUME   408872.323 3769914.221 96.11
   LOCATION L0000051     VOLUME   408864.033 3769916.509 96.43
   LOCATION L0000052     VOLUME   408855.743 3769918.797 96.57
   LOCATION L0000053     VOLUME   408847.453 3769921.085 96.73
   LOCATION L0000054     VOLUME   408839.163 3769923.373 96.93
   LOCATION L0000055     VOLUME   408830.873 3769925.662 97.09
```

LOCATION L0000056 VOLUME 408822.583 3769927.950 97.23
LOCATION L0000057 VOLUME 408814.119 3769927.381 97.37
LOCATION L0000058 VOLUME 408805.613 3769926.113 97.38
LOCATION L0000059 VOLUME 408797.108 3769924.844 97.33
LOCATION L0000060 VOLUME 408792.629 3769920.214 97.29
LOCATION L0000061 VOLUME 408792.902 3769911.619 97.26
LOCATION L0000062 VOLUME 408791.269 3769903.305 97.09
LOCATION L0000063 VOLUME 408788.517 3769895.158 96.97
LOCATION L0000064 VOLUME 408789.435 3769888.349 96.84
LOCATION L0000065 VOLUME 408796.788 3769883.889 96.60
LOCATION L0000066 VOLUME 408804.141 3769879.428 96.32
LOCATION L0000067 VOLUME 408811.493 3769874.967 96.13
LOCATION L0000068 VOLUME 408818.846 3769870.507 96.00
LOCATION L0000069 VOLUME 408825.785 3769868.982 95.86
LOCATION L0000070 VOLUME 408831.620 3769875.300 95.92
LOCATION L0000071 VOLUME 408837.455 3769881.617 96.03
LOCATION L0000072 VOLUME 408843.290 3769887.935 96.04
LOCATION L0000073 VOLUME 408849.124 3769894.253 96.11
LOCATION L0000074 VOLUME 408854.959 3769900.571 96.24
LOCATION L0000075 VOLUME 408860.794 3769906.889 96.43
LOCATION L0000076 VOLUME 408858.770 3769911.023 96.65
LOCATION L0000077 VOLUME 408850.513 3769913.426 96.74
LOCATION L0000078 VOLUME 408842.255 3769915.828 96.86
LOCATION L0000079 VOLUME 408833.997 3769918.230 97.02
LOCATION L0000080 VOLUME 408825.740 3769920.632 97.16
LOCATION L0000081 VOLUME 408817.325 3769921.046 97.30
LOCATION L0000082 VOLUME 408808.793 3769919.967 97.38
LOCATION L0000083 VOLUME 408800.505 3769918.688 97.33
LOCATION L0000084 VOLUME 408801.087 3769910.107 97.28
LOCATION L0000085 VOLUME 408800.397 3769901.754 97.03
LOCATION L0000086 VOLUME 408796.889 3769893.902 96.85
LOCATION L0000087 VOLUME 408802.267 3769888.841 96.63
LOCATION L0000088 VOLUME 408809.635 3769884.406 96.33
LOCATION L0000089 VOLUME 408817.003 3769879.971 96.11
LOCATION L0000090 VOLUME 408823.850 3769879.086 96.06
LOCATION L0000091 VOLUME 408829.629 3769885.454 96.22
LOCATION L0000092 VOLUME 408835.409 3769891.823 96.38
LOCATION L0000093 VOLUME 408841.189 3769898.191 96.45
LOCATION L0000094 VOLUME 408846.968 3769904.559 96.56
LOCATION L0000095 VOLUME 408843.431 3769908.373 96.76
LOCATION L0000096 VOLUME 408835.211 3769910.902 96.96
LOCATION L0000097 VOLUME 408826.992 3769913.431 97.12
LOCATION L0000098 VOLUME 408818.638 3769913.956 97.27
LOCATION L0000099 VOLUME 408810.155 3769912.543 97.38
LOCATION L0000100 VOLUME 408809.077 3769905.885 97.16
LOCATION L0000101 VOLUME 408807.611 3769897.824 96.87
LOCATION L0000102 VOLUME 408810.959 3769892.312 96.62
LOCATION L0000103 VOLUME 408818.462 3769888.110 96.39
LOCATION L0000104 VOLUME 408824.266 3769894.163 96.56
LOCATION L0000105 VOLUME 408830.013 3769900.561 96.71

```
   LOCATION L0000106     VOLUME   408826.907 3769905.448 96.92
   LOCATION L0000107     VOLUME   408819.177 3769907.737 97.12
   LOCATION L0000108     VOLUME   408816.446 3769902.520 96.96
** End of LINE VOLUME Source ID = SLINE2
** Source Parameters **
** LINE VOLUME Source ID = SLINE1
   SRCPARAM L0000001     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000002     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000003     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000004     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000005     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000006     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000007     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000008     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000009     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000010     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000011     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000012     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000013     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000014     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000015     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000016     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000017     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000018     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000019     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000020     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000021     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000022     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000023     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000024     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000025     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000026     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000027     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000028     0.0344827586      3.40      4.00      3.16
   SRCPARAM L0000029     0.0344827586      3.40      4.00      3.16
** ------------------------------------------------------------------
** LINE VOLUME Source ID = SLINE2
   SRCPARAM L0000030     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000031     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000032     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000033     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000034     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000035     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000036     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000037     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000038     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000039     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000040     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000041     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000042     0.0126582278      3.40      4.00      3.16
```

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SRCPARAM L0000043     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000044     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000045     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000046     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000047     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000048     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000049     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000050     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000051     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000052     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000053     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000054     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000055     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000056     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000057     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000058     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000059     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000060     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000061     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000062     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000063     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000064     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000065     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000066     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000067     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000068     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000069     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000070     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000071     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000072     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000073     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000074     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000075     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000076     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000077     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000078     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000079     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000080     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000081     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000082     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000083     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000084     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000085     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000086     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000087     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000088     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000089     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000090     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000091     0.0126582278      3.40      4.00      3.16
SRCPARAM L0000092     0.0126582278      3.40      4.00      3.16
```

```
   SRCPARAM L0000093     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000094     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000095     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000096     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000097     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000098     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000099     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000100     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000101     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000102     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000103     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000104     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000105     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000106     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000107     0.0126582278      3.40      4.00      3.16
   SRCPARAM L0000108     0.0126582278      3.40      4.00      3.16
** ------------------------------------------------------------------
   URBANSRC ALL
   SRCGROUP SLINE1   L0000001 L0000002 L0000003 L0000004 L0000005 L0000006
   SRCGROUP SLINE1   L0000007 L0000008 L0000009 L0000010 L0000011 L0000012
   SRCGROUP SLINE1   L0000013 L0000014 L0000015 L0000016 L0000017 L0000018
   SRCGROUP SLINE1   L0000019 L0000020 L0000021 L0000022 L0000023 L0000024
   SRCGROUP SLINE1   L0000025 L0000026 L0000027 L0000028 L0000029
   SRCGROUP SLINE2   L0000030 L0000031 L0000032 L0000033 L0000034 L0000035
   SRCGROUP SLINE2   L0000036 L0000037 L0000038 L0000039 L0000040 L0000041
   SRCGROUP SLINE2   L0000042 L0000043 L0000044 L0000045 L0000046 L0000047
   SRCGROUP SLINE2   L0000048 L0000049 L0000050 L0000051 L0000052 L0000053
   SRCGROUP SLINE2   L0000054 L0000055 L0000056 L0000057 L0000058 L0000059
   SRCGROUP SLINE2   L0000060 L0000061 L0000062 L0000063 L0000064 L0000065
   SRCGROUP SLINE2   L0000066 L0000067 L0000068 L0000069 L0000070 L0000071
   SRCGROUP SLINE2   L0000072 L0000073 L0000074 L0000075 L0000076 L0000077
   SRCGROUP SLINE2   L0000078 L0000079 L0000080 L0000081 L0000082 L0000083
   SRCGROUP SLINE2   L0000084 L0000085 L0000086 L0000087 L0000088 L0000089
   SRCGROUP SLINE2   L0000090 L0000091 L0000092 L0000093 L0000094 L0000095
   SRCGROUP SLINE2   L0000096 L0000097 L0000098 L0000099 L0000100 L0000101
   SRCGROUP SLINE2   L0000102 L0000103 L0000104 L0000105 L0000106 L0000107
   SRCGROUP SLINE2   L0000108
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "Kaiser BP.rou"
RE FINISHED
**
**************************************
```

```
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\AzusaADJU\AZUS_V9_ADJU\AZUS_v9.SFC
   PROFFILE ..\AzusaADJU\AZUS_V9_ADJU\AZUS_v9.PFL
   SURFDATA 3179 2012
   UAIRDATA 3190 2012
   SITEDATA 99999 2012
   PROFBASE 182.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Kaiser BP.AD\01H1GALL.PLT" 31
   PLOTFILE 1 SLINE1 1ST "Kaiser BP.AD\01H1G001.PLT" 32
   PLOTFILE 1 SLINE2 1ST "Kaiser BP.AD\01H1G002.PLT" 33
   PLOTFILE PERIOD ALL "Kaiser BP.AD\PE00GALL.PLT" 34
   PLOTFILE PERIOD SLINE1 "Kaiser BP.AD\PE00G001.PLT" 35
   PLOTFILE PERIOD SLINE2 "Kaiser BP.AD\PE00G002.PLT" 36
   SUMMFILE "Kaiser BP.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     360       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187     360       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
```

```
 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                          ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses URBAN Dispersion Algorithm for the SBL for   108 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   9818605.0 ;  Urban Roughness Length =  1.000 m

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.
         6. Urban Roughness Length of 1.0 Meter Assumed.

 **Other Options Specified:
         ADJ_U*   - Use ADJ_U* option for SBL in AERMET
         TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_10

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:    108 Source(s);       3 Source Group(s); and     808
```

```
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    108 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   182.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                    ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.7 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Kaiser BP.err

 **File for Summary of Results:   Kaiser BP.sum

 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE ID | NUMBER PART. CATS. | EMISSION RATE (GRAMS/SEC) | X (METERS) | Y (METERS) | BASE ELEV. (METERS) | RELEASE HEIGHT (METERS) | INIT. SY (METERS) | INIT. SZ (METERS) | URBAN SOURCE | EMISSION RATE VARY BY |
|---|---|---|---|---|---|---|---|---|---|---|
| L0000001 | 0 | 0.34483E-01 | 409183.8 | 3769882.8 | 98.2 | 3.40 | 4.00 | 3.16 | YES | |
| L0000002 | 0 | 0.34483E-01 | 409178.4 | 3769876.1 | 98.4 | 3.40 | 4.00 | 3.16 | YES | |
| L0000003 | 0 | 0.34483E-01 | 409172.9 | 3769869.5 | 98.4 | 3.40 | 4.00 | 3.16 | YES | |
| L0000004 | 0 | 0.34483E-01 | 409167.4 | 3769862.8 | 98.3 | 3.40 | 4.00 | 3.16 | YES | |
| L0000005 | 0 | 0.34483E-01 | 409162.0 | 3769856.2 | 98.3 | 3.40 | 4.00 | 3.16 | YES | |
| L0000006 | 0 | 0.34483E-01 | 409156.5 | 3769849.6 | 98.3 | 3.40 | 4.00 | 3.16 | YES | |
| L0000007 | 0 | 0.34483E-01 | 409151.0 | 3769842.9 | 98.4 | 3.40 | 4.00 | 3.16 | YES | |
| L0000008 | 0 | 0.34483E-01 | 409145.6 | 3769836.3 | 98.4 | 3.40 | 4.00 | 3.16 | YES | |
| L0000009 | 0 | 0.34483E-01 | 409140.1 | 3769829.7 | 98.3 | 3.40 | 4.00 | 3.16 | YES | |
| L0000010 | 0 | 0.34483E-01 | 409143.6 | 3769823.8 | 98.2 | 3.40 | 4.00 | 3.16 | YES | |
| L0000011 | 0 | 0.34483E-01 | 409150.1 | 3769818.2 | 97.9 | 3.40 | 4.00 | 3.16 | YES | |
| L0000012 | 0 | 0.34483E-01 | 409156.0 | 3769820.5 | 97.9 | 3.40 | 4.00 | 3.16 | YES | |
| L0000013 | 0 | 0.34483E-01 | 409161.4 | 3769827.1 | 97.9 | 3.40 | 4.00 | 3.16 | YES | |
| L0000014 | 0 | 0.34483E-01 | 409166.9 | 3769833.8 | 97.8 | 3.40 | 4.00 | 3.16 | YES | |
| L0000015 | 0 | 0.34483E-01 | 409172.3 | 3769840.4 | 97.8 | 3.40 | 4.00 | 3.16 | YES | |
| L0000016 | 0 | 0.34483E-01 | 409177.8 | 3769847.1 | 97.9 | 3.40 | 4.00 | 3.16 | YES | |
| L0000017 | 0 | 0.34483E-01 | 409183.2 | 3769853.8 | 97.9 | 3.40 | 4.00 | | | |

```
3.16     YES
 L0000018         0   0.34483E-01  409188.6 3769860.4    97.9     3.40     4.00
3.16     YES
 L0000019         0   0.34483E-01  409194.1 3769867.1    97.9     3.40     4.00
3.16     YES
 L0000020         0   0.34483E-01  409199.5 3769873.7    97.9     3.40     4.00
3.16     YES
 L0000021         0   0.34483E-01  409193.3 3769879.1    98.0     3.40     4.00
3.16     YES
 L0000022         0   0.34483E-01  409187.7 3769874.3    98.1     3.40     4.00
3.16     YES
 L0000023         0   0.34483E-01  409182.5 3769867.5    98.1     3.40     4.00
3.16     YES
 L0000024         0   0.34483E-01  409177.2 3769860.7    98.1     3.40     4.00
3.16     YES
 L0000025         0   0.34483E-01  409171.9 3769853.9    98.1     3.40     4.00
3.16     YES
 L0000026         0   0.34483E-01  409166.6 3769847.1    98.1     3.40     4.00
3.16     YES
 L0000027         0   0.34483E-01  409161.4 3769840.3    98.1     3.40     4.00
3.16     YES
 L0000028         0   0.34483E-01  409156.1 3769833.5    98.1     3.40     4.00
3.16     YES
 L0000029         0   0.34483E-01  409150.8 3769826.7    98.1     3.40     4.00
3.16     YES
 L0000030         0   0.12658E-01  408783.8 3769919.1    97.2     3.40     4.00
3.16     YES
 L0000031         0   0.12658E-01  408784.2 3769910.5    97.2     3.40     4.00
3.16     YES
 L0000032         0   0.12658E-01  408782.0 3769902.3    97.1     3.40     4.00
3.16     YES
 L0000033         0   0.12658E-01  408779.3 3769894.1    97.0     3.40     4.00
3.16     YES
 L0000034         0   0.12658E-01  408776.9 3769887.1    97.0     3.40     4.00
3.16     YES
 L0000035         0   0.12658E-01  408784.2 3769882.6    96.8     3.40     4.00
3.16     YES
 L0000036         0   0.12658E-01  408791.6 3769878.1    96.6     3.40     4.00
3.16     YES
 L0000037         0   0.12658E-01  408798.9 3769873.7    96.4     3.40     4.00
3.16     YES
 L0000038         0   0.12658E-01  408806.3 3769869.2    96.2     3.40     4.00
3.16     YES
 L0000039         0   0.12658E-01  408813.6 3769864.7    96.0     3.40     4.00
3.16     YES
 L0000040         0   0.12658E-01  408821.0 3769860.3    95.8     3.40     4.00
3.16     YES
↟ *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE ID | NUMBER PART. CATS. | EMISSION RATE (GRAMS/SEC) | X (METERS) | Y (METERS) | BASE ELEV. (METERS) | RELEASE HEIGHT (METERS) | INIT. SY (METERS) | INIT. SZ (METERS) | URBAN SOURCE | EMISSION RATE SCALAR VARY BY |
|---|---|---|---|---|---|---|---|---|---|---|
| L0000041 | 0 | 0.12658E-01 | 408828.1 | 3769857.6 | 95.6 | 3.40 | 4.00 | 3.16 | YES | |
| L0000042 | 0 | 0.12658E-01 | 408833.7 | 3769864.1 | 95.6 | 3.40 | 4.00 | 3.16 | YES | |
| L0000043 | 0 | 0.12658E-01 | 408839.3 | 3769870.6 | 95.6 | 3.40 | 4.00 | 3.16 | YES | |
| L0000044 | 0 | 0.12658E-01 | 408844.9 | 3769877.1 | 95.6 | 3.40 | 4.00 | 3.16 | YES | |
| L0000045 | 0 | 0.12658E-01 | 408850.6 | 3769883.6 | 95.6 | 3.40 | 4.00 | 3.16 | YES | |
| L0000046 | 0 | 0.12658E-01 | 408856.2 | 3769890.1 | 95.7 | 3.40 | 4.00 | 3.16 | YES | |
| L0000047 | 0 | 0.12658E-01 | 408861.8 | 3769896.6 | 95.9 | 3.40 | 4.00 | 3.16 | YES | |
| L0000048 | 0 | 0.12658E-01 | 408867.4 | 3769903.1 | 96.0 | 3.40 | 4.00 | 3.16 | YES | |
| L0000049 | 0 | 0.12658E-01 | 408873.0 | 3769909.6 | 96.0 | 3.40 | 4.00 | 3.16 | YES | |
| L0000050 | 0 | 0.12658E-01 | 408872.3 | 3769914.2 | 96.1 | 3.40 | 4.00 | 3.16 | YES | |
| L0000051 | 0 | 0.12658E-01 | 408864.0 | 3769916.5 | 96.4 | 3.40 | 4.00 | 3.16 | YES | |
| L0000052 | 0 | 0.12658E-01 | 408855.7 | 3769918.8 | 96.6 | 3.40 | 4.00 | 3.16 | YES | |
| L0000053 | 0 | 0.12658E-01 | 408847.5 | 3769921.1 | 96.7 | 3.40 | 4.00 | 3.16 | YES | |
| L0000054 | 0 | 0.12658E-01 | 408839.2 | 3769923.4 | 96.9 | 3.40 | 4.00 | 3.16 | YES | |
| L0000055 | 0 | 0.12658E-01 | 408830.9 | 3769925.7 | 97.1 | 3.40 | 4.00 | 3.16 | YES | |
| L0000056 | 0 | 0.12658E-01 | 408822.6 | 3769927.9 | 97.2 | 3.40 | 4.00 | 3.16 | YES | |
| L0000057 | 0 | 0.12658E-01 | 408814.1 | 3769927.4 | 97.4 | 3.40 | 4.00 | | | |

```
3.16     YES
 L0000058         0   0.12658E-01  408805.6 3769926.1    97.4     3.40     4.00
3.16     YES
 L0000059         0   0.12658E-01  408797.1 3769924.8    97.3     3.40     4.00
3.16     YES
 L0000060         0   0.12658E-01  408792.6 3769920.2    97.3     3.40     4.00
3.16     YES
 L0000061         0   0.12658E-01  408792.9 3769911.6    97.3     3.40     4.00
3.16     YES
 L0000062         0   0.12658E-01  408791.3 3769903.3    97.1     3.40     4.00
3.16     YES
 L0000063         0   0.12658E-01  408788.5 3769895.2    97.0     3.40     4.00
3.16     YES
 L0000064         0   0.12658E-01  408789.4 3769888.3    96.8     3.40     4.00
3.16     YES
 L0000065         0   0.12658E-01  408796.8 3769883.9    96.6     3.40     4.00
3.16     YES
 L0000066         0   0.12658E-01  408804.1 3769879.4    96.3     3.40     4.00
3.16     YES
 L0000067         0   0.12658E-01  408811.5 3769875.0    96.1     3.40     4.00
3.16     YES
 L0000068         0   0.12658E-01  408818.8 3769870.5    96.0     3.40     4.00
3.16     YES
 L0000069         0   0.12658E-01  408825.8 3769869.0    95.9     3.40     4.00
3.16     YES
 L0000070         0   0.12658E-01  408831.6 3769875.3    95.9     3.40     4.00
3.16     YES
 L0000071         0   0.12658E-01  408837.5 3769881.6    96.0     3.40     4.00
3.16     YES
 L0000072         0   0.12658E-01  408843.3 3769887.9    96.0     3.40     4.00
3.16     YES
 L0000073         0   0.12658E-01  408849.1 3769894.3    96.1     3.40     4.00
3.16     YES
 L0000074         0   0.12658E-01  408855.0 3769900.6    96.2     3.40     4.00
3.16     YES
 L0000075         0   0.12658E-01  408860.8 3769906.9    96.4     3.40     4.00
3.16     YES
 L0000076         0   0.12658E-01  408858.8 3769911.0    96.6     3.40     4.00
3.16     YES
 L0000077         0   0.12658E-01  408850.5 3769913.4    96.7     3.40     4.00
3.16     YES
 L0000078         0   0.12658E-01  408842.3 3769915.8    96.9     3.40     4.00
3.16     YES
 L0000079         0   0.12658E-01  408834.0 3769918.2    97.0     3.40     4.00
3.16     YES
 L0000080         0   0.12658E-01  408825.7 3769920.6    97.2     3.40     4.00
3.16     YES
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

| SOURCE ID | NUMBER PART. CATS. | EMISSION RATE (GRAMS/SEC) | X (METERS) | Y (METERS) | BASE ELEV. (METERS) | RELEASE HEIGHT (METERS) | INIT. SY (METERS) | INIT. SZ (METERS) | URBAN SOURCE | EMISSION RATE SCALAR VARY BY |
|---|---|---|---|---|---|---|---|---|---|---|
| L0000081 | 0 | 0.12658E-01 | 408817.3 | 3769921.0 | 97.3 | 3.40 | 4.00 | 3.16 | YES | |
| L0000082 | 0 | 0.12658E-01 | 408808.8 | 3769920.0 | 97.4 | 3.40 | 4.00 | 3.16 | YES | |
| L0000083 | 0 | 0.12658E-01 | 408800.5 | 3769918.7 | 97.3 | 3.40 | 4.00 | 3.16 | YES | |
| L0000084 | 0 | 0.12658E-01 | 408801.1 | 3769910.1 | 97.3 | 3.40 | 4.00 | 3.16 | YES | |
| L0000085 | 0 | 0.12658E-01 | 408800.4 | 3769901.8 | 97.0 | 3.40 | 4.00 | 3.16 | YES | |
| L0000086 | 0 | 0.12658E-01 | 408796.9 | 3769893.9 | 96.8 | 3.40 | 4.00 | 3.16 | YES | |
| L0000087 | 0 | 0.12658E-01 | 408802.3 | 3769888.8 | 96.6 | 3.40 | 4.00 | 3.16 | YES | |
| L0000088 | 0 | 0.12658E-01 | 408809.6 | 3769884.4 | 96.3 | 3.40 | 4.00 | 3.16 | YES | |
| L0000089 | 0 | 0.12658E-01 | 408817.0 | 3769880.0 | 96.1 | 3.40 | 4.00 | 3.16 | YES | |
| L0000090 | 0 | 0.12658E-01 | 408823.8 | 3769879.1 | 96.1 | 3.40 | 4.00 | 3.16 | YES | |
| L0000091 | 0 | 0.12658E-01 | 408829.6 | 3769885.5 | 96.2 | 3.40 | 4.00 | 3.16 | YES | |
| L0000092 | 0 | 0.12658E-01 | 408835.4 | 3769891.8 | 96.4 | 3.40 | 4.00 | 3.16 | YES | |
| L0000093 | 0 | 0.12658E-01 | 408841.2 | 3769898.2 | 96.5 | 3.40 | 4.00 | 3.16 | YES | |
| L0000094 | 0 | 0.12658E-01 | 408847.0 | 3769904.6 | 96.6 | 3.40 | 4.00 | 3.16 | YES | |
| L0000095 | 0 | 0.12658E-01 | 408843.4 | 3769908.4 | 96.8 | 3.40 | 4.00 | 3.16 | YES | |
| L0000096 | 0 | 0.12658E-01 | 408835.2 | 3769910.9 | 97.0 | 3.40 | 4.00 | 3.16 | YES | |
| L0000097 | 0 | 0.12658E-01 | 408827.0 | 3769913.4 | 97.1 | 3.40 | 4.00 | | | |

```
3.16     YES
 L0000098         0   0.12658E-01  408818.6 3769914.0    97.3     3.40     4.00
3.16     YES
 L0000099         0   0.12658E-01  408810.2 3769912.5    97.4     3.40     4.00
3.16     YES
 L0000100         0   0.12658E-01  408809.1 3769905.9    97.2     3.40     4.00
3.16     YES
 L0000101         0   0.12658E-01  408807.6 3769897.8    96.9     3.40     4.00
3.16     YES
 L0000102         0   0.12658E-01  408811.0 3769892.3    96.6     3.40     4.00
3.16     YES
 L0000103         0   0.12658E-01  408818.5 3769888.1    96.4     3.40     4.00
3.16     YES
 L0000104         0   0.12658E-01  408824.3 3769894.2    96.6     3.40     4.00
3.16     YES
 L0000105         0   0.12658E-01  408830.0 3769900.6    96.7     3.40     4.00
3.16     YES
 L0000106         0   0.12658E-01  408826.9 3769905.4    96.9     3.40     4.00
3.16     YES
 L0000107         0   0.12658E-01  408819.2 3769907.7    97.1     3.40     4.00
3.16     YES
 L0000108         0   0.12658E-01  408816.4 3769902.5    97.0     3.40     4.00
3.16     YES
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                              *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                              SOURCE IDs
 -----------                                              ----------


  SLINE1     L0000001    , L0000002    , L0000003    , L0000004    , L0000005    ,
L0000006    , L0000007    , L0000008    ,

             L0000009    , L0000010    , L0000011    , L0000012    , L0000013    ,
L0000014    , L0000015    , L0000016    ,

             L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
L0000022    , L0000023    , L0000024    ,

             L0000025    , L0000026    , L0000027    , L0000028    , L0000029    ,

  SLINE2     L0000030    , L0000031    , L0000032    , L0000033    , L0000034    ,
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             L0000038    , L0000039    , L0000040    , L0000041    , L0000042    ,
L0000043    , L0000044    , L0000045    ,

             L0000046    , L0000047    , L0000048    , L0000049    , L0000050    ,
L0000051    , L0000052    , L0000053    ,

             L0000054    , L0000055    , L0000056    , L0000057    , L0000058    ,
L0000059    , L0000060    , L0000061    ,

             L0000062    , L0000063    , L0000064    , L0000065    , L0000066    ,
L0000067    , L0000068    , L0000069    ,

             L0000070    , L0000071    , L0000072    , L0000073    , L0000074    ,
L0000075    , L0000076    , L0000077    ,

             L0000078    , L0000079    , L0000080    , L0000081    , L0000082    ,
L0000083    , L0000084    , L0000085    ,

             L0000086    , L0000087    , L0000088    , L0000089    , L0000090    ,
L0000091    , L0000092    , L0000093    ,

             L0000094    , L0000095    , L0000096    , L0000097    , L0000098    ,
L0000099    , L0000100    , L0000101    ,

             L0000102    , L0000103    , L0000104    , L0000105    , L0000106    ,
L0000107    , L0000108    ,

  ALL        L0000001    , L0000002    , L0000003    , L0000004    , L0000005    ,
L0000006    , L0000007    , L0000008    ,

             L0000009    , L0000010    , L0000011    , L0000012    , L0000013    ,
L0000014    , L0000015    , L0000016    ,

             L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
L0000022    , L0000023    , L0000024    ,

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L0000030    , L0000031    , L0000032    ,

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L0000038    , L0000039    , L0000040    ,

             L0000041    , L0000042    , L0000043    , L0000044    , L0000045    ,
L0000046    , L0000047    , L0000048    ,
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35
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*** SOURCE IDs DEFINING SOURCE GROUPS ***

| SRCGROUP ID | SOURCE IDs |
|---|---|
| | L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 , |
| | L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 , |
| | L0000065 , L0000066 , L0000067 , L0000068 , L0000069 , L0000070 , L0000071 , L0000072 , |
| | L0000073 , L0000074 , L0000075 , L0000076 , L0000077 , L0000078 , L0000079 , L0000080 , |
| | L0000081 , L0000082 , L0000083 , L0000084 , L0000085 , L0000086 , L0000087 , L0000088 , |
| | L0000089 , L0000090 , L0000091 , L0000092 , L0000093 , L0000094 , L0000095 , L0000096 , |
| | L0000097 , L0000098 , L0000099 , L0000100 , L0000101 , L0000102 , L0000103 , L0000104 , |
| | L0000105 , L0000106 , L0000107 , L0000108 , |



*** SOURCE IDs DEFINED AS URBAN SOURCES ***

| URBAN ID | URBAN POP | SOURCE IDs |
|---|---|---|
| | 9818605. | L0000001 , L0000002 , L0000003 , L0000004 , |

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L0000005    , L0000006    , L0000007    ,
 L0000008    ,

             L0000009    , L0000010    , L0000011    , L0000012    , L0000013    ,
L0000014    , L0000015    , L0000016    ,

             L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
L0000022    , L0000023    , L0000024    ,

             L0000025    , L0000026    , L0000027    , L0000028    , L0000029    ,
L0000030    , L0000031    , L0000032    ,

             L0000033    , L0000034    , L0000035    , L0000036    , L0000037    ,
L0000038    , L0000039    , L0000040    ,

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L0000046    , L0000047    , L0000048    ,

             L0000049    , L0000050    , L0000051    , L0000052    , L0000053    ,
L0000054    , L0000055    , L0000056    ,

             L0000057    , L0000058    , L0000059    , L0000060    , L0000061    ,
L0000062    , L0000063    , L0000064    ,

             L0000065    , L0000066    , L0000067    , L0000068    , L0000069    ,
L0000070    , L0000071    , L0000072    ,

             L0000073    , L0000074    , L0000075    , L0000076    , L0000077    ,
L0000078    , L0000079    , L0000080    ,

             L0000081    , L0000082    , L0000083    , L0000084    , L0000085    ,
L0000086    , L0000087    , L0000088    ,

             L0000089    , L0000090    , L0000091    , L0000092    , L0000093    ,
L0000094    , L0000095    , L0000096    ,

             L0000097    , L0000098    , L0000099    , L0000100    , L0000101    ,
L0000102    , L0000103    , L0000104    ,

             L0000105    , L0000106    , L0000107    , L0000108    ,
```



*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

( 408660.5, 3769574.7, 95.9, 95.9, 0.0); ( 408680.5, 3769574.7, 95.9, 95.9, 0.0);
( 408820.5, 3769574.7, 95.9, 95.9, 0.0); ( 408640.5, 3769594.7, 96.0, 96.0, 0.0);
( 408660.5, 3769594.7, 96.2, 96.2, 0.0); ( 408680.5, 3769594.7, 96.1, 96.1, 0.0);
( 408700.5, 3769594.7, 96.1, 96.1, 0.0); ( 408720.5, 3769594.7, 96.0, 96.0, 0.0);
( 408740.5, 3769594.7, 95.5, 95.5, 0.0); ( 408760.5, 3769594.7, 94.8, 94.8, 0.0);
( 408780.5, 3769594.7, 95.4, 95.4, 0.0); ( 408800.5, 3769594.7, 95.5, 95.5, 0.0);
( 408820.5, 3769594.7, 95.5, 95.5, 0.0); ( 408840.5, 3769594.7, 95.6, 95.6, 0.0);
( 408860.5, 3769594.7, 95.7, 95.7, 0.0); ( 408880.5, 3769594.7, 96.0, 96.0, 0.0);
( 408620.5, 3769614.7, 96.1, 96.1, 0.0); ( 408640.5, 3769614.7, 96.3, 96.3, 0.0);
( 408660.5, 3769614.7, 96.3, 96.3, 0.0); ( 408680.5, 3769614.7, 96.3, 96.3, 0.0);
( 408700.5, 3769614.7, 96.3, 96.3, 0.0); ( 408720.5, 3769614.7, 96.2, 96.2, 0.0);
( 408740.5, 3769614.7, 96.0, 96.0, 0.0); ( 408760.5, 3769614.7, 95.7, 95.7, 0.0);
( 408780.5, 3769614.7, 95.3, 95.3, 0.0); ( 408800.5, 3769614.7, 95.3, 95.3, 0.0);
( 408820.5, 3769614.7, 95.5, 95.5, 0.0); ( 408840.5, 3769614.7, 95.6, 95.6, 0.0);
( 408860.5, 3769614.7, 95.9, 95.9, 0.0); ( 408880.5, 3769614.7, 96.0, 96.0, 0.0);
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( 408620.5, 3769634.7, 96.2, 96.2, 0.0); ( 408640.5, 3769634.7, 96.3, 96.3, 0.0);
( 408660.5, 3769634.7, 96.4, 96.4, 0.0); ( 408680.5, 3769634.7, 96.4, 96.4, 0.0);
( 408700.5, 3769634.7, 96.5, 96.5, 0.0); ( 408720.5, 3769634.7, 96.4, 96.4, 0.0);
( 408740.5, 3769634.7, 96.2, 96.2, 0.0); ( 408760.5, 3769634.7, 95.9, 95.9, 0.0);
( 408780.5, 3769634.7, 95.2, 95.2, 0.0); ( 408800.5, 3769634.7, 95.3, 95.3, 0.0);
( 408820.5, 3769634.7, 95.6, 95.6, 0.0); ( 408840.5, 3769634.7, 95.9, 95.9, 0.0);
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```
     ( 408560.5, 3769654.7,      95.9,      95.9,       0.0);         ( 408580.5,
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3769654.7,      96.2,      96.2,       0.0);
     ( 408640.5, 3769654.7,      96.3,      96.3,       0.0);         ( 408660.5,
3769654.7,      96.5,      96.5,       0.0);
     ( 408680.5, 3769654.7,      96.4,      96.4,       0.0);         ( 408700.5,
3769654.7,      96.2,      96.2,       0.0);
     ( 408720.5, 3769654.7,      96.1,      96.1,       0.0);         ( 408740.5,
3769654.7,      96.0,      96.0,       0.0);
     ( 408760.5, 3769654.7,      95.9,      95.9,       0.0);         ( 408780.5,
3769654.7,      95.5,      95.5,       0.0);
     ( 408800.5, 3769654.7,      95.6,      95.6,       0.0);         ( 408820.5,
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     ( 408840.5, 3769654.7,      96.0,      96.0,       0.0);         ( 408860.5,
3769654.7,      96.1,      96.1,       0.0);
     ( 408880.5, 3769654.7,      96.1,      96.1,       0.0);         ( 408900.5,
3769654.7,      96.4,      96.4,       0.0);
     ( 408920.5, 3769654.7,      96.7,      96.7,       0.0);         ( 408940.5,
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     ( 408580.5, 3769674.7,      96.2,      96.2,       0.0);         ( 408600.5,
3769674.7,      96.2,      96.2,       0.0);
     ( 408620.5, 3769674.7,      96.2,      96.2,       0.0);         ( 408640.5,
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     ( 408660.5, 3769674.7,      96.4,      96.4,       0.0);         ( 408680.5,
3769674.7,      96.3,      96.3,       0.0);
     ( 408700.5, 3769674.7,      96.0,      96.0,       0.0);         ( 408720.5,
3769674.7,      96.0,      96.0,       0.0);
     ( 408740.5, 3769674.7,      96.0,      96.0,       0.0);         ( 408760.5,
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     ( 408780.5, 3769674.7,      95.6,      95.6,       0.0);         ( 408800.5,
3769674.7,      95.6,      95.6,       0.0);
     ( 408820.5, 3769674.7,      95.7,      95.7,       0.0);         ( 408840.5,
3769674.7,      95.9,      95.9,       0.0);
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3769674.7,      96.2,      96.2,       0.0);
     ( 408900.5, 3769674.7,      96.2,      96.2,       0.0);         ( 408520.5,
3769694.7,      96.1,      96.1,       0.0);
     ( 408540.5, 3769694.7,      96.2,      96.2,       0.0);         ( 408560.5,
3769694.7,      96.2,      96.2,       0.0);
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***       14:11:35

                                  PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

( 408580.5, 3769694.7, 96.2, 96.2, 0.0); ( 408600.5, 3769694.7, 96.2, 96.2, 0.0);
( 408620.5, 3769694.7, 96.3, 96.3, 0.0); ( 408640.5, 3769694.7, 96.3, 96.3, 0.0);
( 408660.5, 3769694.7, 96.2, 96.2, 0.0); ( 408680.5, 3769694.7, 95.9, 95.9, 0.0);
( 408700.5, 3769694.7, 96.0, 96.0, 0.0); ( 408720.5, 3769694.7, 96.1, 96.1, 0.0);
( 408740.5, 3769694.7, 96.2, 96.2, 0.0); ( 408760.5, 3769694.7, 95.9, 95.9, 0.0);
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( 408480.5, 3769714.7, 96.1, 96.1, 0.0); ( 408500.5, 3769714.7, 96.2, 96.2, 0.0);
( 408520.5, 3769714.7, 96.2, 96.2, 0.0); ( 408540.5, 3769714.7, 96.3, 96.3, 0.0);
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( 408680.5, 3769714.7, 96.2, 96.2, 0.0); ( 408700.5, 3769714.7, 96.3, 96.3, 0.0);
( 408720.5, 3769714.7, 96.4, 96.4, 0.0); ( 408740.5, 3769714.7, 96.3, 96.3, 0.0);
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     ( 408740.5, 3769734.7,      96.5,      96.5,       0.0);         ( 408760.5,
3769734.7,      96.1,      96.1,       0.0);
     ( 408780.5, 3769734.7,      95.6,      95.6,       0.0);         ( 408800.5,
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     ( 408440.5, 3769754.7,      96.2,      96.2,       0.0);         ( 408460.5,
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     ( 408480.5, 3769754.7,      96.3,      96.3,       0.0);         ( 408500.5,
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     ( 408520.5, 3769754.7,      96.3,      96.3,       0.0);         ( 408540.5,
3769754.7,      96.4,      96.4,       0.0);
     ( 408560.5, 3769754.7,      96.4,      96.4,       0.0);         ( 408580.5,
3769754.7,      96.3,      96.3,       0.0);
     ( 408600.5, 3769754.7,      96.1,      96.1,       0.0);         ( 408620.5,
3769754.7,      96.2,      96.2,       0.0);
     ( 408640.5, 3769754.7,      96.2,      96.2,       0.0);         ( 408660.5,
3769754.7,      96.3,      96.3,       0.0);
     ( 408680.5, 3769754.7,      96.7,      96.7,       0.0);         ( 408700.5,
3769754.7,      96.6,      96.6,       0.0);
     ( 408720.5, 3769754.7,      96.6,      96.6,       0.0);         ( 408740.5,
3769754.7,      96.5,      96.5,       0.0);
     ( 408760.5, 3769754.7,      96.2,      96.2,       0.0);         ( 408780.5,
3769754.7,      95.4,      95.4,       0.0);
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     ( 408420.5, 3769774.7,      96.2,      96.2,       0.0);         ( 408440.5,
3769774.7,      96.3,      96.3,       0.0);
     ( 408460.5, 3769774.7,      96.3,      96.3,       0.0);         ( 408480.5,
3769774.7,      96.4,      96.4,       0.0);
     ( 408500.5, 3769774.7,      96.4,      96.4,       0.0);         ( 408520.5,
3769774.7,      96.4,      96.4,       0.0);
     ( 408540.5, 3769774.7,      96.4,      96.4,       0.0);         ( 408560.5,
3769774.7,      96.3,      96.3,       0.0);
     ( 408580.5, 3769774.7,      96.2,      96.2,       0.0);         ( 408600.5,
3769774.7,      96.3,      96.3,       0.0);
     ( 408620.5, 3769774.7,      96.4,      96.4,       0.0);         ( 408640.5,
3769774.7,      96.5,      96.5,       0.0);
     ( 408660.5, 3769774.7,      96.5,      96.5,       0.0);         ( 408680.5,
3769774.7,      96.7,      96.7,       0.0);
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***       14:11:35

                                PAGE  10
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*** MODELOPTs:  RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

( 408700.5, 3769774.7, 96.7, 96.7, 0.0); ( 408720.5, 3769774.7, 96.7, 96.7, 0.0);
( 408740.5, 3769774.7, 96.3, 96.3, 0.0); ( 408760.5, 3769774.7, 95.5, 95.5, 0.0);
( 408780.5, 3769774.7, 95.3, 95.3, 0.0); ( 408380.5, 3769794.7, 96.1, 96.1, 0.0);
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( 408440.5, 3769794.7, 96.4, 96.4, 0.0); ( 408460.5, 3769794.7, 96.4, 96.4, 0.0);
( 408480.5, 3769794.7, 96.4, 96.4, 0.0); ( 408500.5, 3769794.7, 96.5, 96.5, 0.0);
( 408520.5, 3769794.7, 96.4, 96.4, 0.0); ( 408540.5, 3769794.7, 96.3, 96.3, 0.0);
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( 408600.5, 3769794.7, 96.6, 96.6, 0.0); ( 408620.5, 3769794.7, 96.7, 96.7, 0.0);
( 408640.5, 3769794.7, 96.7, 96.7, 0.0); ( 408660.5, 3769794.7, 96.7, 96.7, 0.0);
( 408680.5, 3769794.7, 96.7, 96.7, 0.0); ( 408700.5, 3769794.7, 96.8, 96.8, 0.0);
( 408720.5, 3769794.7, 96.8, 96.8, 0.0); ( 408740.5, 3769794.7, 96.2, 96.2, 0.0);
( 408760.5, 3769794.7, 95.2, 95.2, 0.0); ( 408380.5, 3769814.7, 96.1, 96.1, 0.0);
( 408400.5, 3769814.7, 96.6, 96.6, 0.0); ( 408420.5, 3769814.7, 96.3, 96.3, 0.0);
( 408440.5, 3769814.7, 96.5, 96.5, 0.0); ( 408460.5, 3769814.7, 96.6, 96.6, 0.0);
( 408480.5, 3769814.7, 96.5, 96.5, 0.0); ( 408500.5, 3769814.7, 96.6, 96.6, 0.0);
( 408520.5, 3769814.7, 96.3, 96.3, 0.0); ( 408540.5, 3769814.7, 96.3, 96.3, 0.0);
( 408560.5, 3769814.7, 96.5, 96.5, 0.0); ( 408580.5, 3769814.7, 96.5, 96.5, 0.0);
( 408600.5, 3769814.7, 96.6, 96.6, 0.0); ( 408620.5, 3769814.7, 96.7, 96.7, 0.0);
( 408640.5, 3769814.7, 96.8, 96.8, 0.0); ( 408660.5, 3769814.7, 96.9, 96.9, 0.0);
( 408680.5, 3769814.7, 96.9, 96.9, 0.0); ( 408700.5, 3769814.7, 96.8, 96.8, 0.0);
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     ( 408440.5, 3769834.7,      96.5,      96.5,       0.0);         ( 408460.5,
3769834.7,      96.5,      96.5,       0.0);
     ( 408480.5, 3769834.7,      96.5,      96.5,       0.0);         ( 408500.5,
3769834.7,      96.5,      96.5,       0.0);
     ( 408520.5, 3769834.7,      96.4,      96.4,       0.0);         ( 408540.5,
3769834.7,      96.5,      96.5,       0.0);
     ( 408560.5, 3769834.7,      96.6,      96.6,       0.0);         ( 408580.5,
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     ( 408600.5, 3769834.7,      96.7,      96.7,       0.0);         ( 408620.5,
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     ( 408640.5, 3769834.7,      96.8,      96.8,       0.0);         ( 408660.5,
3769834.7,      96.9,      96.9,       0.0);
     ( 408680.5, 3769834.7,      97.0,      97.0,       0.0);         ( 408700.5,
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     ( 408440.5, 3769854.7,      96.5,      96.5,       0.0);         ( 408460.5,
3769854.7,      96.4,      96.4,       0.0);
     ( 408480.5, 3769854.7,      96.5,      96.5,       0.0);         ( 408500.5,
3769854.7,      96.4,      96.4,       0.0);
     ( 408520.5, 3769854.7,      96.6,      96.6,       0.0);         ( 408540.5,
3769854.7,      96.7,      96.7,       0.0);
     ( 408560.5, 3769854.7,      96.7,      96.7,       0.0);         ( 408580.5,
3769854.7,      96.7,      96.7,       0.0);
     ( 408600.5, 3769854.7,      96.7,      96.7,       0.0);         ( 408620.5,
3769854.7,      96.7,      96.7,       0.0);
     ( 408640.5, 3769854.7,      96.8,      96.8,       0.0);         ( 408660.5,
3769854.7,      96.8,      96.8,       0.0);
     ( 408680.5, 3769854.7,      97.0,      97.0,       0.0);         ( 408700.5,
3769854.7,      96.9,      96.9,       0.0);
     ( 408380.5, 3769874.7,      95.6,      95.6,       0.0);         ( 408400.5,
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     ( 408500.5, 3769874.7,      96.6,      96.6,       0.0);         ( 408520.5,
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     ( 408540.5, 3769874.7,      96.8,      96.8,       0.0);         ( 408560.5,
3769874.7,      96.7,      96.7,       0.0);
     ( 408580.5, 3769874.7,      96.6,      96.6,       0.0);         ( 408620.5,
3769874.7,      96.8,      96.8,       0.0);
     ( 408640.5, 3769874.7,      96.8,      96.8,       0.0);         ( 408660.5,
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 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

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( 408520.5, 3769894.7, 96.6, 96.6, 0.0); ( 408540.5, 3769894.7, 96.7, 96.7, 0.0);
( 408560.5, 3769894.7, 96.7, 96.7, 0.0); ( 408620.5, 3769894.7, 96.8, 96.8, 0.0);
( 408640.5, 3769894.7, 96.8, 96.8, 0.0); ( 408660.5, 3769894.7, 96.9, 96.9, 0.0);
( 408680.5, 3769894.7, 96.9, 96.9, 0.0); ( 408700.5, 3769894.7, 97.0, 97.0, 0.0);
( 408720.5, 3769894.7, 97.0, 97.0, 0.0); ( 408680.5, 3769914.7, 97.0, 97.0, 0.0);
( 408700.5, 3769914.7, 97.1, 97.1, 0.0); ( 408720.5, 3769914.7, 97.1, 97.1, 0.0);
( 408740.5, 3769914.7, 97.1, 97.1, 0.0); ( 408885.4, 3770075.3, 97.6, 97.6, 0.0);
( 408905.4, 3770075.3, 97.3, 97.3, 0.0); ( 408925.4, 3770075.3, 97.1, 97.1, 0.0);
( 408945.4, 3770075.3, 97.0, 97.0, 0.0); ( 408965.4, 3770075.3, 96.9, 96.9, 0.0);
( 408685.4, 3770095.3, 96.4, 96.4, 0.0); ( 408705.4, 3770095.3, 96.9, 96.9, 0.0);
( 408725.4, 3770095.3, 97.1, 97.1, 0.0); ( 408745.4, 3770095.3, 97.2, 97.2, 0.0);
( 408765.4, 3770095.3, 97.4, 97.4, 0.0); ( 408785.4, 3770095.3, 97.5, 97.5, 0.0);
( 408805.4, 3770095.3, 97.4, 97.4, 0.0); ( 408865.4, 3770095.3, 97.7, 97.7, 0.0);
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( 408925.4, 3770095.3, 96.8, 96.8, 0.0); ( 408945.4, 3770095.3, 96.2, 96.2, 0.0);
( 408965.4, 3770095.3, 96.3, 96.3, 0.0); ( 408985.4, 3770095.3, 96.6, 96.6, 0.0);
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( 409045.4, 3770095.3, 97.2, 97.2, 0.0); ( 408705.4, 3770115.3, 96.6, 96.6, 0.0);
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     ( 408885.4, 3770115.3,      97.9,      97.9,       0.0);         ( 408905.4,
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     ( 408925.4, 3770115.3,      97.0,      97.0,       0.0);         ( 408945.4,
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     ( 408965.4, 3770115.3,      96.4,      96.4,       0.0);         ( 408985.4,
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     ( 408765.4, 3770135.3,      97.4,      97.4,       0.0);         ( 408785.4,
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     ( 408805.4, 3770135.3,      97.6,      97.6,       0.0);         ( 408825.4,
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     ( 408845.4, 3770135.3,      98.0,      98.0,       0.0);         ( 408865.4,
3770135.3,      98.4,      98.4,       0.0);
     ( 408885.4, 3770135.3,      98.1,      98.1,       0.0);         ( 408905.4,
3770135.3,      97.7,      97.7,       0.0);
     ( 408925.4, 3770135.3,      97.2,      97.2,       0.0);         ( 408945.4,
3770135.3,      96.6,      96.6,       0.0);
     ( 408965.4, 3770135.3,      96.4,      96.4,       0.0);         ( 408985.4,
3770135.3,      96.3,      96.3,       0.0);
     ( 409005.4, 3770135.3,      96.2,      96.2,       0.0);         ( 409025.4,
3770135.3,      96.3,      96.3,       0.0);
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3770155.3,      97.0,      97.0,       0.0);
     ( 408765.4, 3770155.3,      97.3,      97.3,       0.0);         ( 408785.4,
3770155.3,      97.3,      97.3,       0.0);
     ( 408805.4, 3770155.3,      97.5,      97.5,       0.0);         ( 408825.4,
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     ( 408845.4, 3770155.3,      98.3,      98.3,       0.0);         ( 408865.4,
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     ( 408885.4, 3770155.3,      98.3,      98.3,       0.0);         ( 408905.4,
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     ( 408965.4, 3770155.3,      96.5,      96.5,       0.0);         ( 408985.4,
3770155.3,      96.4,      96.4,       0.0);
     ( 409005.4, 3770155.3,      96.4,      96.4,       0.0);         ( 409025.4,
3770155.3,      96.4,      96.4,       0.0);
↟ *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

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( 408805.4, 3770175.3,  97.7,  97.7,  0.0);  ( 408825.4, 3770175.3,  97.9,  97.9,  0.0);
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( 408885.4, 3770175.3,  98.2,  98.2,  0.0);  ( 408905.4, 3770175.3,  98.0,  98.0,  0.0);
( 408925.4, 3770175.3,  97.6,  97.6,  0.0);  ( 408945.4, 3770175.3,  97.4,  97.4,  0.0);
( 408965.4, 3770175.3,  96.8,  96.8,  0.0);  ( 408985.4, 3770175.3,  96.6,  96.6,  0.0);
( 409005.4, 3770175.3,  96.5,  96.5,  0.0);  ( 409025.4, 3770175.3,  96.5,  96.5,  0.0);
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     ( 409145.4, 3770195.3,      97.4,      97.4,       0.0);         ( 409165.4,
3770195.3,      97.5,      97.5,       0.0);
     ( 409185.4, 3770195.3,      97.6,      97.6,       0.0);         ( 409205.4,
3770195.3,      97.9,      97.9,       0.0);
     ( 408785.4, 3770215.3,      97.6,      97.6,       0.0);         ( 408805.4,
3770215.3,      97.6,      97.6,       0.0);
     ( 408825.4, 3770215.3,      97.7,      97.7,       0.0);         ( 408845.4,
3770215.3,      98.1,      98.1,       0.0);
     ( 408865.4, 3770215.3,      98.3,      98.3,       0.0);         ( 408885.4,
3770215.3,      98.5,      98.5,       0.0);
     ( 408905.4, 3770215.3,      98.1,      98.1,       0.0);         ( 408925.4,
3770215.3,      97.6,      97.6,       0.0);
     ( 408945.4, 3770215.3,      97.5,      97.5,       0.0);         ( 408965.4,
3770215.3,      97.4,      97.4,       0.0);
     ( 408985.4, 3770215.3,      97.4,      97.4,       0.0);         ( 409005.4,
3770215.3,      97.1,      97.1,       0.0);
     ( 409025.4, 3770215.3,      96.7,      96.7,       0.0);         ( 409045.4,
3770215.3,      96.6,      96.6,       0.0);
     ( 409065.4, 3770215.3,      96.7,      96.7,       0.0);         ( 409085.4,
3770215.3,      96.7,      96.7,       0.0);
     ( 409105.4, 3770215.3,      96.9,      96.9,       0.0);         ( 409125.4,
3770215.3,      97.2,      97.2,       0.0);
     ( 409145.4, 3770215.3,      97.0,      97.0,       0.0);         ( 409165.4,
3770215.3,      97.3,      97.3,       0.0);
     ( 409185.4, 3770215.3,      97.4,      97.4,       0.0);         ( 409205.4,
3770215.3,      97.5,      97.5,       0.0);
     ( 409225.4, 3770215.3,      98.0,      98.0,       0.0);         ( 408805.4,
3770235.3,      97.7,      97.7,       0.0);
     ( 408825.4, 3770235.3,      98.1,      98.1,       0.0);         ( 408845.4,
3770235.3,      98.5,      98.5,       0.0);
     ( 408865.4, 3770235.3,      98.6,      98.6,       0.0);         ( 408885.4,
3770235.3,      98.4,      98.4,       0.0);
     ( 408905.4, 3770235.3,      98.0,      98.0,       0.0);         ( 408925.4,
3770235.3,      97.8,      97.8,       0.0);
     ( 408945.4, 3770235.3,      97.6,      97.6,       0.0);         ( 408965.4,
3770235.3,      97.5,      97.5,       0.0);
     ( 408985.4, 3770235.3,      97.5,      97.5,       0.0);         ( 409005.4,
3770235.3,      97.4,      97.4,       0.0);
     ( 409025.4, 3770235.3,      97.2,      97.2,       0.0);         ( 409045.4,
3770235.3,      96.8,      96.8,       0.0);
     ( 409065.4, 3770235.3,      96.7,      96.7,       0.0);         ( 409085.4,
3770235.3,      96.7,      96.7,       0.0);
     ( 409105.4, 3770235.3,      96.9,      96.9,       0.0);         ( 409125.4,
3770235.3,      97.0,      97.0,       0.0);
     ( 409145.4, 3770235.3,      97.1,      97.1,       0.0);         ( 409165.4,
3770235.3,      97.5,      97.5,       0.0);
     ( 409185.4, 3770235.3,      97.6,      97.6,       0.0);         ( 409205.4,
3770235.3,      97.6,      97.6,       0.0);
     ( 409225.4, 3770235.3,      97.7,      97.7,       0.0);         ( 409245.4,
3770235.3,      98.2,      98.2,       0.0);
```

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     ( 408805.4, 3770255.3,      97.8,      97.8,       0.0);         ( 408825.4, 3770255.3,      98.3,      98.3,       0.0);
     ( 408845.4, 3770255.3,      98.6,      98.6,       0.0);         ( 408865.4, 3770255.3,      98.7,      98.7,       0.0);
     ( 408885.4, 3770255.3,      98.2,      98.2,       0.0);         ( 408905.4, 3770255.3,      98.1,      98.1,       0.0);
     ( 408925.4, 3770255.3,      98.0,      98.0,       0.0);         ( 408945.4, 3770255.3,      97.7,      97.7,       0.0);
     ( 408965.4, 3770255.3,      97.6,      97.6,       0.0);         ( 408985.4, 3770255.3,      97.6,      97.6,       0.0);
     ( 409005.4, 3770255.3,      97.6,      97.6,       0.0);         ( 409025.4, 3770255.3,      97.6,      97.6,       0.0);
     ( 409045.4, 3770255.3,      97.1,      97.1,       0.0);         ( 409065.4, 3770255.3,      96.8,      96.8,       0.0);
     ( 409085.4, 3770255.3,      96.8,      96.8,       0.0);         ( 409105.4, 3770255.3,      96.9,      96.9,       0.0);
     ( 409125.4, 3770255.3,      96.9,      96.9,       0.0);         ( 409145.4, 3770255.3,      97.2,      97.2,       0.0);
     ( 409165.4, 3770255.3,      97.5,      97.5,       0.0);         ( 409185.4, 3770255.3,      97.7,      97.7,       0.0);
     ( 409205.4, 3770255.3,      97.9,      97.9,       0.0);         ( 409225.4, 3770255.3,      97.8,      97.8,       0.0);
     ( 409245.4, 3770255.3,      98.3,      98.3,       0.0);         ( 409265.4, 3770255.3,      98.8,      98.8,       0.0);
     ( 409365.4, 3770255.3,      99.2,      99.2,       0.0);         ( 409385.4, 3770255.3,      99.3,      99.3,       0.0);
     ( 408825.4, 3770275.3,      97.9,      97.9,       0.0);         ( 408845.4, 3770275.3,      98.1,      98.1,       0.0);
     ( 408865.4, 3770275.3,      98.4,      98.4,       0.0);         ( 408885.4, 3770275.3,      98.3,      98.3,       0.0);
     ( 408905.4, 3770275.3,      98.3,      98.3,       0.0);         ( 408925.4, 3770275.3,      98.2,      98.2,       0.0);
     ( 408945.4, 3770275.3,      97.8,      97.8,       0.0);         ( 408965.4, 3770275.3,      97.9,      97.9,       0.0);
     ( 408985.4, 3770275.3,      97.9,      97.9,       0.0);         ( 409005.4, 3770275.3,      97.8,      97.8,       0.0);
     ( 409025.4, 3770275.3,      97.6,      97.6,       0.0);         ( 409045.4, 3770275.3,      97.5,      97.5,       0.0);

```
     ( 409065.4, 3770275.3,      97.0,      97.0,       0.0);         ( 409085.4,
3770275.3,      96.9,      96.9,       0.0);
     ( 409105.4, 3770275.3,      97.0,      97.0,       0.0);         ( 409125.4,
3770275.3,      97.0,      97.0,       0.0);
     ( 409145.4, 3770275.3,      97.2,      97.2,       0.0);         ( 409165.4,
3770275.3,      97.4,      97.4,       0.0);
     ( 409185.4, 3770275.3,      97.8,      97.8,       0.0);         ( 409205.4,
3770275.3,      98.2,      98.2,       0.0);
     ( 409225.4, 3770275.3,      98.5,      98.5,       0.0);         ( 409245.4,
3770275.3,      98.7,      98.7,       0.0);
     ( 409265.4, 3770275.3,      98.9,      98.9,       0.0);         ( 409345.4,
3770275.3,      99.3,      99.3,       0.0);
     ( 409365.4, 3770275.3,      99.5,      99.5,       0.0);         ( 409385.4,
3770275.3,      99.5,      99.5,       0.0);
     ( 409405.4, 3770275.3,      99.3,      99.3,       0.0);         ( 408845.4,
3770295.3,      98.0,      98.0,       0.0);
     ( 408865.4, 3770295.3,      98.3,      98.3,       0.0);         ( 408885.4,
3770295.3,      98.3,      98.3,       0.0);
     ( 408905.4, 3770295.3,      98.2,      98.2,       0.0);         ( 408925.4,
3770295.3,      98.1,      98.1,       0.0);
     ( 408945.4, 3770295.3,      97.9,      97.9,       0.0);         ( 408965.4,
3770295.3,      98.0,      98.0,       0.0);
     ( 408985.4, 3770295.3,      97.9,      97.9,       0.0);         ( 409005.4,
3770295.3,      97.7,      97.7,       0.0);
     ( 409025.4, 3770295.3,      97.5,      97.5,       0.0);         ( 409045.4,
3770295.3,      97.4,      97.4,       0.0);
     ( 409065.4, 3770295.3,      97.2,      97.2,       0.0);         ( 409085.4,
3770295.3,      97.2,      97.2,       0.0);
     ( 409105.4, 3770295.3,      97.2,      97.2,       0.0);         ( 409125.4,
3770295.3,      97.1,      97.1,       0.0);
     ( 409145.4, 3770295.3,      97.1,      97.1,       0.0);         ( 409165.4,
3770295.3,      97.2,      97.2,       0.0);
     ( 409185.4, 3770295.3,      97.5,      97.5,       0.0);         ( 409205.4,
3770295.3,      97.9,      97.9,       0.0);
     ( 409225.4, 3770295.3,      98.6,      98.6,       0.0);         ( 409245.4,
3770295.3,      98.8,      98.8,       0.0);
     ( 409265.4, 3770295.3,      98.8,      98.8,       0.0);         ( 409285.4,
3770295.3,      98.8,      98.8,       0.0);
     ( 409305.4, 3770295.3,      99.1,      99.1,       0.0);         ( 409325.4,
3770295.3,      99.5,      99.5,       0.0);
     ( 409345.4, 3770295.3,      99.4,      99.4,       0.0);         ( 409365.4,
3770295.3,      99.4,      99.4,       0.0);
     ( 409385.4, 3770295.3,      99.5,      99.5,       0.0);         ( 409405.4,
3770295.3,      99.6,      99.6,       0.0);
     ( 409425.4, 3770295.3,      99.5,      99.5,       0.0);         ( 408865.4,
3770315.3,      98.3,      98.3,       0.0);
     ( 408885.4, 3770315.3,      98.2,      98.2,       0.0);         ( 408905.4,
3770315.3,      98.1,      98.1,       0.0);
     ( 408925.4, 3770315.3,      98.0,      98.0,       0.0);         ( 408945.4,
3770315.3,      97.9,      97.9,       0.0);
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

( 409005.4, 3770315.3,  97.6,  97.6,  0.0);  ( 409025.4, 3770315.3,  97.4,  97.4,  0.0);
( 409045.4, 3770315.3,  97.3,  97.3,  0.0);  ( 409065.4, 3770315.3,  97.5,  97.5,  0.0);
( 409085.4, 3770315.3,  97.5,  97.5,  0.0);  ( 409105.4, 3770315.3,  97.4,  97.4,  0.0);
( 409125.4, 3770315.3,  97.3,  97.3,  0.0);  ( 409145.4, 3770315.3,  97.1,  97.1,  0.0);
( 409165.4, 3770315.3,  97.2,  97.2,  0.0);  ( 409185.4, 3770315.3,  97.3,  97.3,  0.0);
( 409205.4, 3770315.3,  97.5,  97.5,  0.0);  ( 409225.4, 3770315.3,  98.3,  98.3,  0.0);
( 409245.4, 3770315.3,  98.6,  98.6,  0.0);  ( 409265.4, 3770315.3,  98.5,  98.5,  0.0);
( 409285.4, 3770315.3,  98.7,  98.7,  0.0);  ( 409305.4, 3770315.3,  99.3,  99.3,  0.0);
( 409325.4, 3770315.3,  99.5,  99.5,  0.0);  ( 409345.4, 3770315.3,  99.2,  99.2,  0.0);
( 409365.4, 3770315.3,  99.2,  99.2,  0.0);  ( 409385.4, 3770315.3,  99.5,  99.5,  0.0);
( 409405.4, 3770315.3, 100.0, 100.0,  0.0);  ( 409425.4, 3770315.3,  99.7,  99.7,  0.0);
( 409445.4, 3770315.3,  99.7,  99.7,  0.0);  ( 408885.4, 3770335.3,  98.1,  98.1,  0.0);
( 408905.4, 3770335.3,  98.1,  98.1,  0.0);  ( 408925.4, 3770335.3,  97.9,  97.9,  0.0);
( 408945.4, 3770335.3,  97.8,  97.8,  0.0);  ( 408965.4, 3770335.3,  97.8,  97.8,  0.0);
( 408985.4, 3770335.3,  97.6,  97.6,  0.0);  ( 409005.4, 3770335.3,  97.5,  97.5,  0.0);
( 409025.4, 3770335.3,  97.6,  97.6,  0.0);  ( 409045.4, 3770335.3,  97.9,  97.9,  0.0);
( 409065.4, 3770335.3,  98.1,  98.1,  0.0);  ( 409085.4, 3770335.3,  98.0,  98.0,  0.0);
( 409105.4, 3770335.3,  97.7,  97.7,  0.0);  ( 409125.4, 3770335.3,  97.4,  97.4,  0.0);

```
     ( 409145.4, 3770335.3,      97.4,      97.4,       0.0);         ( 409165.4,
3770335.3,      97.4,      97.4,       0.0);
     ( 409185.4, 3770335.3,      97.4,      97.4,       0.0);         ( 409205.4,
3770335.3,      97.5,      97.5,       0.0);
     ( 409225.4, 3770335.3,      97.7,      97.7,       0.0);         ( 409245.4,
3770335.3,      98.2,      98.2,       0.0);
     ( 409265.4, 3770335.3,      98.3,      98.3,       0.0);         ( 409285.4,
3770335.3,      98.6,      98.6,       0.0);
     ( 409305.4, 3770335.3,      99.2,      99.2,       0.0);         ( 409325.4,
3770335.3,      99.3,      99.3,       0.0);
     ( 409345.4, 3770335.3,      98.9,      98.9,       0.0);         ( 409365.4,
3770335.3,      99.0,      99.0,       0.0);
     ( 409385.4, 3770335.3,      99.6,      99.6,       0.0);         ( 409405.4,
3770335.3,     100.3,     100.3,       0.0);
     ( 409425.4, 3770335.3,     100.0,     100.0,       0.0);         ( 409445.4,
3770335.3,      99.8,      99.8,       0.0);
     ( 409465.4, 3770335.3,      99.8,      99.8,       0.0);         ( 408905.4,
3770355.3,      98.0,      98.0,       0.0);
     ( 408925.4, 3770355.3,      97.9,      97.9,       0.0);         ( 408945.4,
3770355.3,      97.8,      97.8,       0.0);
     ( 408965.4, 3770355.3,      97.8,      97.8,       0.0);         ( 408985.4,
3770355.3,      97.6,      97.6,       0.0);
     ( 409005.4, 3770355.3,      97.7,      97.7,       0.0);         ( 409025.4,
3770355.3,      97.9,      97.9,       0.0);
     ( 409045.4, 3770355.3,      98.0,      98.0,       0.0);         ( 409065.4,
3770355.3,      98.2,      98.2,       0.0);
     ( 409085.4, 3770355.3,      98.1,      98.1,       0.0);         ( 409105.4,
3770355.3,      97.9,      97.9,       0.0);
     ( 409125.4, 3770355.3,      97.7,      97.7,       0.0);         ( 409145.4,
3770355.3,      97.6,      97.6,       0.0);
     ( 409165.4, 3770355.3,      97.5,      97.5,       0.0);         ( 409185.4,
3770355.3,      97.5,      97.5,       0.0);
     ( 409205.4, 3770355.3,      97.7,      97.7,       0.0);         ( 409225.4,
3770355.3,      98.0,      98.0,       0.0);
     ( 409245.4, 3770355.3,      98.1,      98.1,       0.0);         ( 409265.4,
3770355.3,      98.4,      98.4,       0.0);
     ( 409285.4, 3770355.3,      98.7,      98.7,       0.0);         ( 409305.4,
3770355.3,      98.8,      98.8,       0.0);
     ( 409325.4, 3770355.3,      99.0,      99.0,       0.0);         ( 409345.4,
3770355.3,      99.0,      99.0,       0.0);
     ( 409365.4, 3770355.3,      99.4,      99.4,       0.0);         ( 409385.4,
3770355.3,      99.9,      99.9,       0.0);
     ( 409405.4, 3770355.3,     100.4,     100.4,       0.0);         ( 409425.4,
3770355.3,     100.3,     100.3,       0.0);
     ( 409445.4, 3770355.3,     100.1,     100.1,       0.0);         ( 409465.4,
3770355.3,     100.0,     100.0,       0.0);
     ( 409485.4, 3770355.3,     100.0,     100.0,       0.0);         ( 408905.4,
3770375.3,      97.9,      97.9,       0.0);
     ( 408925.4, 3770375.3,      98.0,      98.0,       0.0);         ( 408945.4,
3770375.3,      97.9,      97.9,       0.0);
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( 408965.4, 3770375.3, 97.8, 97.8, 0.0); ( 408985.4, 3770375.3, 97.8, 97.8, 0.0);
( 409005.4, 3770375.3, 97.9, 97.9, 0.0); ( 409025.4, 3770375.3, 98.1, 98.1, 0.0);



*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

( 409045.4, 3770375.3, 98.0, 98.0, 0.0); ( 409065.4, 3770375.3, 98.1, 98.1, 0.0);
( 409085.4, 3770375.3, 98.2, 98.2, 0.0); ( 409105.4, 3770375.3, 98.1, 98.1, 0.0);
( 409125.4, 3770375.3, 97.9, 97.9, 0.0); ( 409145.4, 3770375.3, 97.7, 97.7, 0.0);
( 409165.4, 3770375.3, 97.5, 97.5, 0.0); ( 409185.4, 3770375.3, 97.6, 97.6, 0.0);
( 409205.4, 3770375.3, 97.9, 97.9, 0.0); ( 409225.4, 3770375.3, 98.2, 98.2, 0.0);
( 409245.4, 3770375.3, 98.1, 98.1, 0.0); ( 409265.4, 3770375.3, 98.5, 98.5, 0.0);
( 409285.4, 3770375.3, 98.7, 98.7, 0.0); ( 409305.4, 3770375.3, 98.7, 98.7, 0.0);
( 409325.4, 3770375.3, 98.9, 98.9, 0.0); ( 409345.4, 3770375.3, 99.1, 99.1, 0.0);
( 409365.4, 3770375.3, 99.6, 99.6, 0.0); ( 409385.4, 3770375.3, 100.0, 100.0, 0.0);
( 409405.4, 3770375.3, 100.3, 100.3, 0.0); ( 409425.4, 3770375.3, 100.4, 100.4, 0.0);
( 409445.4, 3770375.3, 100.3, 100.3, 0.0); ( 409465.4, 3770375.3, 100.1, 100.1, 0.0);
( 409485.4, 3770375.3, 99.9, 99.9, 0.0); ( 408925.4, 3770395.3, 97.9, 97.9, 0.0);
( 408945.4, 3770395.3, 98.1, 98.1, 0.0); ( 408965.4, 3770395.3, 98.2, 98.2, 0.0);
( 408985.4, 3770395.3, 98.1, 98.1, 0.0); ( 409005.4, 3770395.3, 98.1, 98.1, 0.0);
( 409025.4, 3770395.3, 98.0, 98.0, 0.0); ( 409045.4, 3770395.3, 98.0, 98.0, 0.0);
( 409065.4, 3770395.3, 98.0, 98.0, 0.0); ( 409085.4, 3770395.3, 98.0, 98.0, 0.0);
( 409105.4, 3770395.3, 97.9, 97.9, 0.0); ( 409125.4, 3770395.3, 97.8, 97.8, 0.0);

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     ( 409165.4, 3770395.3,      97.7,      97.7,       0.0);         ( 409185.4,
3770395.3,      97.8,      97.8,       0.0);
     ( 409205.4, 3770395.3,      98.0,      98.0,       0.0);         ( 409225.4,
3770395.3,      98.1,      98.1,       0.0);
     ( 409245.4, 3770395.3,      98.2,      98.2,       0.0);         ( 409265.4,
3770395.3,      98.3,      98.3,       0.0);
     ( 409285.4, 3770395.3,      98.6,      98.6,       0.0);         ( 409305.4,
3770395.3,      99.1,      99.1,       0.0);
     ( 409325.4, 3770395.3,      99.2,      99.2,       0.0);         ( 409345.4,
3770395.3,      99.1,      99.1,       0.0);
     ( 409365.4, 3770395.3,      99.4,      99.4,       0.0);         ( 409385.4,
3770395.3,      99.8,      99.8,       0.0);
     ( 409405.4, 3770395.3,      99.9,      99.9,       0.0);         ( 409425.4,
3770395.3,     100.1,     100.1,       0.0);
     ( 409445.4, 3770395.3,     100.2,     100.2,       0.0);         ( 409465.4,
3770395.3,     100.1,     100.1,       0.0);
     ( 408945.4, 3770415.3,      98.1,      98.1,       0.0);         ( 408965.4,
3770415.3,      98.2,      98.2,       0.0);
     ( 408985.4, 3770415.3,      98.3,      98.3,       0.0);         ( 409005.4,
3770415.3,      98.3,      98.3,       0.0);
     ( 409025.4, 3770415.3,      98.2,      98.2,       0.0);         ( 409045.4,
3770415.3,      98.2,      98.2,       0.0);
     ( 409065.4, 3770415.3,      98.0,      98.0,       0.0);         ( 409085.4,
3770415.3,      97.9,      97.9,       0.0);
     ( 409105.4, 3770415.3,      97.8,      97.8,       0.0);         ( 409185.4,
3770415.3,      97.9,      97.9,       0.0);
     ( 409205.4, 3770415.3,      98.0,      98.0,       0.0);         ( 409225.4,
3770415.3,      98.1,      98.1,       0.0);
     ( 409245.4, 3770415.3,      98.2,      98.2,       0.0);         ( 409265.4,
3770415.3,      98.3,      98.3,       0.0);
     ( 409285.4, 3770415.3,      98.6,      98.6,       0.0);         ( 409305.4,
3770415.3,      98.9,      98.9,       0.0);
     ( 409325.4, 3770415.3,      99.5,      99.5,       0.0);         ( 409345.4,
3770415.3,      99.5,      99.5,       0.0);
     ( 409365.4, 3770415.3,      99.5,      99.5,       0.0);         ( 409385.4,
3770415.3,      99.5,      99.5,       0.0);
     ( 409405.4, 3770415.3,      99.6,      99.6,       0.0);         ( 409425.4,
3770415.3,      99.9,      99.9,       0.0);
     ( 408965.4, 3770435.3,      98.1,      98.1,       0.0);         ( 408985.4,
3770435.3,      98.4,      98.4,       0.0);
     ( 409005.4, 3770435.3,      98.5,      98.5,       0.0);         ( 409025.4,
3770435.3,      98.5,      98.5,       0.0);
     ( 409045.4, 3770435.3,      98.3,      98.3,       0.0);         ( 409065.4,
3770435.3,      98.1,      98.1,       0.0);
     ( 409205.4, 3770435.3,      98.1,      98.1,       0.0);         ( 409225.4,
3770435.3,      98.2,      98.2,       0.0);
     ( 409245.4, 3770435.3,      98.2,      98.2,       0.0);         ( 409265.4,
3770435.3,      98.4,      98.4,       0.0);
     ( 409285.4, 3770435.3,      98.7,      98.7,       0.0);         ( 409305.4,
3770435.3,      98.7,      98.7,       0.0);
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

( 409005.4, 3770455.3, 98.5, 98.5, 0.0); ( 409025.4, 3770455.3, 98.5, 98.5, 0.0);
( 409045.4, 3770455.3, 98.3, 98.3, 0.0); ( 409225.4, 3770455.3, 98.4, 98.4, 0.0);
( 409245.4, 3770455.3, 98.4, 98.4, 0.0); ( 409265.4, 3770455.3, 98.5, 98.5, 0.0);
( 409285.4, 3770455.3, 98.8, 98.8, 0.0); ( 409305.4, 3770455.3, 99.3, 99.3, 0.0);
( 409325.4, 3770455.3, 99.7, 99.7, 0.0); ( 409345.4, 3770455.3, 99.8, 99.8, 0.0);
( 409365.4, 3770455.3, 99.7, 99.7, 0.0); ( 409385.4, 3770455.3, 99.6, 99.6, 0.0);
( 408985.4, 3770475.3, 98.3, 98.3, 0.0); ( 409005.4, 3770475.3, 98.4, 98.4, 0.0);
( 409025.4, 3770475.3, 98.4, 98.4, 0.0); ( 409245.4, 3770475.3, 98.8, 98.8, 0.0);
( 409265.4, 3770475.3, 98.8, 98.8, 0.0); ( 409285.4, 3770475.3, 98.9, 98.9, 0.0);
( 409305.4, 3770475.3, 99.3, 99.3, 0.0); ( 409325.4, 3770475.3, 99.6, 99.6, 0.0);
( 409345.4, 3770475.3, 99.6, 99.6, 0.0); ( 409365.4, 3770475.3, 99.6, 99.6, 0.0);
( 409005.4, 3770495.3, 98.3, 98.3, 0.0); ( 409265.4, 3770495.3, 99.2, 99.2, 0.0);
( 409285.4, 3770495.3, 99.1, 99.1, 0.0); ( 409305.4, 3770495.3, 99.2, 99.2, 0.0);
( 409325.4, 3770495.3, 99.3, 99.3, 0.0); ( 409285.4, 3770515.3, 99.2, 99.2, 0.0);
( 409305.4, 3770515.3, 98.9, 98.9, 0.0); ( 409620.3, 3769917.5, 99.6, 99.6, 0.0);
( 409594.5, 3769937.9, 99.5, 99.5, 0.0); ( 409641.7, 3769936.4, 99.5, 99.5, 0.0);

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     ( 409617.3, 3769956.3,      99.8,      99.8,       0.0);         ( 409558.1,
3769968.2,      99.3,      99.3,       0.0);
     ( 409518.3, 3769997.1,      99.3,      99.3,       0.0);         ( 409513.4,
3770011.5,      99.4,      99.4,       0.0);
     ( 409533.8, 3770024.4,      99.5,      99.5,       0.0);         ( 409551.7,
3770011.0,      99.6,      99.6,       0.0);
     ( 409573.1, 3769996.1,      99.6,      99.6,       0.0);         ( 409557.6,
3770022.9,      99.6,      99.6,       0.0);
     ( 409573.1, 3770033.4,      99.8,      99.8,       0.0);         ( 409598.4,
3770016.5,      99.9,      99.9,       0.0);
     ( 409609.9, 3770032.4,     100.0,     100.0,       0.0);         ( 409595.9,
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     ( 409585.0, 3770047.3,      99.9,      99.9,       0.0);         ( 409619.3,
3770048.8,      99.9,      99.9,       0.0);
     ( 409656.6, 3770027.4,     100.1,     100.1,       0.0);         ( 409680.5,
3770017.5,     100.1,     100.1,       0.0);
     ( 409693.9, 3770014.0,     100.1,     100.1,       0.0);         ( 409708.9,
3770011.5,     100.0,     100.0,       0.0);
     ( 409607.9, 3770068.2,     101.0,     101.0,       0.0);         ( 409589.5,
3770065.7,     100.5,     100.5,       0.0);
     ( 409579.5, 3770065.7,     100.4,     100.4,       0.0);         ( 409552.2,
3770058.3,      99.9,      99.9,       0.0);
     ( 408953.2, 3769648.0,      97.1,      97.1,       0.0);         ( 408703.2,
3769848.5,      96.9,      96.9,       0.0);
     ( 408758.2, 3769919.1,      97.1,      97.1,       0.0);         ( 408757.2,
3769928.2,      97.0,      97.0,       0.0);
     ( 408629.0, 3769906.2,      96.7,      96.7,       0.0);         ( 408597.0,
3769864.1,      96.7,      96.7,       0.0);
     ( 408548.4, 3769905.3,      96.6,      96.6,       0.0);         ( 408501.7,
3769896.2,      96.5,      96.5,       0.0);
     ( 408462.3, 3769854.9,      96.4,      96.4,       0.0);         ( 408378.1,
3769883.3,      95.0,      95.0,       0.0);
     ( 408352.4, 3769866.9,      95.8,      99.3,       0.0);         ( 408352.4,
3769829.3,      97.7,      97.7,       0.0);
     ( 408378.3, 3769790.7,      96.0,      96.0,       0.0);         ( 408664.6,
3769570.0,      95.3,      95.3,       0.0);
     ( 408755.6, 3769593.9,      94.7,      94.7,       0.0);         ( 408812.3,
3769570.0,      95.5,      95.5,       0.0);
     ( 408871.9, 3769584.9,      96.0,      96.0,       0.0);         ( 408658.5,
3770080.2,      96.1,      96.1,       0.0);
     ( 409005.1, 3770499.7,      98.3,      98.3,       0.0);         ( 409148.5,
3770383.1,      97.6,      97.6,       0.0);
     ( 409289.4, 3770534.5,      98.9,      98.9,       0.0);         ( 409506.5,
3770366.9,     100.2,     100.2,       0.0);
     ( 409379.3, 3770230.0,      98.9,      98.9,       0.0);         ( 409302.4,
3770294.8,      99.0,      99.0,       0.0);
     ( 409203.6, 3770183.8,      98.0,      98.0,       0.0);         ( 409149.3,
3770186.3,      97.7,      97.7,       0.0);
     ( 409125.0, 3770158.7,      97.6,      97.6,       0.0);         ( 409100.7,
3770174.9,      97.5,      97.5,       0.0);
```

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***

(1=YES; 0=NO)

1 1 1 

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\AzusaADJU\AZUS_V9_ADJU\AZUS_v9.SFC
Met Version: 16216
Profile file: ..\AzusaADJU\AZUS_V9_ADJU\AZUS_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3179 Name: UNKNOWN Year: 2012

Upper air station no.: 3190 Name: UNKNOWN Year: 2012

First 24 hours of scalar data

| YR | MO | DY | JDY | HR | H0 | U* | W* | DT/DZ | ZICNV | ZIMCH | M-O LEN | Z0 | BOWEN | ALBEDO | REF WS | WD | HT | REF TA | HT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 01 | 01 | 1 | 01 | -21.3 | 0.224 | -9.000 | -9.000 | -999. | 255. | 55.3 | 0.36 | 1.68 | 1.00 | 1.80 | 20. | 9.1 | 293.1 | 5.5 |
| 12 | 01 | 01 | 1 | 02 | -32.6 | 0.342 | -9.000 | -9.000 | -999. | 481. | 128.9 | 0.36 | 1.68 | 1.00 | 2.70 | 99. | 9.1 | 293.1 | 5.5 |
| 12 | 01 | 01 | 1 | 03 | -26.4 | 0.277 | -9.000 | -9.000 | -999. | 351. | 84.1 | 0.36 | 1.68 | 1.00 | 2.20 | 14. | 9.1 | 292.0 | 5.5 |
| 12 | 01 | 01 | 1 | 04 | -32.6 | 0.342 | -9.000 | -9.000 | -999. | 480. | 128.9 | 0.36 | 1.68 | 1.00 | 2.70 | 10. | 9.1 | 292.5 | 5.5 |
| 12 | 01 | 01 | 1 | 05 | -26.4 | 0.277 | -9.000 | -9.000 | -999. | 351. | 84.1 | 0.36 | 1.68 | 1.00 | 2.20 | 12. | 9.1 | 292.5 | 5.5 |
| 12 | 01 | 01 | 1 | 06 | -21.6 | 0.224 | -9.000 | -9.000 | -999. | 256. | 55.2 | 0.36 | 1.68 | 1.00 | 1.80 | 118. | 9.1 | 289.2 | 5.5 |
| 12 | 01 | 01 | 1 | 07 | -26.6 | 0.277 | -9.000 | -9.000 | -999. | 349. | 84.1 | 0.36 | 1.68 | 1.00 | 2.20 | 64. | 9.1 | 290.9 | 5.5 |
| 12 | 01 | 01 | 1 | 08 | -1.3 | 0.062 | -9.000 | -9.000 | -999. | 124. | 16.5 | 0.36 | 1.68 | 0.55 | 0.40 | 36. | 9.1 | 290.9 | 5.5 |
| 12 | 01 | 01 | 1 | 09 | 38.1 | 0.160 | 0.348 | 0.008 | 39. | 153. | -9.5 | 0.36 | 1.68 | 0.32 | 0.90 | 124. | 9.1 | 293.8 | 5.5 |
| 12 | 01 | 01 | 1 | 10 | 99.5 | 0.179 | 0.693 | 0.007 | 119. | 181. | -5.1 | 0.36 | 1.68 | 0.25 | 0.90 | 21. | 9.1 | 298.1 | 5.5 |
| 12 | 01 | 01 | 1 | 11 | 142.6 | 0.494 | 1.086 | 0.005 | 321. | 832. | -75.2 | 0.36 | 1.68 | 0.22 | 3.60 | 141. | 9.1 | 299.9 | 5.5 |
| 12 | 01 | 01 | 1 | 12 | 162.8 | 0.442 | 1.385 | 0.005 | 582. | 709. | -47.3 | 0.36 | 1.68 | 0.21 | 3.10 | 122. | 9.1 | 299.9 | 5.5 |
| 12 | 01 | 01 | 1 | 13 | 164.4 | 0.298 | 1.634 | 0.005 | 946. | 405. | -14.3 | 0.36 | 1.68 | 0.21 | 1.80 | 114. | 9.1 | 300.9 | 5.5 |

```
 12 01 01   1 14  142.7  0.293  1.718  0.005 1265.  382.    -15.8  0.36   1.68
0.22    1.80   93.    9.1  302.5    5.5
 12 01 01   1 15   96.7  0.283  1.575  0.005 1438.  361.    -20.7  0.36   1.68
0.26    1.80  110.    9.1  303.8    5.5
 12 01 01   1 16   41.5  0.207  1.201  0.005 1485.  228.    -18.9  0.36   1.68
0.35    1.30  113.    9.1  304.2    5.5
 12 01 01   1 17  -37.8  0.464 -9.000 -9.000 -999.  757.    236.3  0.36   1.68
0.62    3.60  251.    9.1  300.9    5.5
 12 01 01   1 18  -26.1  0.277 -9.000 -9.000 -999.  379.     84.2  0.36   1.68
1.00    2.20    8.    9.1  296.4    5.5
 12 01 01   1 19 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.36   1.68
1.00  999.00  999.   -9.0  295.9    5.5
 12 01 01   1 20   -5.7  0.107 -9.000 -9.000 -999.   84.     19.3  0.36   1.68
1.00    0.90   35.    9.1  295.4    5.5
 12 01 01   1 21  -21.3  0.224 -9.000 -9.000 -999.  255.     55.3  0.36   1.68
1.00    1.80  213.    9.1  293.8    5.5
 12 01 01   1 22  -21.3  0.224 -9.000 -9.000 -999.  255.     55.3  0.36   1.68
1.00    1.80   52.    9.1  293.8    5.5
 12 01 01   1 23  -26.3  0.277 -9.000 -9.000 -999.  349.     84.2  0.36   1.68
1.00    2.20   58.    9.1  293.8    5.5
 12 01 01   1 24  -21.4  0.224 -9.000 -9.000 -999.  256.     55.3  0.36   1.68
1.00    1.80   83.    9.1  292.5    5.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    5.5 0 -999.  -99.00   293.2   99.0  -99.00  -99.00
 12 01 01 01    9.1 1   20.    1.80  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE1   ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
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***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 408660.46 | 3769574.73 | 3.31535 | 408680.46 | 3769574.73 | 3.49548 |
| 408820.46 | 3769574.73 | 5.23542 | 408640.46 | 3769594.73 | 3.22954 |
| 408660.46 | 3769594.73 | 3.40670 | 408680.46 | 3769594.73 | 3.59779 |
| 408700.46 | 3769594.73 | 3.80507 | 408720.46 | 3769594.73 | 4.02984 |
| 408740.46 | 3769594.73 | 4.27161 | 408760.46 | 3769594.73 | 4.53226 |
| 408780.46 | 3769594.73 | 4.82505 | 408800.46 | 3769594.73 | 5.14009 |
| 408820.46 | 3769594.73 | 5.48271 | 408840.46 | 3769594.73 | 5.85588 |
| 408860.46 | 3769594.73 | 6.26212 | 408880.46 | 3769594.73 | 6.70550 |
| 408620.46 | 3769614.73 | 3.13624 | 408640.46 | 3769614.73 | 3.30902 |
| 408660.46 | 3769614.73 | 3.49589 | 408680.46 | 3769614.73 | 3.69835 |
| 408700.46 | 3769614.73 | 3.91901 | 408720.46 | 3769614.73 | 4.15920 |
| 408740.46 | 3769614.73 | 4.42066 | 408760.46 | 3769614.73 | 4.70540 |
| 408780.46 | 3769614.73 | 5.01650 | 408800.46 | 3769614.73 | 5.35984 |
| 408820.46 | 3769614.73 | 5.73750 | 408840.46 | 3769614.73 | 6.15274 |
| 408860.46 | 3769614.73 | 6.60902 | 408880.46 | 3769614.73 | 7.10807 |
| 408900.46 | 3769614.73 | 7.65578 | 408600.46 | 3769634.73 | 3.03782 |
| 408620.46 | 3769634.73 | 3.20443 | 408640.46 | 3769634.73 | 3.38529 |
| 408660.46 | 3769634.73 | 3.58203 | 408680.46 | 3769634.73 | 3.79624 |
| 408700.46 | 3769634.73 | 4.03046 | 408720.46 | 3769634.73 | 4.28619 |
| 408740.46 | 3769634.73 | 4.56617 | 408760.46 | 3769634.73 | 4.87297 |
| 408780.46 | 3769634.73 | 5.20667 | 408800.46 | | |

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3769634.73        5.58187
         408820.46    3769634.73        5.99729                        408840.46
3769634.73        6.45791
         408860.46    3769634.73        6.97036                        408880.46
3769634.73        7.52873
         408900.46    3769634.73        8.15236                        408920.46
3769634.73        8.84345
         408560.46    3769654.73        2.78791                        408580.46
3769654.73        2.93549
         408600.46    3769654.73        3.09538                        408620.46
3769654.73        3.26909
         408640.46    3769654.73        3.45831                        408660.46
3769654.73        3.66482
         408680.46    3769654.73        3.89024                        408700.46
3769654.73        4.13641
         408720.46    3769654.73        4.40734                        408740.46
3769654.73        4.70610
         408760.46    3769654.73        5.03569                        408780.46
3769654.73        5.39794
         408800.46    3769654.73        5.80458                        408820.46
3769654.73        6.25821
         408840.46    3769654.73        6.76410                        408860.46
3769654.73        7.32824
         408880.46    3769654.73        7.95878                        408900.46
3769654.73        8.66757
         408920.46    3769654.73        9.46179                        408940.46
3769654.73       10.34808
         408540.46    3769674.73        2.69042                        408560.46
3769674.73        2.83139
         408580.46    3769674.73        2.98392                        408600.46
3769674.73        3.14948
         408620.46    3769674.73        3.33002                        408640.46
3769674.73        3.52721
         408660.46    3769674.73        3.74290                        408680.46
3769674.73        3.97891
         408700.46    3769674.73        4.23772                        408720.46
3769674.73        4.52430
         408740.46    3769674.73        4.84173                        408760.46
3769674.73        5.19329
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***       14:11:35

                                PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE1   ***
                                INCLUDING SOURCE(S):     L0000001    , L0000002
```

```
, L0000003    , L0000004    , L0000005    ,
                L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                 **

       X-COORD (M)   Y-COORD (M)        CONC                         X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         408780.46    3769674.73        5.58316                        408800.46
3769674.73        6.02116
         408820.46    3769674.73        6.51324                        408840.46
3769674.73        7.06674
         408860.46    3769674.73        7.68976                        408880.46
3769674.73        8.39613
         408900.46    3769674.73        9.19455                        408520.46
3769694.73        2.59261
         408540.46    3769694.73        2.72635                        408560.46
3769694.73        2.87116
         408580.46    3769694.73        3.02848                        408600.46
3769694.73        3.19973
         408620.46    3769694.73        3.38669                        408640.46
3769694.73        3.59118
         408660.46    3769694.73        3.81515                        408680.46
3769694.73        4.06063
         408700.46    3769694.73        4.33341                        408720.46
3769694.73        4.63608
         408740.46    3769694.73        4.97153                        408760.46
3769694.73        5.34339
         408780.46    3769694.73        5.75948                        408800.46
3769694.73        6.22773
         408820.46    3769694.73        6.75748                        408840.46
3769694.73        7.36003
         408860.46    3769694.73        8.04929                        408880.46
3769694.73        8.83373
         408480.46    3769714.73        2.37762                        408500.46
3769714.73        2.49492
         408520.46    3769714.73        2.62156                        408540.46
3769714.73        2.75863
         408560.46    3769714.73        2.90733                        408580.46
3769714.73        3.06907
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         408600.46    3769714.73        3.24549                    408620.46
3769714.73        3.43818
         408640.46    3769714.73        3.64921                    408660.46
3769714.73        3.88139
         408680.46    3769714.73        4.13863                    408700.46
3769714.73        4.42342
         408720.46    3769714.73        4.73997                    408740.46
3769714.73        5.09201
         408760.46    3769714.73        5.48424                    408780.46
3769714.73        5.92515
         408800.46    3769714.73        6.42324                    408820.46
3769714.73        6.99119
         408840.46    3769714.73        7.64062                    408860.46
3769714.73        8.38065
         408460.46    3769734.73        2.28753                    408480.46
3769734.73        2.39854
         408500.46    3769734.73        2.51797                    408520.46
3769734.73        2.64705
         408540.46    3769734.73        2.78713                    408560.46
3769734.73        2.93935
         408580.46    3769734.73        3.10500                    408600.46
3769734.73        3.28588
         408620.46    3769734.73        3.48392                    408640.46
3769734.73        3.70120
         408660.46    3769734.73        3.94105                    408680.46
3769734.73        4.20876
         408700.46    3769734.73        4.50414                    408720.46
3769734.73        4.83340
         408740.46    3769734.73        5.20102                    408760.46
3769734.73        5.61233
         408780.46    3769734.73        6.07523                    408800.46
3769734.73        6.60316
         408820.46    3769734.73        7.20687                    408840.46
3769734.73        7.89935
         408440.46    3769754.73        2.19939                    408460.46
3769754.73        2.30363
         408480.46    3769754.73        2.41613                    408500.46
3769754.73        2.53748
         408520.46    3769754.73        2.66885                    408540.46
3769754.73        2.81154
         408560.46    3769754.73        2.96672                    408580.46
3769754.73        3.13566
         408600.46    3769754.73        3.32004                    408620.46
3769754.73        3.52336
         408640.46    3769754.73        3.74693                    408660.46
3769754.73        3.99382
         408680.46    3769754.73        4.26943                    408700.46
3769754.73        4.57372
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
```

*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                            *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE1   ***
                            INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                 ** CONC OF PM_10    IN MICROGRAMS/M**3
                **

      X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - -

```
3769774.73        5.81285
         408780.46    3769774.73        6.31728                    408380.46
3769794.73        1.94367
         408400.46    3769794.73        2.02945                    408420.46
3769794.73        2.12160
         408440.46    3769794.73        2.22062                    408460.46
3769794.73        2.32711
         408480.46    3769794.73        2.44196                    408500.46
3769794.73        2.56641
         408520.46    3769794.73        2.70093                    408540.46
3769794.73        2.84707
         408560.46    3769794.73        3.00636                    408580.46
3769794.73        3.18047
         408600.46    3769794.73        3.37284                    408620.46
3769794.73        3.58337
         408640.46    3769794.73        3.81545                    408660.46
3769794.73        4.07250
         408680.46    3769794.73        4.35802                    408700.46
3769794.73        4.67773
         408720.46    3769794.73        5.03569                    408740.46
3769794.73        5.43625
         408760.46    3769794.73        5.88370                    408380.46
3769814.73        1.94860
         408400.46    3769814.73        2.03532                    408420.46
3769814.73        2.12747
         408440.46    3769814.73        2.22710                    408460.46
3769814.73        2.33443
         408480.46    3769814.73        2.44999                    408500.46
3769814.73        2.57527
         408520.46    3769814.73        2.71055                    408540.46
3769814.73        2.85809
         408560.46    3769814.73        3.01931                    408580.46
3769814.73        3.19543
         408600.46    3769814.73        3.38864                    408620.46
3769814.73        3.60137
         408640.46    3769814.73        3.83634                    408660.46
3769814.73        4.09678
         408680.46    3769814.73        4.38641                    408700.46
3769814.73        4.70974
         408720.46    3769814.73        5.07273                    408740.46
3769814.73        5.48185
         408360.46    3769834.73        1.87159                    408380.46
3769834.73        1.95167
         408400.46    3769834.73        2.03840                    408420.46
3769834.73        2.13098
         408440.46    3769834.73        2.23079                    408460.46
3769834.73        2.33839
         408480.46    3769834.73        2.45451                    408500.46
3769834.73        2.58009
         408520.46    3769834.73        2.71625                    408540.46
```

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE1   ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         408680.46    3769834.73        4.40194                      408700.46
3769834.73        4.72768
         408360.46    3769854.73        1.87192                      408380.46
3769854.73        1.95272
         408400.46    3769854.73        2.03878                      408420.46
3769854.73        2.13196
         408440.46    3769854.73        2.23162                      408460.46
3769854.73        2.33907
         408480.46    3769854.73        2.45548                      408500.46
3769854.73        2.58099
         408520.46    3769854.73        2.71777                      408540.46
3769854.73        2.86638
         408560.46    3769854.73        3.02827                      408580.46
3769854.73        3.20528

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         408600.46    3769854.73        3.39972                    408620.46
3769854.73        3.61360
         408640.46    3769854.73        3.84996                    408660.46
3769854.73        4.11237
         408680.46    3769854.73        4.40472                    408700.46
3769854.73        4.73101
         408380.46    3769874.73        1.94978                    408400.46
3769874.73        2.03580
         408500.46    3769874.73        2.57854                    408520.46
3769874.73        2.71487
         408540.46    3769874.73        2.86297                    408560.46
3769874.73        3.02427
         408580.46    3769874.73        3.20056                    408620.46
3769874.73        3.60756
         408640.46    3769874.73        3.84296                    408660.46
3769874.73        4.10410
         408680.46    3769874.73        4.39467                    408700.46
3769874.73        4.71968
         408720.46    3769874.73        5.08477                    408500.46
3769894.73        2.57166
         408520.46    3769894.73        2.70725                    408540.46
3769894.73        2.85442
         408560.46    3769894.73        3.01462                    408620.46
3769894.73        3.59346
         408640.46    3769894.73        3.82669                    408660.46
3769894.73        4.08540
         408680.46    3769894.73        4.37275                    408700.46
3769894.73        4.69428
         408720.46    3769894.73        5.05486                    408680.46
3769914.73        4.33927
         408700.46    3769914.73        4.65509                    408720.46
3769914.73        5.00860
         408740.46    3769914.73        5.40646                    408885.41
3770075.32        7.34636
         408905.41    3770075.32        7.91468                    408925.41
3770075.32        8.53506
         408945.41    3770075.32        9.21085                    408965.41
3770075.32        9.94237
         408685.41    3770095.32        3.68258                    408705.41
3770095.32        3.89882
         408725.41    3770095.32        4.13273                    408745.41
3770095.32        4.38689
         408765.41    3770095.32        4.66353                    408785.41
3770095.32        4.96431
         408805.41    3770095.32        5.29165                    408865.41
3770095.32        6.46238
         408885.41    3770095.32        6.92322                    408905.41
3770095.32        7.41944
         408925.41    3770095.32        7.95137                    408945.41
3770095.32        8.52068
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         408965.41    3770095.32        9.13738                      408985.41
3770095.32        9.79262
         409005.41    3770095.32       10.47467                      409025.41
3770095.32       11.17291
         409045.41    3770095.32       11.87118                      408705.41
3770115.32        3.77866
         408725.41    3770115.32        3.99705                      408745.41
3770115.32        4.23311
         408765.41    3770115.32        4.48845                      408785.41
3770115.32        4.76473
         408805.41    3770115.32        5.06329                      408825.41
3770115.32        5.38624
         408845.41    3770115.32        5.73612                      408865.41
3770115.32        6.11467
         408885.41    3770115.32        6.52000                      408905.41
3770115.32        6.95376
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                   PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE1   ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         408925.41    3770115.32        7.41399                      408945.41
3770115.32        7.89934
         408965.41    3770115.32        8.41837                      408985.41
3770115.32        8.95826
         409005.41    3770115.32        9.51401                      409025.41
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3770115.32       10.07631
         409045.41    3770115.32       10.63229                    408705.41
3770135.32        3.65794
         408725.41    3770135.32        3.86118                    408745.41
3770135.32        4.07984
         408765.41    3770135.32        4.31489                    408785.41
3770135.32        4.56772
         408805.41    3770135.32        4.83940                    408825.41
3770135.32        5.13156
         408845.41    3770135.32        5.44535                    408865.41
3770135.32        5.78103
         408885.41    3770135.32        6.13864                    408905.41
3770135.32        6.51771
         408925.41    3770135.32        6.91650                    408945.41
3770135.32        7.33268
         408965.41    3770135.32        7.76869                    408985.41
3770135.32        8.21737
         409005.41    3770135.32        8.67454                    409025.41
3770135.32        9.13148
         408725.41    3770155.32        3.72617                    408745.41
3770155.32        3.92817
         408765.41    3770155.32        4.14416                    408785.41
3770155.32        4.37436
         408805.41    3770155.32        4.62133                    408825.41
3770155.32        4.88565
         408845.41    3770155.32        5.16653                    408865.41
3770155.32        5.46436
         408885.41    3770155.32        5.77972                    408905.41
3770155.32        6.11141
         408925.41    3770155.32        6.45748                    408945.41
3770155.32        6.81644
         408965.41    3770155.32        7.18265                    408985.41
3770155.32        7.55918
         409005.41    3770155.32        7.93919                    409025.41
3770155.32        8.31433
         409045.41    3770155.32        8.67405                    408745.41
3770175.32        3.77880
         408765.41    3770175.32        3.97711                    408785.41
3770175.32        4.18795
         408805.41    3770175.32        4.41222                    408825.41
3770175.32        4.64948
         408845.41    3770175.32        4.90022                    408865.41
3770175.32        5.16507
         408885.41    3770175.32        5.44331                    408905.41
3770175.32        5.73337
         408925.41    3770175.32        6.03366                    408945.41
3770175.32        6.34272
         408965.41    3770175.32        6.65499                    408985.41
3770175.32        6.97275
         409005.41    3770175.32        7.28932                    409025.41
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| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 409145.41 | 3770195.32 | 8.03901 | 409165.41 | 3770195.32 | 8.08678 |
| 409185.41 | 3770195.32 | 8.09007 | 409205.41 | 3770195.32 | 8.04988 |
| 408785.41 | 3770215.32 | 3.83455 | 408805.41 | 3770215.32 | 4.01750 |
| 408825.41 | 3770215.32 | 4.20979 | 408845.41 | 3770215.32 | 4.41117 |
| 408865.41 | 3770215.32 | 4.62031 | 408885.41 | 3770215.32 | 4.83672 |
| 408905.41 | 3770215.32 | 5.05970 | 408925.41 | 3770215.32 | 5.28657 |
| 408945.41 | 3770215.32 | 5.51723 | 408965.41 | 3770215.32 | 5.74930 |
| 408985.41 | 3770215.32 | 5.97970 | 409005.41 | 3770215.32 | 6.20318 |
| 409025.41 | 3770215.32 | 6.41678 | 409045.41 | 3770215.32 | 6.61945 |
| 409065.41 | 3770215.32 | 6.80609 | 409085.41 | 3770215.32 | 6.96991 |
| 409105.41 | 3770215.32 | 7.10900 | 409125.41 | 3770215.32 | 7.21914 |
| 409145.41 | 3770215.32 | 7.29179 | 409165.41 | 3770215.32 | 7.33315 |
| 409185.41 | 3770215.32 | 7.33591 | 409205.41 | 3770215.32 | 7.30216 |
| 409225.41 | 3770215.32 | 7.23541 | 408805.41 | 3770235.32 | 3.83398 |
| 408825.41 | 3770235.32 | 4.00748 | 408845.41 | 3770235.32 | 4.18719 |
| 408865.41 | 3770235.32 | 4.37297 | 408885.41 | 3770235.32 | 4.56483 |
| 408905.41 | 3770235.32 | 4.76061 | 408925.41 | 3770235.32 | 4.95914 |
| 408945.41 | 3770235.32 | 5.15926 | 408965.41 | 3770235.32 | 5.35906 |
| 408985.41 | 3770235.32 | 5.55599 | 409005.41 | 3770235.32 | 5.74733 |
| 409025.41 | 3770235.32 | 5.92931 | 409045.41 | 3770235.32 | 6.09699 |
| 409065.41 | 3770235.32 | 6.25125 | 409085.41 | 3770235.32 | 6.38759 |
| 409105.41 | 3770235.32 | 6.50236 | 409125.41 | 3770235.32 | 6.59206 |
| 409145.41 | 3770235.32 | 6.65372 | 409165.41 | 3770235.32 | 6.68773 |

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         409185.41    3770235.32        6.69023                       409205.41
3770235.32        6.66201
         409225.41    3770235.32        6.60521                       409245.41
3770235.32        6.52297
         408805.41    3770255.32        3.65944                       408825.41
3770255.32        3.81564
         408845.41    3770255.32        3.97628                       408865.41
3770255.32        4.14178
         408885.41    3770255.32        4.31206                       408905.41
3770255.32        4.48459
         408925.41    3770255.32        4.65880                       408945.41
3770255.32        4.83287
         408965.41    3770255.32        5.00566                       408985.41
3770255.32        5.17497
         409005.41    3770255.32        5.33902                       409025.41
3770255.32        5.49434
         409045.41    3770255.32        5.63583                       409065.41
3770255.32        5.76412
         409085.41    3770255.32        5.87844                       409105.41
3770255.32        5.97395
         409125.41    3770255.32        6.04766                       409145.41
3770255.32        6.09994
         409165.41    3770255.32        6.12785                       409185.41
3770255.32        6.13041
         409205.41    3770255.32        6.10754                       409225.41
3770255.32        6.05991
         409245.41    3770255.32        5.99104                       409265.41
3770255.32        5.89916
         409365.41    3770255.32        5.22687                       409385.41
3770255.32        5.06746
         408825.41    3770275.32        3.63407                       408845.41
3770275.32        3.77877
         408865.41    3770275.32        3.92676                       408885.41
3770275.32        4.07739
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                   PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE1   ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
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                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         408905.41    3770275.32        4.22987                       408925.41
3770275.32        4.38297
         408945.41    3770275.32        4.53480                       408965.41
3770275.32        4.68542
         408985.41    3770275.32        4.83190                       409005.41
3770275.32        4.97216
         409025.41    3770275.32        5.10430                       409045.41
3770275.32        5.22685
         409065.41    3770275.32        5.33463                       409085.41
3770275.32        5.43045
         409105.41    3770275.32        5.51053                       409125.41
3770275.32        5.57200
         409145.41    3770275.32        5.61565                       409165.41
3770275.32        5.63853
         409185.41    3770275.32        5.64148                       409205.41
3770275.32        5.62298
         409225.41    3770275.32        5.58312                       409245.41
3770275.32        5.52388
         409265.41    3770275.32        5.44663                       409345.41
3770275.32        5.00556
         409365.41    3770275.32        4.87234                       409385.41
3770275.32        4.73441
         409405.41    3770275.32        4.59427                       408845.41
3770295.32        3.59305
         408865.41    3770295.32        3.72551                       408885.41
3770295.32        3.85949
         408905.41    3770295.32        3.99441                       408925.41
3770295.32        4.12920
         408945.41    3770295.32        4.26245                       408965.41
3770295.32        4.39371
         408985.41    3770295.32        4.52059                       409005.41
3770295.32        4.64143
         409025.41    3770295.32        4.75486                       409045.41
3770295.32        4.85943
         409065.41    3770295.32        4.95273                       409085.41
3770295.32        5.03440
         409105.41    3770295.32        5.10211                       409125.41
```

```
3770295.32        5.15401
         409145.41    3770295.32        5.18957                        409165.41
3770295.32        5.20872
         409185.41    3770295.32        5.21077                        409205.41
3770295.32        5.19577
         409225.41    3770295.32        5.16262                        409245.41
3770295.32        5.11235
         409265.41    3770295.32        5.04788                        409285.41
3770295.32        4.96968
         409305.41    3770295.32        4.87845                        409325.41
3770295.32        4.77692
         409345.41    3770295.32        4.66920                        409365.41
3770295.32        4.55441
         409385.41    3770295.32        4.43410                        409405.41
3770295.32        4.31002
         409425.41    3770295.32        4.18487                        408865.41
3770315.32        3.53773
         408885.41    3770315.32        3.65714                        408905.41
3770315.32        3.77678
         408925.41    3770315.32        3.89572                        408945.41
3770315.32        4.01308
         408965.41    3770315.32        4.12788                        408985.41
3770315.32        4.23813
         409005.41    3770315.32        4.34294                        409025.41
3770315.32        4.44112
         409045.41    3770315.32        4.53106                        409065.41
3770315.32        4.61235
         409085.41    3770315.32        4.68226                        409105.41
3770315.32        4.73968
         409125.41    3770315.32        4.78370                        409145.41
3770315.32        4.81335
         409165.41    3770315.32        4.82945                        409185.41
3770315.32        4.83065
         409205.41    3770315.32        4.81767                        409225.41
3770315.32        4.79085
         409245.41    3770315.32        4.74819                        409265.41
3770315.32        4.69327
         409285.41    3770315.32        4.62607                        409305.41
3770315.32        4.54660
         409325.41    3770315.32        4.45966                        409345.41
3770315.32        4.36694
         409365.41    3770315.32        4.26719                        409385.41
3770315.32        4.16142
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE1 ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , L0000029 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 409405.41 | 3770315.32 | 4.05133 | 409425.41 | 3770315.32 | 3.94183 |
| 409445.41 | 3770315.32 | 3.82988 | 408885.41 | 3770335.32 | 3.46913 |
| 408905.41 | 3770335.32 | 3.57559 | 408925.41 | 3770335.32 | 3.68086 |
| 408945.41 | 3770335.32 | 3.78420 | 408965.41 | 3770335.32 | 3.88500 |
| 408985.41 | 3770335.32 | 3.98143 | 409005.41 | 3770335.32 | 4.07299 |
| 409025.41 | 3770335.32 | 4.15886 | 409045.41 | 3770335.32 | 4.23771 |
| 409065.41 | 3770335.32 | 4.30775 | 409085.41 | 3770335.32 | 4.36765 |
| 409105.41 | 3770335.32 | 4.41643 | 409125.41 | 3770335.32 | 4.45377 |
| 409145.41 | 3770335.32 | 4.47974 | 409165.41 | 3770335.32 | 4.49321 |
| 409185.41 | 3770335.32 | 4.49400 | 409205.41 | 3770335.32 | 4.48232 |
| 409225.41 | 3770335.32 | 4.45886 | 409245.41 | 3770335.32 | 4.42348 |
| 409265.41 | 3770335.32 | 4.37624 | 409285.41 | 3770335.32 | 4.31830 |
| 409305.41 | 3770335.32 | 4.24971 | 409325.41 | 3770335.32 | 4.17477 |
| 409345.41 | 3770335.32 | 4.09449 | 409365.41 | 3770335.32 | 4.00693 |

409385.41 3770335.32 3.91323 409405.41
3770335.32 3.81541
409425.41 3770335.32 3.71874 409445.41
3770335.32 3.62013
409465.41 3770335.32 3.51990 408905.41
3770355.32 3.38927
408925.41 3770355.32 3.48291 408945.41
3770355.32 3.57431
408965.41 3770355.32 3.66312 408985.41
3770355.32 3.74786
409005.41 3770355.32 3.82832 409025.41
3770355.32 3.90347
409045.41 3770355.32 3.97168 409065.41
3770355.32 4.03230
409085.41 3770355.32 4.08429 409105.41
3770355.32 4.12681
409125.41 3770355.32 4.15918 409145.41
3770355.32 4.18136
409165.41 3770355.32 4.19266 409185.41
3770355.32 4.19336
409205.41 3770355.32 4.18365 409225.41
3770355.32 4.16338
409245.41 3770355.32 4.13236 409265.41
3770355.32 4.09158
409285.41 3770355.32 4.04123 409305.41
3770355.32 3.98307
409325.41 3770355.32 3.91754 409345.41
3770355.32 3.84601
409365.41 3770355.32 3.76843 409385.41
3770355.32 3.68598
409405.41 3770355.32 3.60023 409425.41
3770355.32 3.51384
409445.41 3770355.32 3.42617 409465.41
3770355.32 3.33717
409485.41 3770355.32 3.24727 408905.41
3770375.32 3.21662
408925.41 3770375.32 3.30019 408945.41
3770375.32 3.38143
408965.41 3770375.32 3.45994 408985.41
3770375.32 3.53474
409005.41 3770375.32 3.60559 409025.41
3770375.32 3.67131
409045.41 3770375.32 3.73068 409065.41
3770375.32 3.78350
409085.41 3770375.32 3.82879 409105.41
3770375.32 3.86592
409125.41 3770375.32 3.89424 409145.41
3770375.32 3.91331
409165.41 3770375.32 3.92298 409185.41
3770375.32 3.92376

 *** MODELOPTs:  RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                            *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE1  ***
                            INCLUDING SOURCE(S):  L0000001  , L0000002
, L0000003  , L0000004  , L0000005  ,
              L0000006  , L0000007  , L0000008  , L0000009  , L0000010
, L0000011  , L0000012  , L0000013  ,
              L0000014  , L0000015  , L0000016  , L0000017  , L0000018
, L0000019  , L0000020  , L0000021  ,
              L0000022  , L0000023  , L0000024  , L0000025  , L0000026
, L0000027  , L0000028  , L0000029  ,

                                  *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                ** CONC OF PM_10  IN MICROGRAMS/M**3
                **

      X-COORD (M)  Y-COORD (M)  CONC  X-COORD (M)
Y-COORD (M)  CONC
 - - -

3770395.32 3.51185
409065.41 3770395.32 3.55802 409085.41
3770395.32 3.59755
409105.41 3770395.32 3.62991 409125.41
3770395.32 3.65464
409165.41 3770395.32 3.68014 409185.41
3770395.32 3.68102
409205.41 3770395.32 3.67360 409225.41
3770395.32 3.65798
409245.41 3770395.32 3.63449 409265.41
3770395.32 3.60352
409285.41 3770395.32 3.56539 409305.41
3770395.32 3.51992
409325.41 3770395.32 3.46952 409345.41
3770395.32 3.41457
409365.41 3770395.32 3.35445 409385.41
3770395.32 3.29013
409405.41 3770395.32 3.22341 409425.41
3770395.32 3.15425
409445.41 3770395.32 3.08343 409465.41
3770395.32 3.01172
408945.41 3770415.32 3.03955 408965.41
3770415.32 3.10165
408985.41 3770415.32 3.16059 409005.41
3770415.32 3.21577
409025.41 3770415.32 3.26661 409045.41
3770415.32 3.31262
409065.41 3770415.32 3.35317 409085.41
3770415.32 3.38778
409105.41 3770415.32 3.41613 409185.41
3770415.32 3.46122
409205.41 3770415.32 3.45471 409225.41
3770415.32 3.44100
409245.41 3770415.32 3.42039 409265.41
3770415.32 3.39325
409285.41 3770415.32 3.35972 409305.41
3770415.32 3.32017
409325.41 3770415.32 3.27460 409345.41
3770415.32 3.22566
409365.41 3770415.32 3.17298 409385.41
3770415.32 3.11673
409405.41 3770415.32 3.05714 409425.41
3770415.32 2.99511
408965.41 3770435.32 2.94315 408985.41
3770435.32 2.99569
409005.41 3770435.32 3.04465 409025.41
3770435.32 3.08979
409045.41 3770435.32 3.13058 409065.41
3770435.32 3.16641
409205.41 3770435.32 3.25594 409225.41

         409005.41    3770455.32        2.88736                      409025.41
3770455.32        2.92754
         409045.41    3770455.32        2.96378                      409225.41
3770455.32        3.06423
         409245.41    3770455.32        3.04823                      409265.41
3770455.32        3.02700
         409285.41    3770455.32        3.00061                      409305.41
3770455.32        2.96898
         409325.41    3770455.32        2.93334                      409345.41
3770455.32        2.89467

409365.41 3770455.32 2.85283 409385.41
3770455.32 2.80799
408985.41 3770475.32 2.70335 409005.41
3770475.32 2.74245
409025.41 3770475.32 2.77831 409245.41
3770475.32 2.88544
409265.41 3770475.32 2.86653 409285.41
3770475.32 2.84320
409305.41 3770475.32 2.81518 409325.41
3770475.32 2.78372
409345.41 3770475.32 2.74913 409365.41
3770475.32 2.71158
409005.41 3770495.32 2.60856 409265.41
3770495.32 2.71891
409285.41 3770495.32 2.69848 409305.41
3770495.32 2.67400
409325.41 3770495.32 2.64602 409285.41
3770515.32 2.56524
409305.41 3770515.32 2.54397 409620.32
3769917.48 5.61052
409594.45 3769937.88 6.15424 409641.70
3769936.39 5.15347
409617.33 3769956.28 5.57520 409558.14
3769968.22 6.94519
409518.34 3769997.07 7.84551 409513.37
3770011.50 7.78043
409533.76 3770024.43 6.99012 409551.67
3770011.00 6.69784
409573.06 3769996.08 6.32052 409557.64
3770022.94 6.41258
409573.06 3770033.39 5.95563 409598.43
3770016.47 5.60030
409609.87 3770032.39 5.26259 409595.94
3770037.86 5.46552
409585.00 3770047.31 5.57709 409619.32
3770048.81 4.97652
409656.63 3770027.42 4.55681 409680.50
3770017.47 4.27828
409693.93 3770013.99 4.12072 409708.86
3770011.50 3.94944
409607.88 3770068.21 4.99266 409589.47
3770065.72 5.31256
409579.53 3770065.72 5.48344 409552.17
3770058.26 6.09298
408953.25 3769647.96 10.67178 408703.21
3769848.54 4.77942
408758.17 3769919.06 5.78546 408757.25
3769928.22 5.72490
408629.03 3769906.24 3.67793 408596.97
3769864.11 3.36289

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         408548.43    3769905.32        2.90971                      408501.72
3769896.17        2.57923
         408462.34    3769854.95        2.34964                      408378.08
3769883.34        1.93787
         408352.44    3769866.86        1.83944                      408352.44
3769829.31        1.84068
         408378.28    3769790.74        1.93345                      408664.62
3769570.02        3.32742
         408755.60    3769593.88        4.45813                      408812.27
3769570.02        5.04820
         408871.92    3769584.94        6.33460                      408658.51
3770080.18        3.48562
         409005.15    3770499.71        2.58012                      409148.50
3770383.08        3.81842
         409289.43    3770534.53        2.44370                      409506.48
3770366.88        3.06403
         409379.33    3770230.01        5.60100                      409302.39
3770294.80        4.90216
         409203.58    3770183.84        8.54136                      409149.31
3770186.27        8.43217
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                  PAGE  29
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE1   ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         409125.02    3770158.74        9.61449                      409100.72
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE2   ***
                                  INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                  L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                  L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                  L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                     *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                         X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         408660.46    3769574.73        7.49248                      408680.46
3769574.73        7.80299
         408820.46    3769574.73        8.99910                      408640.46
3769594.73        7.78788
         408660.46    3769594.73        8.17718                      408680.46
3769594.73        8.55472
         408700.46    3769594.73        8.91248                      408720.46
3769594.73        9.23921
         408740.46    3769594.73        9.51842                      408760.46
3769594.73        9.73867
         408780.46    3769594.73        9.91881                      408800.46
3769594.73       10.02061
         408820.46    3769594.73       10.04757                      408840.46
3769594.73       10.00000

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         408860.46    3769594.73        9.88071                    408880.46
3769594.73        9.69730
         408620.46    3769614.73        8.01227                    408640.46
3769614.73        8.48215
         408660.46    3769614.73        8.95384                    408680.46
3769614.73        9.41738
         408700.46    3769614.73        9.86213                    408720.46
3769614.73       10.27275
         408740.46    3769614.73       10.63303                    408760.46
3769614.73       10.92633
         408780.46    3769614.73       11.14008                    408800.46
3769614.73       11.27132
         408820.46    3769614.73       11.30977                    408840.46
3769614.73       11.25273
         408860.46    3769614.73       11.10284                    408880.46
3769614.73       10.86616
         408900.46    3769614.73       10.55712                    408600.46
3769634.73        8.15203
         408620.46    3769634.73        8.69689                    408640.46
3769634.73        9.26165
         408660.46    3769634.73        9.83755                    408680.46
3769634.73       10.41200
         408700.46    3769634.73       10.97040                    408720.46
3769634.73       11.49248
         408740.46    3769634.73       11.95723                    408760.46
3769634.73       12.34149
         408780.46    3769634.73       12.61485                    408800.46
3769634.73       12.79385
         408820.46    3769634.73       12.84984                    408840.46
3769634.73       12.77916
         408860.46    3769634.73       12.58592                    408880.46
3769634.73       12.27424
         408900.46    3769634.73       11.87440                    408920.46
3769634.73       11.40129
         408560.46    3769654.73        7.62764                    408580.46
3769654.73        8.19615
         408600.46    3769654.73        8.80621                    408620.46
3769654.73        9.45560
         408640.46    3769654.73       10.13890                    408660.46
3769654.73       10.84647
         408680.46    3769654.73       11.56322                    408700.46
3769654.73       12.26815
         408720.46    3769654.73       12.93936                    408740.46
3769654.73       13.54772
         408760.46    3769654.73       14.05983                    408780.46
3769654.73       14.43741
         408800.46    3769654.73       14.67885                    408820.46
3769654.73       14.75560
         408840.46    3769654.73       14.65932                    408860.46
3769654.73       14.39642
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         408880.46    3769654.73       13.98781                      408900.46
3769654.73       13.46344
         408920.46    3769654.73       12.85029                      408940.46
3769654.73       12.17953
         408540.46    3769674.73        7.54040                      408560.46
3769674.73        8.14351
         408580.46    3769674.73        8.80259                      408600.46
3769674.73        9.51971
         408620.46    3769674.73       10.29534                      408640.46
3769674.73       11.12497
         408660.46    3769674.73       11.99881                      408680.46
3769674.73       12.89964
         408700.46    3769674.73       13.80215                      408720.46
3769674.73       14.67998
         408740.46    3769674.73       15.49059                      408760.46
3769674.73       16.18342
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  31
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE2   ***
                                 INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                  L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                  L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                  L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         408780.46    3769674.73       16.70832                      408800.46
3769674.73       17.04052
         408820.46    3769674.73       17.14728                      408840.46
3769674.73       17.01666
         408860.46    3769674.73       16.65816                      408880.46
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3769674.73       16.10806
         408900.46    3769674.73       15.40336                       408520.46
3769694.73        7.37747
         408540.46    3769694.73        7.99729                       408560.46
3769694.73        8.68576
         408580.46    3769694.73        9.44952                       408600.46
3769694.73       10.29347
         408620.46    3769694.73       11.22085                       408640.46
3769694.73       12.23027
         408660.46    3769694.73       13.31354                       408680.46
3769694.73       14.45130
         408700.46    3769694.73       15.62856                       408720.46
3769694.73       16.79842
         408740.46    3769694.73       17.89775                       408760.46
3769694.73       18.85129
         408780.46    3769694.73       19.59261                       408800.46
3769694.73       20.05991
         408820.46    3769694.73       20.21082                       408840.46
3769694.73       20.03230
         408860.46    3769694.73       19.54345                       408880.46
3769694.73       18.77633
         408480.46    3769714.73        6.59502                       408500.46
3769714.73        7.14814
         408520.46    3769714.73        7.76873                       408540.46
3769714.73        8.46632
         408560.46    3769714.73        9.25103                       408580.46
3769714.73       10.13364
         408600.46    3769714.73       11.12476                       408620.46
3769714.73       12.23248
         408640.46    3769714.73       13.46173                       408660.46
3769714.73       14.81226
         408680.46    3769714.73       16.27681                       408700.46
3769714.73       17.82160
         408720.46    3769714.73       19.39535                       408740.46
3769714.73       20.91554
         408760.46    3769714.73       22.27151                       408780.46
3769714.73       23.34829
         408800.46    3769714.73       24.03429                       408820.46
3769714.73       24.26281
         408840.46    3769714.73       23.99791                       408860.46
3769714.73       23.25000
         408460.46    3769734.73        6.33003                       408480.46
3769734.73        6.86754
         408500.46    3769734.73        7.47365                       408520.46
3769734.73        8.16032
         408540.46    3769734.73        8.94127                       408560.46
3769734.73        9.83119
         408580.46    3769734.73       10.84637                       408600.46
3769734.73       12.00530
         408620.46    3769734.73       13.32623                       408640.46
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| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 408720.46 | 3769754.73 | 26.59797 | 408740.46 | 3769754.73 | 29.72897 |
| 408760.46 | 3769754.73 | 32.74833 | 408780.46 | 3769754.73 | 35.25423 |
| 408800.46 | 3769754.73 | 37.04816 | 408400.46 | 3769774.73 | 5.30323 |
| 408420.46 | 3769774.73 | 5.72889 | 408440.46 | 3769774.73 | 6.20903 |
| 408460.46 | 3769774.73 | 6.75393 | 408480.46 | 3769774.73 | 7.37584 |
| 408500.46 | 3769774.73 | 8.08979 | 408520.46 | 3769774.73 | 8.91344 |
| 408540.46 | 3769774.73 | 9.86998 | 408560.46 | 3769774.73 | 10.98746 |
| 408580.46 | 3769774.73 | 12.30035 | 408600.46 | 3769774.73 | 13.85622 |
| 408620.46 | 3769774.73 | 15.70565 | 408640.46 | 3769774.73 | 17.91057 |
| 408660.46 | 3769774.73 | 20.54277 | 408680.46 | 3769774.73 | 23.67639 |
| 408700.46 | 3769774.73 | 27.36066 | 408720.46 | 3769774.73 | 31.59583 |
| 408740.46 | 3769774.73 | 36.25187 | 408760.46 | 3769774.73 | 40.92193 |
| 408780.46 | 3769774.73 | 45.20733 | 408380.46 | 3769794.73 | 5.01846 |
| 408400.46 | 3769794.73 | 5.41265 | 408420.46 | 3769794.73 | 5.85802 |
| 408440.46 | 3769794.73 | 6.36330 | 408460.46 | 3769794.73 | 6.93961 |
| 408480.46 | 3769794.73 | 7.60115 | 408500.46 | 3769794.73 | 8.36632 |
| 408520.46 | 3769794.73 | 9.25596 | 408540.46 | 3769794.73 | 10.29889 |
| 408560.46 | 3769794.73 | 11.53190 | 408580.46 | 3769794.73 | 13.00219 |
| 408600.46 | 3769794.73 | 14.77871 | 408620.46 | 3769794.73 | 16.92974 |
| 408640.46 | 3769794.73 | 19.56243 | 408660.46 | 3769794.73 | 22.80790 |
| 408680.46 | 3769794.73 | 26.82338 | 408700.46 | 3769794.73 | 31.78407 |
| 408720.46 | 3769794.73 | 37.82904 | 408740.46 | 3769794.73 | 44.93286 |
| 408760.46 | 3769794.73 | 52.55082 | 408380.46 | 3769814.73 | 5.09821 |

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         408400.46    3769814.73        5.50768                      408420.46
3769814.73        5.96965
         408440.46    3769814.73        6.49714                      408460.46
3769814.73        7.10178
         408480.46    3769814.73        7.79909                      408500.46
3769814.73        8.61054
         408520.46    3769814.73        9.56033                      408540.46
3769814.73       10.68539
         408560.46    3769814.73       12.03122                      408580.46
3769814.73       13.65654
         408600.46    3769814.73       15.64394                      408620.46
3769814.73       18.10567
         408640.46    3769814.73       21.19671                      408660.46
3769814.73       25.13241
         408680.46    3769814.73       30.21059                      408700.46
3769814.73       36.83001
         408720.46    3769814.73       45.47370                      408740.46
3769814.73       56.57959
         408360.46    3769834.73        4.79192                      408380.46
3769834.73        5.16369
         408400.46    3769834.73        5.58439                      408420.46
3769834.73        6.06148
         408440.46    3769834.73        6.60717                      408460.46
3769834.73        7.23520
         408480.46    3769834.73        7.96316                      408500.46
3769834.73        8.81390
         408520.46    3769834.73        9.81725                      408540.46
3769834.73       11.01417
         408560.46    3769834.73       12.45799                      408580.46
3769834.73       14.22146
         408600.46    3769834.73       16.40778                      408620.46
3769834.73       19.16516
         408640.46    3769834.73       22.70933                      408660.46
3769834.73       27.36346
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***       14:11:35

                                  PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE2   ***
                                  INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                  L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                  L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
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                L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - -
         408680.46    3769834.73       33.62240                      408700.46
3769834.73       42.25978
         408360.46    3769854.73        4.83329                      408380.46
3769854.73        5.21274
         408400.46    3769854.73        5.64144                      408420.46
3769854.73        6.13067
         408440.46    3769854.73        6.69019                      408460.46
3769854.73        7.33584
         408480.46    3769854.73        8.08782                      408500.46
3769854.73        8.96895
         408520.46    3769854.73       10.01522                      408540.46
3769854.73       11.26876
         408560.46    3769854.73       12.79060                      408580.46
3769854.73       14.66612
         408600.46    3769854.73       17.01831                      408620.46
3769854.73       20.02707
         408640.46    3769854.73       23.96911                      408660.46
3769854.73       29.28403
         408680.46    3769854.73       36.70066                      408700.46
3769854.73       47.49971
         408380.46    3769874.73        5.24023                      408400.46
3769874.73        5.67384
         408500.46    3769874.73        9.07114                      408520.46
3769874.73       10.14425
         408540.46    3769874.73       11.43513                      408560.46
3769874.73       13.00957
         408580.46    3769874.73       14.96088                      408620.46
3769874.73       20.61192
         408640.46    3769874.73       24.83946                      408660.46
3769874.73       30.64419
         408680.46    3769874.73       38.96408                      408700.46
3769874.73       51.58783
         408720.46    3769874.73       72.30416                      408500.46
3769894.73        9.11271
         408520.46    3769894.73       10.19756                      408540.46
3769894.73       11.50408
         408560.46    3769894.73       13.10041                      408620.46
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3769894.73       20.85739
         408640.46    3769894.73       25.20730                       408660.46
3769894.73       31.22680
         408680.46    3769894.73       39.95264                       408700.46
3769894.73       53.43622
         408720.46    3769894.73       76.26151                       408680.46
3769914.73       39.43043
         408700.46    3769914.73       52.44122                       408720.46
3769914.73       74.07525
         408740.46    3769914.73      114.81890                       408885.41
3770075.32       23.93688
         408905.41    3770075.32       22.57283                       408925.41
3770075.32       21.04557
         408945.41    3770075.32       19.45574                       408965.41
3770075.32       17.88196
         408685.41    3770095.32       15.15873                       408705.41
3770095.32       16.43481
         408725.41    3770095.32       17.70055                       408745.41
3770095.32       18.89696
         408765.41    3770095.32       19.94770                       408785.41
3770095.32       20.77827
         408805.41    3770095.32       21.31798                       408865.41
3770095.32       20.86501
         408885.41    3770095.32       20.10304                       408905.41
3770095.32       19.15414
         408925.41    3770095.32       18.06493                       408945.41
3770095.32       16.89348
         408965.41    3770095.32       15.71534                       408985.41
3770095.32       14.56152
         409005.41    3770095.32       13.45555                       409025.41
3770095.32       12.41596
         409045.41    3770095.32       11.45163                       408705.41
3770115.32       14.44374
         408725.41    3770115.32       15.39498                       408745.41
3770115.32       16.27419
         408765.41    3770115.32       17.03188                       408785.41
3770115.32       17.61911
         408805.41    3770115.32       17.99851                       408825.41
3770115.32       18.13890
         408845.41    3770115.32       18.02661                       408865.41
3770115.32       17.66809
         408885.41    3770115.32       17.14291                       408905.41
3770115.32       16.45982

*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE2 ***

INCLUDING SOURCE(S): L0000030 , L0000031 , L0000032 , L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 , L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 , L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 , L0000057 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 408925.41 | 3770115.32 | 15.66489 | 408945.41 | 3770115.32 | 14.79107 |
| 408965.41 | 3770115.32 | 13.89202 | 408985.41 | 3770115.32 | 12.99324 |
| 409005.41 | 3770115.32 | 12.11771 | 409025.41 | 3770115.32 | 11.28002 |
| 409045.41 | 3770115.32 | 10.48909 | 408705.41 | 3770135.32 | 12.78137 |
| 408725.41 | 3770135.32 | 13.50899 | 408745.41 | 3770135.32 | 14.16961 |
| 408765.41 | 3770135.32 | 14.73020 | 408785.41 | 3770135.32 | 15.15958 |
| 408805.41 | 3770135.32 | 15.43354 | 408825.41 | 3770135.32 | 15.53176 |
| 408845.41 | 3770135.32 | 15.44707 | 408865.41 | 3770135.32 | 15.18877 |
| 408885.41 | 3770135.32 | 14.80765 | 408905.41 | 3770135.32 | 14.30436 |
| 408925.41 | 3770135.32 | 13.71034 | 408945.41 | 3770135.32 | 13.04919 |
| 408965.41 | 3770135.32 | 12.35163 | 408985.41 | 3770135.32 | 11.64346 |
| 409005.41 | 3770135.32 | 10.94355 | 409025.41 | 3770135.32 | 10.26389 |
| 408725.41 | 3770155.32 | 11.94977 | 408745.41 | 3770155.32 | 12.45605 |
| 408765.41 | 3770155.32 | 12.88030 | 408785.41 | 3770155.32 | 13.20552 |

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         408805.41    3770155.32       13.40855                    408825.41
3770155.32       13.47533
         408845.41    3770155.32       13.40840                    408865.41
3770155.32       13.22776
         408885.41    3770155.32       12.93363                    408905.41
3770155.32       12.55357
         408925.41    3770155.32       12.10015                    408945.41
3770155.32       11.59097
         408965.41    3770155.32       11.04526                    408985.41
3770155.32       10.48181
         409005.41    3770155.32        9.91745                    409025.41
3770155.32        9.36183
         409045.41    3770155.32        8.82217                    408745.41
3770175.32       11.04214
         408765.41    3770175.32       11.37032                    408785.41
3770175.32       11.61663
         408805.41    3770175.32       11.76822                    408825.41
3770175.32       11.82427
         408845.41    3770175.32       11.78256                    408865.41
3770175.32       11.64138
         408885.41    3770175.32       11.41156                    408905.41
3770175.32       11.11780
         408925.41    3770175.32       10.76444                    408945.41
3770175.32       10.36372
         408965.41    3770175.32        9.93157                    408985.41
3770175.32        9.47864
         409005.41    3770175.32        9.01887                    409025.41
3770175.32        8.56112
         409045.41    3770175.32        8.11205                    409065.41
3770175.32        7.67648
         409085.41    3770175.32        7.25746                    409105.41
3770175.32        6.85755
         409125.41    3770175.32        6.47961                    408765.41
3770195.32       10.12003
         408785.41    3770195.32       10.30969                    408805.41
3770195.32       10.42699
         408825.41    3770195.32       10.47376                    408845.41
3770195.32       10.44390
         408865.41    3770195.32       10.33254                    408885.41
3770195.32       10.15216
         408905.41    3770195.32        9.92218                    408925.41
3770195.32        9.64345
         408945.41    3770195.32        9.32336                    408965.41
3770195.32        8.97598
         408985.41    3770195.32        8.60811                    409005.41
3770195.32        8.23075
         409025.41    3770195.32        7.85097                    409045.41
3770195.32        7.47474
         409065.41    3770195.32        7.10636                    409085.41
3770195.32        6.74898
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*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE2 ***
INCLUDING SOURCE(S): L0000030 , L0000031 , L0000032 , L0000033 , L0000034 ,
L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 , L0000041 , L0000042 ,
L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 , L0000049 , L0000050 ,
L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 , L0000057 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 409145.41 | 3770195.32 | 5.76314 | 409165.41 | 3770195.32 | 5.46670 |
| 409185.41 | 3770195.32 | 5.18633 | 409205.41 | 3770195.32 | 4.92170 |
| 408785.41 | 3770215.32 | 9.22147 | 408805.41 | 3770215.32 | 9.31850 |
| 408825.41 | 3770215.32 | 9.35339 | 408845.41 | 3770215.32 | 9.32378 |
| 408865.41 | 3770215.32 | 9.23697 | 408885.41 | 3770215.32 | 9.09650 |
| 408905.41 | 3770215.32 | 8.91566 | 408925.41 | 3770215.32 | 8.69382 |
| 408945.41 | 3770215.32 | 8.43510 | 408965.41 | 3770215.32 | 8.15048 |
| 408985.41 | 3770215.32 | 7.84846 | 409005.41 | 3770215.32 | 7.53737 |
| 409025.41 | 3770215.32 | 7.22062 | 409045.41 | 3770215.32 | 6.90350 |
| 409065.41 | 3770215.32 | 6.59044 | 409085.41 | | |

3770215.32 6.28439
409105.41 3770215.32 5.98749 409125.41
3770215.32 5.70105
409145.41 3770215.32 5.42714 409165.41
3770215.32 5.16493
409185.41 3770215.32 4.91576 409205.41
3770215.32 4.67935
409225.41 3770215.32 4.45497 408805.41
3770235.32 8.38252
408825.41 3770235.32 8.40750 408845.41
3770235.32 8.38302
408865.41 3770235.32 8.31523 408885.41
3770235.32 8.20780
408905.41 3770235.32 8.06158 408925.41
3770235.32 7.88034
408945.41 3770235.32 7.66940 408965.41
3770235.32 7.43577
408985.41 3770235.32 7.18591 409005.41
3770235.32 6.92525
409025.41 3770235.32 6.65910 409045.41
3770235.32 6.39128
409065.41 3770235.32 6.12388 409085.41
3770235.32 5.86051
409105.41 3770235.32 5.60318 409125.41
3770235.32 5.35340
409145.41 3770235.32 5.11240 409165.41
3770235.32 4.88035
409185.41 3770235.32 4.65863 409205.41
3770235.32 4.44736
409225.41 3770235.32 4.24614 409245.41
3770235.32 4.05425
408805.41 3770255.32 7.58778 408825.41
3770255.32 7.60670
408845.41 3770255.32 7.58772 408865.41
3770255.32 7.53335
408885.41 3770255.32 7.44899 408905.41
3770255.32 7.32854
408925.41 3770255.32 7.17880 408945.41
3770255.32 7.00579
408965.41 3770255.32 6.81220 408985.41
3770255.32 6.60363
409005.41 3770255.32 6.38371 409025.41
3770255.32 6.15787
409045.41 3770255.32 5.93104 409065.41
3770255.32 5.70186
409085.41 3770255.32 5.47422 409105.41
3770255.32 5.25037
409125.41 3770255.32 5.03187 409145.41
3770255.32 4.81937
409165.41 3770255.32 4.61382 409185.41

3770255.32        4.41605
         409205.41    3770255.32        4.22664                      409225.41
3770255.32        4.04586
         409245.41    3770255.32        3.87220                      409265.41
3770255.32        3.70648
         409365.41    3770255.32        2.99729                      409385.41
3770255.32        2.87635
         408825.41    3770275.32        6.92699                      408845.41
3770275.32        6.91261
         408865.41    3770275.32        6.86666                      408885.41
3770275.32        6.79419


                              *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE2   ***
                              INCLUDING SOURCE(S):     L0000030    , L0000031 , L0000032    , L0000033    , L0000034    ,
                 L0000035    , L0000036    , L0000037    , L0000038    , L0000039 , L0000040    , L0000041    , L0000042    ,
                 L0000043    , L0000044    , L0000045    , L0000046    , L0000047 , L0000048    , L0000049    , L0000050    ,
                 L0000051    , L0000052    , L0000053    , L0000054    , L0000055 , L0000056    , L0000057    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                 ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)        Y-COORD (M)        CONC
 - - -

409105.41 3770275.32 4.92670 409125.41
3770275.32 4.73494
409145.41 3770275.32 4.54734 409165.41
3770275.32 4.36510
409185.41 3770275.32 4.18818 409205.41
3770275.32 4.01735
409225.41 3770275.32 3.85384 409245.41
3770275.32 3.69724
409265.41 3770275.32 3.54724 409345.41
3770275.32 3.01352
409365.41 3770275.32 2.89539 409385.41
3770275.32 2.78308
409405.41 3770275.32 2.67655 408845.41
3770295.32 6.32553
408865.41 3770295.32 6.28668 408885.41
3770295.32 6.22636
408905.41 3770295.32 6.14308 408925.41
3770295.32 6.03994
408945.41 3770295.32 5.91979 408965.41
3770295.32 5.78228
408985.41 3770295.32 5.63394 409005.41
3770295.32 5.47685
409025.41 3770295.32 5.31279 409045.41
3770295.32 5.14391
409065.41 3770295.32 4.97287 409085.41
3770295.32 4.80076
409105.41 3770295.32 4.62958 409125.41
3770295.32 4.46078
409145.41 3770295.32 4.29508 409165.41
3770295.32 4.13307
409185.41 3770295.32 3.97533 409205.41
3770295.32 3.82208
409225.41 3770295.32 3.67328 409245.41
3770295.32 3.53138
409265.41 3770295.32 3.39555 409285.41
3770295.32 3.26505
409305.41 3770295.32 3.13951 409325.41
3770295.32 3.01931
409345.41 3770295.32 2.90527 409365.41
3770295.32 2.79612
409385.41 3770295.32 2.69171 409405.41
3770295.32 2.59197
409425.41 3770295.32 2.49719 408865.41
3770315.32 5.78074
408885.41 3770315.32 5.73054 408905.41
3770315.32 5.66143
408925.41 3770315.32 5.57477 408945.41
3770315.32 5.47221
408965.41 3770315.32 5.35576 408985.41
3770315.32 5.22987

```
         409005.41    3770315.32        5.09508                      409025.41
3770315.32        4.95345
         409045.41    3770315.32        4.80724                      409065.41
3770315.32        4.65748
         409085.41    3770315.32        4.50691                      409105.41
3770315.32        4.35673
         409125.41    3770315.32        4.20780                      409145.41
3770315.32        4.06101
         409165.41    3770315.32        3.91662                      409185.41
3770315.32        3.77563
         409205.41    3770315.32        3.63814                      409225.41
3770315.32        3.50340
         409245.41    3770315.32        3.37444                      409265.41
3770315.32        3.25093
         409285.41    3770315.32        3.13144                      409305.41
3770315.32        3.01573
         409325.41    3770315.32        2.90546                      409345.41
3770315.32        2.80049
         409365.41    3770315.32        2.69949                      409385.41
3770315.32        2.60227
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                   PAGE  37
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE2   ***
                                   INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                  L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                  L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                  L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         409405.41    3770315.32        2.50889                      409425.41
```

```
3770315.32        2.42076
         409445.41    3770315.32        2.33605                   408885.41
3770335.32        5.29493
         408905.41    3770335.32        5.23610                   408925.41
3770335.32        5.16299
         408945.41    3770335.32        5.07611                   408965.41
3770335.32        4.97677
         408985.41    3770335.32        4.86857                   409005.41
3770335.32        4.75201
         409025.41    3770335.32        4.62863                   409045.41
3770335.32        4.50010
         409065.41    3770335.32        4.36873                   409085.41
3770335.32        4.23738
         409105.41    3770335.32        4.10593                   409125.41
3770335.32        3.97445
         409145.41    3770335.32        3.84359                   409165.41
3770335.32        3.71469
         409185.41    3770335.32        3.58829                   409205.41
3770335.32        3.46473
         409225.41    3770335.32        3.34404                   409245.41
3770335.32        3.22648
         409265.41    3770335.32        3.11332                   409285.41
3770335.32        3.00372
         409305.41    3770335.32        2.89752                   409325.41
3770335.32        2.79625
         409345.41    3770335.32        2.69955                   409365.41
3770335.32        2.60583
         409385.41    3770335.32        2.51511                   409405.41
3770335.32        2.42774
         409425.41    3770335.32        2.34561                   409445.41
3770335.32        2.26669
         409465.41    3770335.32        2.19071                   408905.41
3770355.32        4.85960
         408925.41    3770355.32        4.79664                   408945.41
3770355.32        4.72246
         408965.41    3770355.32        4.63725                   408985.41
3770355.32        4.54383
         409005.41    3770355.32        4.44243                   409025.41
3770355.32        4.33454
         409045.41    3770355.32        4.22274                   409065.41
3770355.32        4.10763
         409085.41    3770355.32        3.99162                   409105.41
3770355.32        3.87513
         409125.41    3770355.32        3.75845                   409145.41
3770355.32        3.64195
         409165.41    3770355.32        3.52677                   409185.41
3770355.32        3.41310
         409205.41    3770355.32        3.30131                   409225.41
3770355.32        3.19185
         409245.41    3770355.32        3.08562                   409265.41
```

```
3770355.32        2.98198
         409285.41    3770355.32        2.88165                        409305.41
3770355.32        2.78500
         409325.41    3770355.32        2.69156                        409345.41
3770355.32        2.60153
         409365.41    3770355.32        2.51434                        409385.41
3770355.32        2.43008
         409405.41    3770355.32        2.34906                        409425.41
3770355.32        2.27211
         409445.41    3770355.32        2.19837                        409465.41
3770355.32        2.12740
         409485.41    3770355.32        2.05903                        408905.41
3770375.32        4.52429
         408925.41    3770375.32        4.46957                        408945.41
3770375.32        4.40557
         408965.41    3770375.32        4.33210                        408985.41
3770375.32        4.25103
         409005.41    3770375.32        4.16248                        409025.41
3770375.32        4.06808
         409045.41    3770375.32        3.97089                        409065.41
3770375.32        3.86979
         409085.41    3770375.32        3.76682                        409105.41
3770375.32        3.66294
         409125.41    3770375.32        3.55888                        409145.41
3770375.32        3.45502
         409165.41    3770375.32        3.35177                        409185.41
3770375.32        3.24924
         409205.41    3770375.32        3.14792                        409225.41
3770375.32        3.04846
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  38
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE2   ***
                                 INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                  L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                  L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                  L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 409245.41 | 3770375.32 | 2.95223 | 409265.41 | 3770375.32 | 2.85750 |
| 409285.41 | 3770375.32 | 2.76558 | 409305.41 | 3770375.32 | 2.67707 |
| 409325.41 | 3770375.32 | 2.59084 | 409345.41 | 3770375.32 | 2.50732 |
| 409365.41 | 3770375.32 | 2.42634 | 409385.41 | 3770375.32 | 2.34815 |
| 409405.41 | 3770375.32 | 2.27303 | 409425.41 | 3770375.32 | 2.20096 |
| 409445.41 | 3770375.32 | 2.13188 | 409465.41 | 3770375.32 | 2.06545 |
| 409485.41 | 3770375.32 | 2.00142 | 408925.41 | 3770395.32 | 4.17683 |
| 408945.41 | 3770395.32 | 4.12021 | 408965.41 | 3770395.32 | 4.05630 |
| 408985.41 | 3770395.32 | 3.98554 | 409005.41 | 3770395.32 | 3.90882 |
| 409025.41 | 3770395.32 | 3.82707 | 409045.41 | 3770395.32 | 3.74106 |
| 409065.41 | 3770395.32 | 3.65207 | 409085.41 | 3770395.32 | 3.56096 |
| 409105.41 | 3770395.32 | 3.46845 | 409125.41 | 3770395.32 | 3.37521 |
| 409165.41 | 3770395.32 | 3.18862 | 409185.41 | 3770395.32 | 3.09583 |
| 409205.41 | 3770395.32 | 3.00422 | 409225.41 | 3770395.32 | 2.91424 |
| 409245.41 | 3770395.32 | 2.82602 | 409265.41 | 3770395.32 | 2.73992 |
| 409285.41 | 3770395.32 | 2.65562 | 409305.41 | 3770395.32 | 2.57313 |
| 409325.41 | 3770395.32 | 2.49373 | 409345.41 | 3770395.32 | 2.41706 |
| 409365.41 | 3770395.32 | 2.34231 | 409385.41 | 3770395.32 | 2.26970 |
| 409405.41 | 3770395.32 | 2.19990 | 409425.41 | 3770395.32 | 2.13249 |
| 409445.41 | 3770395.32 | 2.06753 | 409465.41 | 3770395.32 | 2.00508 |
| 408945.41 | 3770415.32 | 3.86380 | 408965.41 | 3770415.32 | 3.80788 |

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         408985.41    3770415.32        3.74555                      409005.41
3770415.32        3.67810
         409025.41    3770415.32        3.60631                      409045.41
3770415.32        3.53041
         409065.41    3770415.32        3.45186                      409085.41
3770415.32        3.37106
         409105.41    3770415.32        3.28848                      409185.41
3770415.32        2.95258
         409205.41    3770415.32        2.86944                      409225.41
3770415.32        2.78761
         409245.41    3770415.32        2.70721                      409265.41
3770415.32        2.62820
         409285.41    3770415.32        2.55081                      409305.41
3770415.32        2.47522
         409325.41    3770415.32        2.40113                      409345.41
3770415.32        2.32998
         409365.41    3770415.32        2.26107                      409385.41
3770415.32        2.19416
         409405.41    3770415.32        2.12906                      409425.41
3770415.32        2.06600
         408965.41    3770435.32        3.58292                      408985.41
3770435.32        3.52767
         409005.41    3770435.32        3.46780                      409025.41
3770435.32        3.40417
         409045.41    3770435.32        3.33722                      409065.41
3770435.32        3.26763
         409205.41    3770435.32        2.74299                      409225.41
3770435.32        2.66830
         409245.41    3770435.32        2.59502                      409265.41
3770435.32        2.52239
         409285.41    3770435.32        2.45121                      409305.41
3770435.32        2.38190
         409325.41    3770435.32        2.31288                      409345.41
3770435.32        2.24674
         409365.41    3770435.32        2.18307                      409385.41
3770435.32        2.12122
         409405.41    3770435.32        2.06050                      408985.41
3770455.32        3.32918
↟ *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                   PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE2   ***
                                   INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
```

```
                 L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                 L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                 L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         409005.41    3770455.32        3.27614                       409025.41
3770455.32        3.21969
         409045.41    3770455.32        3.16019                       409225.41
3770455.32        2.55581
         409245.41    3770455.32        2.48869                       409265.41
3770455.32        2.42229
         409285.41    3770455.32        2.35669                       409305.41
3770455.32        2.29200
         409325.41    3770455.32        2.22888                       409345.41
3770455.32        2.16782
         409365.41    3770455.32        2.10842                       409385.41
3770455.32        2.05053
         408985.41    3770475.32        3.14764                       409005.41
3770475.32        3.10066
         409025.41    3770475.32        3.05038                       409245.41
3770475.32        2.38802
         409265.41    3770475.32        2.32702                       409285.41
3770475.32        2.26689
         409305.41    3770475.32        2.20729                       409325.41
3770475.32        2.14911
         409345.41    3770475.32        2.09244                       409365.41
3770475.32        2.03715
         409005.41    3770495.32        2.93955                       409265.41
3770495.32        2.23679
         409285.41    3770495.32        2.18167                       409305.41
3770495.32        2.12705
         409325.41    3770495.32        2.07329                       409285.41
3770515.32        2.10092
         409305.41    3770515.32        2.05096                       409620.32
3769917.48        2.08565
         409594.45    3769937.88        2.21698                       409641.70
3769936.39        2.00010
         409617.33    3769956.28        2.11276                       409558.14
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3769968.22        2.41767
         409518.34    3769997.07        2.65835                      409513.37
3770011.50        2.68522
         409533.76    3770024.43        2.54880                      409551.67
3770011.00        2.44930
         409573.06    3769996.08        2.33457                      409557.64
3770022.94        2.41061
         409573.06    3770033.39        2.32210                      409598.43
3770016.47        2.20100
         409609.87    3770032.39        2.14152                      409595.94
3770037.86        2.20488
         409585.00    3770047.31        2.25337                      409619.32
3770048.81        2.09174
         409656.63    3770027.42        1.94304                      409680.50
3770017.47        1.85357
         409693.93    3770013.99        1.80546                      409708.86
3770011.50        1.75405
         409607.88    3770068.21        2.15450                      409589.47
3770065.72        2.21861
         409579.53    3770065.72        2.26732                      409552.17
3770058.26        2.41722
         408953.25    3769647.96       11.30490                      408703.21
3769848.54       47.67743
         408758.17    3769919.06      183.45642                      408757.25
3769928.22      157.28234
         408629.03    3769906.24       22.52929                      408596.97
3769864.11       16.77344
         408548.43    3769905.32       12.09538                      408501.72
3769896.17        9.17614
         408462.34    3769854.95        7.40267                      408378.08
3769883.34        5.19684
         408352.44    3769866.86        4.70802                      408352.44
3769829.31        4.64038
         408378.28    3769790.74        4.96097                      408664.62
3769570.02        7.40104
         408755.60    3769593.88        9.64080                      408812.27
3769570.02        8.77235
         408871.92    3769584.94        9.27408                      408658.51
3770080.18       14.64862
         409005.15    3770499.71        2.90637                      409148.50
3770383.08        3.37103
         409289.43    3770534.53        2.01828                      409506.48
3770366.88        1.95863
         409379.33    3770230.01        3.03526                      409302.39
3770294.80        3.16146
         409203.58    3770183.84        5.09065                      409149.31
3770186.27        5.85971
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
```

                            *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: SLINE2   ***
                            INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                 ** CONC OF PM_10    IN MICROGRAMS/M**3
                **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         409125.02    3770158.74        6.84270                     409100.72
3770174.93        6.95850
         409079.66    3770173.31        7.43186                     409044.83
3770144.97        9.23780
         409048.19    3770087.68       11.70427                     408881.61
3770059.36       28.18765
         408861.32    3770102.06       19.80532                     408675.29
3770074.15       16.44554


                            *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                            INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,

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                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                         ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - -
         408660.46    3769574.73       10.80783                     408680.46
3769574.73       11.29848
         408820.46    3769574.73       14.23452                     408640.46
3769594.73       11.01743
         408660.46    3769594.73       11.58387                     408680.46
3769594.73       12.15251
         408700.46    3769594.73       12.71755                     408720.46
3769594.73       13.26905
         408740.46    3769594.73       13.79003                     408760.46
3769594.73       14.27094
         408780.46    3769594.73       14.74386                     408800.46
3769594.73       15.16070
         408820.46    3769594.73       15.53027                     408840.46
3769594.73       15.85588
         408860.46    3769594.73       16.14283                     408880.46
3769594.73       16.40280
         408620.46    3769614.73       11.14851                     408640.46
3769614.73       11.79118
         408660.46    3769614.73       12.44973                     408680.46
3769614.73       13.11573
         408700.46    3769614.73       13.78114                     408720.46
3769614.73       14.43195
         408740.46    3769614.73       15.05369                     408760.46
3769614.73       15.63172
         408780.46    3769614.73       16.15659                     408800.46
3769614.73       16.63116
         408820.46    3769614.73       17.04727                     408840.46
3769614.73       17.40548
         408860.46    3769614.73       17.71185                     408880.46
3769614.73       17.97424
         408900.46    3769614.73       18.21291                     408600.46
3769634.73       11.18985
         408620.46    3769634.73       11.90132                     408640.46
3769634.73       12.64693
         408660.46    3769634.73       13.41958                     408680.46
3769634.73       14.20823
         408700.46    3769634.73       15.00086                     408720.46
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3769634.73       15.77867
         408740.46    3769634.73       16.52340                       408760.46
3769634.73       17.21447
         408780.46    3769634.73       17.82152                       408800.46
3769634.73       18.37572
         408820.46    3769634.73       18.84713                       408840.46
3769634.73       19.23707
         408860.46    3769634.73       19.55628                       408880.46
3769634.73       19.80297
         408900.46    3769634.73       20.02676                       408920.46
3769634.73       20.24474
         408560.46    3769654.73       10.41554                       408580.46
3769654.73       11.13164
         408600.46    3769654.73       11.90159                       408620.46
3769654.73       12.72469
         408640.46    3769654.73       13.59721                       408660.46
3769654.73       14.51129
         408680.46    3769654.73       15.45346                       408700.46
3769654.73       16.40456
         408720.46    3769654.73       17.34670                       408740.46
3769654.73       18.25381
         408760.46    3769654.73       19.09552                       408780.46
3769654.73       19.83534
         408800.46    3769654.73       20.48343                       408820.46
3769654.73       21.01381
         408840.46    3769654.73       21.42342                       408860.46
3769654.73       21.72466
         408880.46    3769654.73       21.94658                       408900.46
3769654.73       22.13101
         408920.46    3769654.73       22.31208                       408940.46
3769654.73       22.52762
         408540.46    3769674.73       10.23082                       408560.46
3769674.73       10.97489
         408580.46    3769674.73       11.78651                       408600.46
3769674.73       12.66919
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3769674.73       14.65218
         408660.46    3769674.73       15.74171                       408680.46
3769674.73       16.87855
         408700.46    3769674.73       18.03987                       408720.46
3769674.73       19.20428
         408740.46    3769674.73       20.33232                       408760.46
3769674.73       21.37671

*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 408780.46 | 3769674.73 | 22.29148 | 408800.46 | 3769674.73 | 23.06168 |
| 408820.46 | 3769674.73 | 23.66052 | 408840.46 | 3769674.73 | 24.08341 |
| 408860.46 | 3769674.73 | 24.34792 | 408880.46 | 3769674.73 | 24.50419 |
| 408900.46 | 3769674.73 | 24.59791 | 408520.46 | 3769694.73 | 9.97008 |
| 408540.46 | 3769694.73 | 10.72365 | 408560.46 | 3769694.73 | 11.55693 |
| 408580.46 | 3769694.73 | 12.47801 | 408600.46 | 3769694.73 | 13.49320 |
| 408620.46 | 3769694.73 | 14.60753 | 408640.46 | 3769694.73 | 15.82145 |
| 408660.46 | 3769694.73 | 17.12869 | 408680.46 | 3769694.73 | 18.51193 |
| 408700.46 | 3769694.73 | 19.96198 | 408720.46 | 3769694.73 | 21.43450 |
| 408740.46 | 3769694.73 | 22.86928 | 408760.46 | 3769694.73 | 24.19468 |
| 408780.46 | 3769694.73 | 25.35209 | 408800.46 | 3769694.73 | 26.28764 |
| 408820.46 | 3769694.73 | 26.96830 | 408840.46 | 3769694.73 | 27.39233 |
| 408860.46 | 3769694.73 | 27.59274 | 408880.46 | 3769694.73 | 27.61006 |
| 408480.46 | 3769714.73 | 8.97265 | 408500.46 | 3769714.73 | 9.64306 |

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         408520.46    3769714.73       10.39028                    408540.46
3769714.73       11.22495
         408560.46    3769714.73       12.15837                    408580.46
3769714.73       13.20271
         408600.46    3769714.73       14.37026                    408620.46
3769714.73       15.67065
         408640.46    3769714.73       17.11094                    408660.46
3769714.73       18.69365
         408680.46    3769714.73       20.41544                    408700.46
3769714.73       22.24502
         408720.46    3769714.73       24.13533                    408740.46
3769714.73       26.00755
         408760.46    3769714.73       27.75575                    408780.46
3769714.73       29.27344
         408800.46    3769714.73       30.45753                    408820.46
3769714.73       31.25399
         408840.46    3769714.73       31.63852                    408860.46
3769714.73       31.63065
         408460.46    3769734.73        8.61756                    408480.46
3769734.73        9.26608
         408500.46    3769734.73        9.99162                    408520.46
3769734.73       10.80737
         408540.46    3769734.73       11.72840                    408560.46
3769734.73       12.77054
         408580.46    3769734.73       13.95137                    408600.46
3769734.73       15.29118
         408620.46    3769734.73       16.81016                    408640.46
3769734.73       18.52561
         408660.46    3769734.73       20.45460                    408680.46
3769734.73       22.61204
         408700.46    3769734.73       24.95395                    408720.46
3769734.73       27.43709
         408740.46    3769734.73       29.95893                    408760.46
3769734.73       32.35889
         408780.46    3769734.73       34.43547                    408800.46
3769734.73       36.03185
         408820.46    3769734.73       36.99295                    408840.46
3769734.73       37.26245
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3769754.73        8.85285
         408480.46    3769754.73        9.54541                    408500.46
3769754.73       10.32697
         408520.46    3769754.73       11.21358                    408540.46
3769754.73       12.22458
         408560.46    3769754.73       13.38168                    408580.46
3769754.73       14.71020
         408600.46    3769754.73       16.23970                    408620.46
3769754.73       18.01337
         408640.46    3769754.73       20.06223                    408660.46
3769754.73       22.42328
```

 *** MODELOPTs:  RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

  *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL  ***
  INCLUDING SOURCE(S):  L0000001  , L0000002
, L0000003  , L0000004  , L0000005  ,
  L0000006  , L0000007  , L0000008  , L0000009  , L0000010
, L0000011  , L0000012  , L0000013  ,
  L0000014  , L0000015  , L0000016  , L0000017  , L0000018
, L0000019  , L0000020  , L0000021  ,
  L0000022  , L0000023  , L0000024  , L0000025  , L0000026
, L0000027  , L0000028  ,  . . .  ,

  *** DISCRETE CARTESIAN RECEPTOR POINTS
***

  ** CONC OF PM_10  IN MICROGRAMS/M**3
  **

  X-COORD (M)  Y-COORD (M)  CONC  X-COORD (M)
Y-COORD (M)  CONC
 - - -

3769774.73 27.99546
408700.46 3769774.73 31.99271 408720.46
3769774.73 36.57822
408740.46 3769774.73 41.62638 408760.46
3769774.73 46.73477
408780.46 3769774.73 51.52461 408380.46
3769794.73 6.96213
408400.46 3769794.73 7.44210 408420.46
3769794.73 7.97962
408440.46 3769794.73 8.58392 408460.46
3769794.73 9.26672
408480.46 3769794.73 10.04311 408500.46
3769794.73 10.93273
408520.46 3769794.73 11.95689 408540.46
3769794.73 13.14596
408560.46 3769794.73 14.53827 408580.46
3769794.73 16.18265
408600.46 3769794.73 18.15155 408620.46
3769794.73 20.51311
408640.46 3769794.73 23.37788 408660.46
3769794.73 26.88040
408680.46 3769794.73 31.18141 408700.46
3769794.73 36.46180
408720.46 3769794.73 42.86473 408740.46
3769794.73 50.36911
408760.46 3769794.73 58.43452 408380.46
3769814.73 7.04681
408400.46 3769814.73 7.54300 408420.46
3769814.73 8.09712
408440.46 3769814.73 8.72424 408460.46
3769814.73 9.43621
408480.46 3769814.73 10.24908 408500.46
3769814.73 11.18582
408520.46 3769814.73 12.27088 408540.46
3769814.73 13.54348
408560.46 3769814.73 15.05053 408580.46
3769814.73 16.85196
408600.46 3769814.73 19.03258 408620.46
3769814.73 21.70704
408640.46 3769814.73 25.03305 408660.46
3769814.73 29.22918
408680.46 3769814.73 34.59701 408700.46
3769814.73 41.53975
408720.46 3769814.73 50.54644 408740.46
3769814.73 62.06144
408360.46 3769834.73 6.66351 408380.46
3769834.73 7.11535
408400.46 3769834.73 7.62279 408420.46
3769834.73 8.19246
408440.46 3769834.73 8.83796 408460.46

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3769834.73        9.57359
         408480.46    3769834.73       10.41767                       408500.46
3769834.73       11.39400
         408520.46    3769834.73       12.53350                       408540.46
3769834.73       13.87880
         408560.46    3769834.73       15.48459                       408580.46
3769834.73       17.42509
         408600.46    3769834.73       19.80549                       408620.46
3769834.73       22.77667
         408640.46    3769834.73       26.55716                       408660.46
3769834.73       31.47348
↑ *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                  PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
         408680.46    3769834.73       38.02434                       408700.46
3769834.73       46.98746
         408360.46    3769854.73        6.70522                       408380.46
3769854.73        7.16546
         408400.46    3769854.73        7.68022                       408420.46
3769854.73        8.26263
         408440.46    3769854.73        8.92181                       408460.46
3769854.73        9.67491
         408480.46    3769854.73       10.54330                       408500.46
3769854.73       11.54994
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3769854.73       14.13514
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3769854.73       17.87140
         408600.46    3769854.73       20.41802                    408620.46
3769854.73       23.64067
         408640.46    3769854.73       27.81908                    408660.46
3769854.73       33.39641
         408680.46    3769854.73       41.10539                    408700.46
3769854.73       52.23072
         408380.46    3769874.73        7.19001                    408400.46
3769874.73        7.70965
         408500.46    3769874.73       11.64968                    408520.46
3769874.73       12.85911
         408540.46    3769874.73       14.29810                    408560.46
3769874.73       16.03383
         408580.46    3769874.73       18.16144                    408620.46
3769874.73       24.21948
         408640.46    3769874.73       28.68243                    408660.46
3769874.73       34.74829
         408680.46    3769874.73       43.35875                    408700.46
3769874.73       56.30751
         408720.46    3769874.73       77.38893                    408500.46
3769894.73       11.68437
         408520.46    3769894.73       12.90481                    408540.46
3769894.73       14.35850
         408560.46    3769894.73       16.11503                    408620.46
3769894.73       24.45085
         408640.46    3769894.73       29.03399                    408660.46
3769894.73       35.31220
         408680.46    3769894.73       44.32538                    408700.46
3769894.73       58.13050
         408720.46    3769894.73       81.31637                    408680.46
3769914.73       43.76970
         408700.46    3769914.73       57.09630                    408720.46
3769914.73       79.08385
         408740.46    3769914.73      120.22536                    408885.41
3770075.32       31.28324
         408905.41    3770075.32       30.48751                    408925.41
3770075.32       29.58063
         408945.41    3770075.32       28.66659                    408965.41
3770075.32       27.82433
         408685.41    3770095.32       18.84131                    408705.41
3770095.32       20.33363
         408725.41    3770095.32       21.83327                    408745.41
3770095.32       23.28385
         408765.41    3770095.32       24.61123                    408785.41
3770095.32       25.74258
         408805.41    3770095.32       26.60963                    408865.41
3770095.32       27.32739
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         408885.41    3770095.32       27.02627                       408905.41
3770095.32       26.57358
         408925.41    3770095.32       26.01631                       408945.41
3770095.32       25.41416
         408965.41    3770095.32       24.85272                       408985.41
3770095.32       24.35414
         409005.41    3770095.32       23.93022                       409025.41
3770095.32       23.58887
         409045.41    3770095.32       23.32281                       408705.41
3770115.32       18.22241
         408725.41    3770115.32       19.39203                       408745.41
3770115.32       20.50730
         408765.41    3770115.32       21.52033                       408785.41
3770115.32       22.38384
         408805.41    3770115.32       23.06180                       408825.41
3770115.32       23.52514
         408845.41    3770115.32       23.76273                       408865.41
3770115.32       23.78277
         408885.41    3770115.32       23.66291                       408905.41
3770115.32       23.41358
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                   L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                   L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                   L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         408925.41    3770115.32       23.07888                       408945.41
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3770115.32 22.69041
408965.41 3770115.32 22.31039 408985.41
3770115.32 21.95150
409005.41 3770115.32 21.63172 409025.41
3770115.32 21.35633
409045.41 3770115.32 21.12139 408705.41
3770135.32 16.43931
408725.41 3770135.32 17.37017 408745.41
3770135.32 18.24944
408765.41 3770135.32 19.04510 408785.41
3770135.32 19.72731
408805.41 3770135.32 20.27294 408825.41
3770135.32 20.66331
408845.41 3770135.32 20.89242 408865.41
3770135.32 20.96980
408885.41 3770135.32 20.94629 408905.41
3770135.32 20.82207
408925.41 3770135.32 20.62684 408945.41
3770135.32 20.38187
408965.41 3770135.32 20.12033 408985.41
3770135.32 19.86083
409005.41 3770135.32 19.61809 409025.41
3770135.32 19.39538
408725.41 3770155.32 15.67594 408745.41
3770155.32 16.38422
408765.41 3770155.32 17.02447 408785.41
3770155.32 17.57988
408805.41 3770155.32 18.02988 408825.41
3770155.32 18.36098
408845.41 3770155.32 18.57492 408865.41
3770155.32 18.69213
408885.41 3770155.32 18.71335 408905.41
3770155.32 18.66498
408925.41 3770155.32 18.55763 408945.41
3770155.32 18.40741
408965.41 3770155.32 18.22791 408985.41
3770155.32 18.04099
409005.41 3770155.32 17.85664 409025.41
3770155.32 17.67617
409045.41 3770155.32 17.49622 408745.41
3770175.32 14.82094
408765.41 3770175.32 15.34743 408785.41
3770175.32 15.80457
408805.41 3770175.32 16.18044 408825.41
3770175.32 16.47375
408845.41 3770175.32 16.68278 408865.41
3770175.32 16.80646
408885.41 3770175.32 16.85487 408905.41
3770175.32 16.85116
408925.41 3770175.32 16.79810 408945.41

```
3770175.32       16.70645
         408965.41    3770175.32       16.58655                       408985.41
3770175.32       16.45138
         409005.41    3770175.32       16.30819                       409025.41
3770175.32       16.16002
         409045.41    3770175.32       16.00702                       409065.41
3770175.32       15.84564
         409085.41    3770175.32       15.67880                       409105.41
3770175.32       15.49041
         409125.41    3770175.32       15.27533                       408765.41
3770195.32       13.93491
         408785.41    3770195.32       14.31759                       408805.41
3770195.32       14.63792
         408825.41    3770195.32       14.89784                       408845.41
3770195.32       15.09190
         408865.41    3770195.32       15.21631                       408885.41
3770195.32       15.28147
         408905.41    3770195.32       15.30549                       408925.41
3770195.32       15.28761
         408945.41    3770195.32       15.23422                       408965.41
3770195.32       15.15509
         408985.41    3770195.32       15.05699                       409005.41
3770195.32       14.94482
         409025.41    3770195.32       14.82166                       409045.41
3770195.32       14.69014
         409065.41    3770195.32       14.54567                       409085.41
3770195.32       14.39185
         409105.41    3770195.32       14.21831                       409125.41
3770195.32       14.02129
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 409145.41 | 3770195.32 | 13.80215 | 409165.41 | 3770195.32 | 13.55348 |
| 409185.41 | 3770195.32 | 13.27640 | 409205.41 | 3770195.32 | 12.97158 |
| 408785.41 | 3770215.32 | 13.05602 | 408805.41 | 3770215.32 | 13.33600 |
| 408825.41 | 3770215.32 | 13.56317 | 408845.41 | 3770215.32 | 13.73495 |
| 408865.41 | 3770215.32 | 13.85728 | 408885.41 | 3770215.32 | 13.93322 |
| 408905.41 | 3770215.32 | 13.97536 | 408925.41 | 3770215.32 | 13.98039 |
| 408945.41 | 3770215.32 | 13.95232 | 408965.41 | 3770215.32 | 13.89978 |
| 408985.41 | 3770215.32 | 13.82816 | 409005.41 | 3770215.32 | 13.74055 |
| 409025.41 | 3770215.32 | 13.63741 | 409045.41 | 3770215.32 | 13.52295 |
| 409065.41 | 3770215.32 | 13.39654 | 409085.41 | 3770215.32 | 13.25430 |
| 409105.41 | 3770215.32 | 13.09649 | 409125.41 | 3770215.32 | 12.92019 |
| 409145.41 | 3770215.32 | 12.71893 | 409165.41 | 3770215.32 | 12.49807 |
| 409185.41 | 3770215.32 | 12.25167 | 409205.41 | 3770215.32 | 11.98152 |
| 409225.41 | 3770215.32 | 11.69038 | 408805.41 | 3770235.32 | 12.21650 |
| 408825.41 | 3770235.32 | 12.41498 | 408845.41 | 3770235.32 | 12.57020 |
| 408865.41 | 3770235.32 | 12.68820 | 408885.41 | 3770235.32 | 12.77263 |
| 408905.41 | 3770235.32 | 12.82219 | 408925.41 | 3770235.32 | 12.83948 |
| 408945.41 | 3770235.32 | 12.82865 | 408965.41 | 3770235.32 | 12.79483 |
| 408985.41 | 3770235.32 | 12.74191 | 409005.41 | 3770235.32 | 12.67258 |
| 409025.41 | 3770235.32 | 12.58841 | 409045.41 | 3770235.32 | 12.48827 |
| 409065.41 | 3770235.32 | 12.37514 | 409085.41 | 3770235.32 | 12.24809 |

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         409105.41    3770235.32       12.10554                       409125.41
3770235.32       11.94546
         409145.41    3770235.32       11.76612                       409165.41
3770235.32       11.56808
         409185.41    3770235.32       11.34886                       409205.41
3770235.32       11.10937
         409225.41    3770235.32       10.85135                       409245.41
3770235.32       10.57722
         408805.41    3770255.32       11.24722                       408825.41
3770255.32       11.42234
         408845.41    3770255.32       11.56400                       408865.41
3770255.32       11.67513
         408885.41    3770255.32       11.76105                       408905.41
3770255.32       11.81313
         408925.41    3770255.32       11.83760                       408945.41
3770255.32       11.83865
         408965.41    3770255.32       11.81786                       408985.41
3770255.32       11.77860
         409005.41    3770255.32       11.72273                       409025.41
3770255.32       11.65221
         409045.41    3770255.32       11.56686                       409065.41
3770255.32       11.46598
         409085.41    3770255.32       11.35266                       409105.41
3770255.32       11.22432
         409125.41    3770255.32       11.07953                       409145.41
3770255.32       10.91931
         409165.41    3770255.32       10.74167                       409185.41
3770255.32       10.54646
         409205.41    3770255.32       10.33419                       409225.41
3770255.32       10.10577
         409245.41    3770255.32        9.86324                       409265.41
3770255.32        9.60564
         409365.41    3770255.32        8.22416                       409385.41
3770255.32        7.94380
         408825.41    3770275.32       10.56106                       408845.41
3770275.32       10.69138
         408865.41    3770275.32       10.79342                       408885.41
3770275.32       10.87159
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                             *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
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                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - -
         408905.41    3770275.32       10.92308                     408925.41
3770275.32       10.95253
         408945.41    3770275.32       10.96219                     408965.41
3770275.32       10.94964
         408985.41    3770275.32       10.92032                     409005.41
3770275.32       10.87576
         409025.41    3770275.32       10.81641                     409045.41
3770275.32       10.74273
         409065.41    3770275.32       10.65421                     409085.41
3770275.32       10.55257
         409105.41    3770275.32       10.43724                     409125.41
3770275.32       10.30694
         409145.41    3770275.32       10.16299                     409165.41
3770275.32       10.00363
         409185.41    3770275.32        9.82966                     409205.41
3770275.32        9.64034
         409225.41    3770275.32        9.43696                     409245.41
3770275.32        9.22112
         409265.41    3770275.32        8.99387                     409345.41
3770275.32        8.01907
         409365.41    3770275.32        7.76773                     409385.41
3770275.32        7.51749
         409405.41    3770275.32        7.27082                     408845.41
3770295.32        9.91857
         408865.41    3770295.32       10.01219                     408885.41
3770295.32       10.08585
         408905.41    3770295.32       10.13749                     408925.41
3770295.32       10.16914
         408945.41    3770295.32       10.18224                     408965.41
3770295.32       10.17598
         408985.41    3770295.32       10.15453                     409005.41
3770295.32       10.11828
         409025.41    3770295.32       10.06765                     409045.41
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3770295.32       10.00334
         409065.41    3770295.32        9.92561                      409085.41
3770295.32        9.83516
         409105.41    3770295.32        9.73170                      409125.41
3770295.32        9.61479
         409145.41    3770295.32        9.48465                      409165.41
3770295.32        9.34178
         409185.41    3770295.32        9.18609                      409205.41
3770295.32        9.01785
         409225.41    3770295.32        8.83590                      409245.41
3770295.32        8.64373
         409265.41    3770295.32        8.44344                      409285.41
3770295.32        8.23473
         409305.41    3770295.32        8.01795                      409325.41
3770295.32        7.79623
         409345.41    3770295.32        7.57447                      409365.41
3770295.32        7.35053
         409385.41    3770295.32        7.12581                      409405.41
3770295.32        6.90199
         409425.41    3770295.32        6.68206                      408865.41
3770315.32        9.31846
         408885.41    3770315.32        9.38768                      408905.41
3770315.32        9.43821
         408925.41    3770315.32        9.47049                      408945.41
3770315.32        9.48530
         408965.41    3770315.32        9.48364                      408985.41
3770315.32        9.46800
         409005.41    3770315.32        9.43802                      409025.41
3770315.32        9.39457
         409045.41    3770315.32        9.33831                      409065.41
3770315.32        9.26983
         409085.41    3770315.32        9.18917                      409105.41
3770315.32        9.09640
         409125.41    3770315.32        8.99150                      409145.41
3770315.32        8.87437
         409165.41    3770315.32        8.74607                      409185.41
3770315.32        8.60628
         409205.41    3770315.32        8.45581                      409225.41
3770315.32        8.29425
         409245.41    3770315.32        8.12263                      409265.41
3770315.32        7.94420
         409285.41    3770315.32        7.75751                      409305.41
3770315.32        7.56233
         409325.41    3770315.32        7.36512                      409345.41
3770315.32        7.16743
         409365.41    3770315.32        6.96667                      409385.41
3770315.32        6.76368
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 409405.41 | 3770315.32 | 6.56022 | 409425.41 | 3770315.32 | 6.36260 |
| 409445.41 | 3770315.32 | 6.16593 | 408885.41 | 3770335.32 | 8.76406 |
| 408905.41 | 3770335.32 | 8.81169 | 408925.41 | 3770335.32 | 8.84384 |
| 408945.41 | 3770335.32 | 8.86030 | 408965.41 | 3770335.32 | 8.86178 |
| 408985.41 | 3770335.32 | 8.84999 | 409005.41 | 3770335.32 | 8.82500 |
| 409025.41 | 3770335.32 | 8.78748 | 409045.41 | 3770335.32 | 8.73781 |
| 409065.41 | 3770335.32 | 8.67647 | 409085.41 | 3770335.32 | 8.60503 |
| 409105.41 | 3770335.32 | 8.52237 | 409125.41 | 3770335.32 | 8.42822 |
| 409145.41 | 3770335.32 | 8.32333 | 409165.41 | 3770335.32 | 8.20790 |
| 409185.41 | 3770335.32 | 8.08229 | 409205.41 | 3770335.32 | 7.94705 |
| 409225.41 | 3770335.32 | 7.80290 | 409245.41 | 3770335.32 | 7.64996 |
| 409265.41 | 3770335.32 | 7.48956 | 409285.41 | 3770335.32 | 7.32202 |

409305.41 3770335.32 7.14723 409325.41
3770335.32 6.97103
409345.41 3770335.32 6.79404 409365.41
3770335.32 6.61276
409385.41 3770335.32 6.42834 409405.41
3770335.32 6.24315
409425.41 3770335.32 6.06435 409445.41
3770335.32 5.88682
409465.41 3770335.32 5.71061 408905.41
3770355.32 8.24888
408925.41 3770355.32 8.27955 408945.41
3770355.32 8.29677
408965.41 3770355.32 8.30037 408985.41
3770355.32 8.29169
409005.41 3770355.32 8.27075 409025.41
3770355.32 8.23801
409045.41 3770355.32 8.19442 409065.41
3770355.32 8.13993
409085.41 3770355.32 8.07591 409105.41
3770355.32 8.00194
409125.41 3770355.32 7.91763 409145.41
3770355.32 7.82331
409165.41 3770355.32 7.71942 409185.41
3770355.32 7.60647
409205.41 3770355.32 7.48497 409225.41
3770355.32 7.35523
409245.41 3770355.32 7.21798 409265.41
3770355.32 7.07357
409285.41 3770355.32 6.92288 409305.41
3770355.32 6.76807
409325.41 3770355.32 6.60911 409345.41
3770355.32 6.44753
409365.41 3770355.32 6.28277 409385.41
3770355.32 6.11606
409405.41 3770355.32 5.94928 409425.41
3770355.32 5.78595
409445.41 3770355.32 5.62454 409465.41
3770355.32 5.46457
409485.41 3770355.32 5.30630 408905.41
3770375.32 7.74091
408925.41 3770375.32 7.76976 408945.41
3770375.32 7.78699
408965.41 3770375.32 7.79204 408985.41
3770375.32 7.78576
409005.41 3770375.32 7.76807 409025.41
3770375.32 7.73939
409045.41 3770375.32 7.70157 409065.41
3770375.32 7.65330
409085.41 3770375.32 7.59562 409105.41
3770375.32 7.52886

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

| X-COORD (M) | Y-COORD (M) | CONC | X-COORD (M) | Y-COORD (M) | CONC |
|---|---|---|---|---|---|
| 409245.41 | 3770375.32 | 6.82292 | 409265.41 | 3770375.32 | 6.69270 |
| 409285.41 | 3770375.32 | 6.55694 | 409305.41 | 3770375.32 | 6.41802 |
| 409325.41 | 3770375.32 | 6.27439 | 409345.41 | 3770375.32 | 6.12753 |
| 409365.41 | 3770375.32 | 5.97792 | 409385.41 | 3770375.32 | 5.82703 |
| 409405.41 | 3770375.32 | 5.67652 | 409425.41 | 3770375.32 | 5.52714 |
| 409445.41 | 3770375.32 | 5.37957 | 409465.41 | 3770375.32 | 5.23363 |
| 409485.41 | 3770375.32 | 5.08920 | 408925.41 | 3770395.32 | 7.30798 |
| 408945.41 | 3770395.32 | 7.32397 | 408965.41 | | |

3770395.32 7.32980
408985.41 3770395.32 7.32537 409005.41
3770395.32 7.31092
409025.41 3770395.32 7.28670 409045.41
3770395.32 7.25291
409065.41 3770395.32 7.21009 409085.41
3770395.32 7.15851
409105.41 3770395.32 7.09837 409125.41
3770395.32 7.02985
409165.41 3770395.32 6.86876 409185.41
3770395.32 6.77685
409205.41 3770395.32 6.67782 409225.41
3770395.32 6.57223
409245.41 3770395.32 6.46051 409265.41
3770395.32 6.34344
409285.41 3770395.32 6.22101 409305.41
3770395.32 6.09305
409325.41 3770395.32 5.96325 409345.41
3770395.32 5.83163
409365.41 3770395.32 5.69675 409385.41
3770395.32 5.55983
409405.41 3770395.32 5.42331 409425.41
3770395.32 5.28674
409445.41 3770395.32 5.15096 409465.41
3770395.32 5.01680
408945.41 3770415.32 6.90335 408965.41
3770415.32 6.90954
408985.41 3770415.32 6.90614 409005.41
3770415.32 6.89387
409025.41 3770415.32 6.87292 409045.41
3770415.32 6.84303
409065.41 3770415.32 6.80503 409085.41
3770415.32 6.75884
409105.41 3770415.32 6.70461 409185.41
3770415.32 6.41380
409205.41 3770415.32 6.32415 409225.41
3770415.32 6.22861
409245.41 3770415.32 6.12760 409265.41
3770415.32 6.02145
409285.41 3770415.32 5.91053 409305.41
3770415.32 5.79540
409325.41 3770415.32 5.67574 409345.41
3770415.32 5.55564
409365.41 3770415.32 5.43405 409385.41
3770415.32 5.31089
409405.41 3770415.32 5.18620 409425.41
3770415.32 5.06111
408965.41 3770435.32 6.52607 408985.41
3770435.32 6.52336
409005.41 3770435.32 6.51245 409025.41

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                 ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         409005.41    3770455.32        6.16349                      409025.41
3770455.32        6.14723
         409045.41    3770455.32        6.12397                      409225.41
3770455.32        5.62004
         409245.41    3770455.32        5.53692                      409265.41
3770455.32        5.44930

409285.41 3770455.32 5.35730 409305.41
3770455.32 5.26098
409325.41 3770455.32 5.16222 409345.41
3770455.32 5.06249
409365.41 3770455.32 4.96125 409385.41
3770455.32 4.85853
408985.41 3770475.32 5.85099 409005.41
3770475.32 5.84311
409025.41 3770475.32 5.82869 409245.41
3770475.32 5.27347
409265.41 3770475.32 5.19355 409285.41
3770475.32 5.11009
409305.41 3770475.32 5.02247 409325.41
3770475.32 4.93283
409345.41 3770475.32 4.84156 409365.41
3770475.32 4.74872
409005.41 3770495.32 5.54811 409265.41
3770495.32 4.95570
409285.41 3770495.32 4.88015 409305.41
3770495.32 4.80106
409325.41 3770495.32 4.71931 409285.41
3770515.32 4.66617
409305.41 3770515.32 4.59493 409620.32
3769917.48 7.69618
409594.45 3769937.88 8.37122 409641.70
3769936.39 7.15357
409617.33 3769956.28 7.68796 409558.14
3769968.22 9.36285
409518.34 3769997.07 10.50386 409513.37
3770011.50 10.46565
409533.76 3770024.43 9.53892 409551.67
3770011.00 9.14713
409573.06 3769996.08 8.65509 409557.64
3770022.94 8.82318
409573.06 3770033.39 8.27774 409598.43
3770016.47 7.80130
409609.87 3770032.39 7.40411 409595.94
3770037.86 7.67040
409585.00 3770047.31 7.83047 409619.32
3770048.81 7.06826
409656.63 3770027.42 6.49984 409680.50
3770017.47 6.13185
409693.93 3770013.99 5.92618 409708.86
3770011.50 5.70349
409607.88 3770068.21 7.14716 409589.47
3770065.72 7.53117
409579.53 3770065.72 7.75075 409552.17
3770058.26 8.51020
408953.25 3769647.96 21.97669 408703.21
3769848.54 52.45685

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         408758.17    3769919.06      189.24188                      408757.25
3769928.22      163.00724
         408629.03    3769906.24       26.20722                      408596.97
3769864.11       20.13633
         408548.43    3769905.32       15.00509                      408501.72
3769896.17       11.75536
         408462.34    3769854.95        9.75230                      408378.08
3769883.34        7.13471
         408352.44    3769866.86        6.54746                      408352.44
3769829.31        6.48106
         408378.28    3769790.74        6.89442                      408664.62
3769570.02       10.72847
         408755.60    3769593.88       14.09893                      408812.27
3769570.02       13.82056
         408871.92    3769584.94       15.60868                      408658.51
3770080.18       18.13424
         409005.15    3770499.71        5.48649                      409148.50
3770383.08        7.18945
         409289.43    3770534.53        4.46199                      409506.48
3770366.88        5.02265
         409379.33    3770230.01        8.63626                      409302.39
3770294.80        8.06362
         409203.58    3770183.84       13.63201                      409149.31
3770186.27       14.29188
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  51
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                   L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                   L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                   L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
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Y-COORD (M)        CONC
 - - -

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        408780.46   3769594.73       12.47576  (16093007)               408800.46
3769594.73       13.26672  (16093007)
        408820.46   3769594.73       14.12477  (16093007)               408840.46
3769594.73       15.23796  (15022109)
        408860.46   3769594.73       16.96690  (15022109)               408880.46
3769594.73       18.65995  (15022109)
        408620.46   3769614.73       12.73600  (12022717)               408640.46
3769614.73       12.76429  (12022717)
        408660.46   3769614.73       12.73704  (12022717)               408680.46
3769614.73       12.64694  (12022717)
        408700.46   3769614.73       12.48784  (12022717)               408720.46
3769614.73       12.25101  (12022717)
        408740.46   3769614.73       11.92865  (12022717)               408760.46
3769614.73       12.18447  (16093007)
        408780.46   3769614.73       12.97232  (16093007)               408800.46
3769614.73       13.83605  (16093007)
        408820.46   3769614.73       14.78167  (16093007)               408840.46
3769614.73       15.81680  (16093007)
        408860.46   3769614.73       17.10530  (15022109)               408880.46
3769614.73       19.21731  (15022109)
        408900.46   3769614.73       21.31157  (15022109)               408600.46
3769634.73       14.34435  (12022717)
        408620.46   3769634.73       14.59741  (12022717)               408640.46
3769634.73       14.81142  (12022717)
        408660.46   3769634.73       14.97836  (12022717)               408680.46
3769634.73       15.08850  (12022717)
        408700.46   3769634.73       15.13242  (12022717)               408720.46
3769634.73       15.09715  (12022717)
        408740.46   3769634.73       14.97088  (12022717)               408760.46
3769634.73       14.74050  (12022717)
        408780.46   3769634.73       14.38908  (12022717)               408800.46
3769634.73       14.40962  (16093007)
        408820.46   3769634.73       15.44899  (16093007)               408840.46
3769634.73       16.59609  (16093007)
        408860.46   3769634.73       17.86453  (16093007)               408880.46
3769634.73       19.33011  (15022109)
        408900.46   3769634.73       21.94351  (15022109)               408920.46
3769634.73       24.56683  (15022109)
        408560.46   3769654.73       14.88803  (12022717)               408580.46
3769654.73       15.36719  (12022717)
        408600.46   3769654.73       15.83621  (12022717)               408620.46
3769654.73       16.28954  (12022717)
        408640.46   3769654.73       16.72065  (12022717)               408660.46
3769654.73       17.12139  (12022717)
        408680.46   3769654.73       17.48102  (12022717)               408700.46
3769654.73       17.78682  (12022717)
        408720.46   3769654.73       18.02808  (12022717)               408740.46
3769654.73       18.18905  (12022717)
        408760.46   3769654.73       18.25104  (12022717)               408780.46
3769654.73       18.19076  (12022717)
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        408800.46   3769654.73       17.99981  (12022717)               408820.46
3769654.73       17.65089  (12022717)
        408840.46   3769654.73       17.38015  (16093007)               408860.46
3769654.73       18.78384  (16093007)
        408880.46   3769654.73       20.34724  (16093007)               408900.46
3769654.73       22.09391  (16093007)
        408920.46   3769654.73       25.29610  (15022109)               408940.46
3769654.73       28.65787  (15022109)
        408540.46   3769674.73       15.09100  (12022717)               408560.46
3769674.73       15.72357  (12022717)
        408580.46   3769674.73       16.36868  (12022717)               408600.46
3769674.73       17.02326  (12022717)
        408620.46   3769674.73       17.68424  (12022717)               408640.46
3769674.73       18.34644  (12022717)
        408660.46   3769674.73       19.00297  (12022717)               408680.46
3769674.73       19.64428  (12022717)
        408700.46   3769674.73       20.25934  (12022717)               408720.46
3769674.73       20.83929  (12022717)
        408740.46   3769674.73       21.36662  (12022717)               408760.46
3769674.73       21.81976  (12022717)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE  53
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE1   ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
        408780.46   3769674.73       22.17421  (12022717)               408800.46
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3769674.73 22.41113 (12022717)
408820.46 3769674.73 22.49716 (12022717) 408840.46
3769674.73 22.39630 (12022717)
408860.46 3769674.73 22.06755 (12022717) 408880.46
3769674.73 21.47298 (12022717)
408900.46 3769674.73 23.43151 (16093007) 408520.46
3769694.73 14.69232 (12022717)
408540.46 3769694.73 15.42134 (12022717) 408560.46
3769694.73 16.18314 (12022717)
408580.46 3769694.73 16.97780 (12022717) 408600.46
3769694.73 17.80427 (12022717)
408620.46 3769694.73 18.66158 (12022717) 408640.46
3769694.73 19.54747 (12022717)
408660.46 3769694.73 20.45806 (12022717) 408680.46
3769694.73 21.38709 (12022717)
408700.46 3769694.73 22.33447 (12022717) 408720.46
3769694.73 23.28796 (12022717)
408740.46 3769694.73 24.23149 (12022717) 408760.46
3769694.73 25.14530 (12022717)
408780.46 3769694.73 26.01281 (12022717) 408800.46
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408820.46 3769694.73 27.50218 (12022717) 408840.46
3769694.73 28.05455 (12022717)
408860.46 3769694.73 28.41840 (12022717) 408880.46
3769694.73 28.51872 (12022717)
408480.46 3769714.73 13.05906 (12022717) 408500.46
3769714.73 13.78101 (12022717)
408520.46 3769714.73 14.54722 (12022717) 408540.46
3769714.73 15.36022 (12022717)
408560.46 3769714.73 16.22232 (12022717) 408580.46
3769714.73 17.13582 (12022717)
408600.46 3769714.73 18.10301 (12022717) 408620.46
3769714.73 19.12544 (12022717)
408640.46 3769714.73 20.20504 (12022717) 408660.46
3769714.73 21.34415 (12022717)
408680.46 3769714.73 22.54575 (12022717) 408700.46
3769714.73 23.80622 (12022717)
408720.46 3769714.73 25.12293 (12022717) 408740.46
3769714.73 26.48756 (12022717)
408760.46 3769714.73 27.88870 (12022717) 408780.46
3769714.73 29.31729 (12022717)
408800.46 3769714.73 30.75473 (12022717) 408820.46
3769714.73 32.18210 (12022717)
408840.46 3769714.73 33.56413 (12022717) 408860.46
3769714.73 34.84044 (12022717)
408460.46 3769734.73 11.79003 (12022717) 408480.46
3769734.73 12.49030 (12022717)
408500.46 3769734.73 13.23956 (12022717) 408520.46
3769734.73 14.04232 (12022717)
408540.46 3769734.73 14.90338 (12022717) 408560.46

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3769734.73       15.82694  (12022717)
        408580.46   3769734.73       16.81725  (12022717)                408600.46
3769734.73       17.87978  (12022717)
        408620.46   3769734.73       19.02021  (12022717)                408640.46
3769734.73       20.24425  (12022717)
        408660.46   3769734.73       21.56016  (12022717)                408680.46
3769734.73       22.97984  (12022717)
        408700.46   3769734.73       24.49890  (12022717)                408720.46
3769734.73       26.12733  (12022717)
        408740.46   3769734.73       27.86739  (12022717)                408760.46
3769734.73       29.71892  (12022717)
        408780.46   3769734.73       31.68255  (12022717)                408800.46
3769734.73       33.76531  (12022717)
        408820.46   3769734.73       35.95809  (12022717)                408840.46
3769734.73       38.24467  (12022717)
        408440.46   3769754.73       10.32555  (12022717)                408460.46
3769754.73       10.96670  (12022717)
        408480.46   3769754.73       11.65778  (12022717)                408500.46
3769754.73       12.40286  (12022717)
        408520.46   3769754.73       13.20731  (12022717)                408540.46
3769754.73       14.07710  (12022717)
        408560.46   3769754.73       15.01807  (12022717)                408580.46
3769754.73       16.03642  (12022717)
        408600.46   3769754.73       17.13962  (12022717)                408620.46
3769754.73       18.34003  (12022717)
        408640.46   3769754.73       19.64500  (12022717)                408660.46
3769754.73       21.06623  (12022717)
        408680.46   3769754.73       22.62085  (12022717)                408700.46
3769754.73       24.31155  (12022717)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                   PAGE  54
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE1   ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 408720.46 | 3769754.73 | 26.15962 | (12022717) | 408740.46 | 3769754.73 | 28.17853 | (12022717) |
| 408760.46 | 3769754.73 | 30.37973 | (12022717) | 408780.46 | 3769754.73 | 32.77056 | (12022717) |
| 408800.46 | 3769754.73 | 35.40907 | (12022717) | 408400.46 | 3769774.73 | 8.27227 | (12022717) |
| 408420.46 | 3769774.73 | 8.79162 | (12022717) | 408440.46 | 3769774.73 | 9.35196 | (12022717) |
| 408460.46 | 3769774.73 | 9.95768 | (12022717) | 408480.46 | 3769774.73 | 10.61352 | (12022717) |
| 408500.46 | 3769774.73 | 11.32481 | (12022717) | 408520.46 | 3769774.73 | 12.09680 | (12022717) |
| 408540.46 | 3769774.73 | 12.93638 | (12022717) | 408560.46 | 3769774.73 | 13.85074 | (12022717) |
| 408580.46 | 3769774.73 | 14.84785 | (12022717) | 408600.46 | 3769774.73 | 15.93911 | (12022717) |
| 408620.46 | 3769774.73 | 17.13439 | (12022717) | 408640.46 | 3769774.73 | 18.44595 | (12022717) |
| 408660.46 | 3769774.73 | 19.88887 | (12022717) | 408680.46 | 3769774.73 | 21.48150 | (12022717) |
| 408700.46 | 3769774.73 | 23.24020 | (12022717) | 408720.46 | 3769774.73 | 25.18744 | (12022717) |
| 408740.46 | 3769774.73 | 27.34324 | (12022717) | 408760.46 | 3769774.73 | 29.72752 | (12022717) |
| 408780.46 | 3769774.73 | 32.39959 | (12022717) | 408380.46 | 3769794.73 | 9.00508 | (12120215) |
| 408400.46 | 3769794.73 | 9.44497 | (12120215) | 408420.46 | 3769794.73 | 9.91492 | (12120215) |
| 408440.46 | 3769794.73 | 10.41879 | (12120215) | 408460.46 | 3769794.73 | 10.96056 | (12120215) |
| 408480.46 | 3769794.73 | 11.54359 | (12120215) | 408500.46 | 3769794.73 | 12.17020 | (12120215) |
| 408520.46 | 3769794.73 | 12.84864 | (12120215) | 408540.46 | 3769794.73 | 13.58240 | (12120215) |
| 408560.46 | 3769794.73 | 14.37696 | (12120215) | 408580.46 | 3769794.73 | 15.23930 | (12120215) |
| 408600.46 | 3769794.73 | 16.17021 | (12120215) | 408620.46 | 3769794.73 | 17.19038 | (12120215) |
| 408640.46 | 3769794.73 | 18.30705 | (12120215) | 408660.46 | 3769794.73 | 19.53108 | (12120215) |
| 408680.46 | 3769794.73 | 20.87823 | (12120215) | 408700.46 | 3769794.73 | 22.35976 | (12120215) |

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        408720.46   3769794.73       24.00209  (12120215)                408740.46
3769794.73       25.83549  (12120215)
        408760.46   3769794.73       27.88551  (12120215)                408380.46
3769814.73       10.20456  (12120215)
        408400.46   3769814.73       10.71997  (12120215)                408420.46
3769814.73       11.27962  (12120215)
        408440.46   3769814.73       11.87750  (12120215)                408460.46
3769814.73       12.52155  (12120215)
        408480.46   3769814.73       13.21882  (12120215)                408500.46
3769814.73       13.97110  (12120215)
        408520.46   3769814.73       14.79021  (12120215)                408540.46
3769814.73       15.67665  (12120215)
        408560.46   3769814.73       16.63936  (12120215)                408580.46
3769814.73       17.69067  (12120215)
        408600.46   3769814.73       18.84036  (12120215)                408620.46
3769814.73       20.10077  (12120215)
        408640.46   3769814.73       21.48710  (12120215)                408660.46
3769814.73       23.01742  (12120215)
        408680.46   3769814.73       24.71368  (12120215)                408700.46
3769814.73       26.60175  (12120215)
        408720.46   3769814.73       28.70910  (12120215)                408740.46
3769814.73       31.07281  (12120215)
        408360.46   3769834.73       10.76800  (12120215)                408380.46
3769834.73       11.32370  (12120215)
        408400.46   3769834.73       11.91194  (12120215)                408420.46
3769834.73       12.54871  (12120215)
        408440.46   3769834.73       13.23260  (12120215)                408460.46
3769834.73       13.97037  (12120215)
        408480.46   3769834.73       14.76872  (12120215)                408500.46
3769834.73       15.63458  (12120215)
        408520.46   3769834.73       16.57560  (12120215)                408540.46
3769834.73       17.59786  (12120215)
        408560.46   3769834.73       18.71228  (12120215)                408580.46
3769834.73       19.93244  (12120215)
        408600.46   3769834.73       21.27206  (12120215)                408620.46
3769834.73       22.74491  (12120215)
        408640.46   3769834.73       24.37001  (12120215)                408660.46
3769834.73       26.16949  (12120215)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                        ***        14:11:35

                                   PAGE  55
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE1   ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
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                L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                      ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        408680.46   3769834.73       28.17042  (12120215)               408700.46
3769834.73       30.40919  (12120215)
        408360.46   3769854.73       11.70327  (12120215)               408380.46
3769854.73       12.30690  (12120215)
        408400.46   3769854.73       12.95982  (12120215)               408420.46
3769854.73       13.65525  (12120215)
        408440.46   3769854.73       14.40956  (12120215)               408460.46
3769854.73       15.22352  (12120215)
        408480.46   3769854.73       16.10127  (12120215)               408500.46
3769854.73       17.05701  (12120215)
        408520.46   3769854.73       18.09081  (12120215)               408540.46
3769854.73       19.21832  (12120215)
        408560.46   3769854.73       20.45113  (12120215)               408580.46
3769854.73       21.95575  (12033117)
        408600.46   3769854.73       23.61804  (12033117)               408620.46
3769854.73       25.45492  (12033117)
        408640.46   3769854.73       27.49151  (12033117)               408660.46
3769854.73       29.75743  (12033117)
        408680.46   3769854.73       32.28685  (12033117)               408700.46
3769854.73       35.11852  (12033117)
        408380.46   3769874.73       13.58463  (12033117)               408400.46
3769874.73       14.40696  (12033117)
        408500.46   3769874.73       19.66777  (12033117)               408520.46
3769874.73       21.01144  (12033117)
        408540.46   3769874.73       22.47929  (12033117)               408560.46
3769874.73       24.08625  (12033117)
        408580.46   3769874.73       25.84997  (12033117)               408620.46
3769874.73       29.93460  (12033117)
        408640.46   3769874.73       32.30536  (12033117)               408660.46
3769874.73       34.93701  (12033117)
        408680.46   3769874.73       37.86660  (12033117)               408700.46
3769874.73       41.13964  (12033117)
        408720.46   3769874.73       44.81002  (12033117)               408500.46
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3769894.73       22.46757  (12033117)
        408520.46   3769894.73       23.96910  (12033117)                408540.46
3769894.73       25.60449  (12033117)
        408560.46   3769894.73       27.38921  (12033117)                408620.46
3769894.73       33.83556  (12033117)
        408640.46   3769894.73       36.42657  (12033117)                408660.46
3769894.73       39.28866  (12033117)
        408680.46   3769894.73       42.45592  (12033117)                408700.46
3769894.73       45.97380  (12033117)
        408720.46   3769894.73       49.89020  (12033117)                408680.46
3769914.73       45.55627  (12033117)
        408700.46   3769914.73       49.06921  (12033117)                408720.46
3769914.73       52.93668  (12033117)
        408740.46   3769914.73       57.20650  (12033117)                408885.41
3770075.32       25.66291  (12111616)
        408905.41   3770075.32       27.30457  (12111616)                408925.41
3770075.32       28.60247  (12111616)
        408945.41   3770075.32       29.40597  (12111616)                408965.41
3770075.32       29.56254  (12111616)
        408685.41   3770095.32       14.23403  (12033117)                408705.41
3770095.32       14.10686  (12020617)
        408725.41   3770095.32       15.06619  (12020617)                408745.41
3770095.32       16.00212  (12020617)
        408765.41   3770095.32       16.88802  (12020617)                408785.41
3770095.32       17.69245  (12020617)
        408805.41   3770095.32       18.37710  (12020617)                408865.41
3770095.32       22.62197  (12111616)
        408885.41   3770095.32       23.86784  (12111616)                408905.41
3770095.32       24.83320  (12111616)
        408925.41   3770095.32       25.40392  (12111616)                408945.41
3770095.32       25.46048  (12111616)
        408965.41   3770095.32       28.82369  (15022217)                408985.41
3770095.32       36.30223  (15022217)
        409005.41   3770095.32       44.36515  (15022217)                409025.41
3770095.32       52.40575  (15022217)
        409045.41   3770095.32       59.58095  (15022217)                408705.41
3770115.32       13.85802  (12020617)
        408725.41   3770115.32       14.59573  (12020617)                408745.41
3770115.32       15.27276  (12020617)
        408765.41   3770115.32       15.86286  (12020617)                408785.41
3770115.32       16.35513  (12111616)
        408805.41   3770115.32       17.67477  (12111616)                408825.41
3770115.32       18.93588  (12111616)
        408845.41   3770115.32       20.07852  (12111616)                408865.41
3770115.32       21.03561  (12111616)
        408885.41   3770115.32       21.75329  (12111616)                408905.41
3770115.32       22.14396  (12111616)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE1 ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , L0000029 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 408925.41 | 3770115.32 | 22.13238 | (12111616) | 408945.41 | 3770115.32 | 23.58088 | (15022217) |
| 408965.41 | 3770115.32 | 29.65691 | (15022217) | 408985.41 | 3770115.32 | 36.32177 | (15022217) |
| 409005.41 | 3770115.32 | 43.17840 | (15022217) | 409025.41 | 3770115.32 | 49.64847 | (15022217) |
| 409045.41 | 3770115.32 | 55.00830 | (15022217) | 408705.41 | 3770135.32 | 13.32250 | (12020617) |
| 408725.41 | 3770135.32 | 13.83470 | (12020617) | 408745.41 | 3770135.32 | 14.25933 | (12020617) |
| 408765.41 | 3770135.32 | 14.91283 | (12111616) | 408785.41 | 3770135.32 | 15.99764 | (12111616) |
| 408805.41 | 3770135.32 | 17.01929 | (12111616) | 408825.41 | 3770135.32 | 17.93050 | (12111616) |
| 408845.41 | 3770135.32 | 18.67916 | (12111616) | 408865.41 | 3770135.32 | 19.21453 | (12111616) |
| 408885.41 | 3770135.32 | 19.47527 | (12111616) | 408905.41 | 3770135.32 | 19.41084 | (12111616) |
| 408925.41 | 3770135.32 | 19.61510 | (15011115) | 408945.41 | 3770135.32 | 24.47677 | (15022217) |
| 408965.41 | 3770135.32 | 30.01210 | (15022217) | 408985.41 | 3770135.32 | 35.83982 | (15022217) |
| 409005.41 | 3770135.32 | 41.56228 | (15022217) | 409025.41 | 3770135.32 | 46.65958 | (15022217) |

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        408725.41   3770155.32       12.84971  (12020617)               408745.41
3770155.32       13.64401  (12111616)
        408765.41   3770155.32       14.54213  (12111616)               408785.41
3770155.32       15.37888  (12111616)
        408805.41   3770155.32       16.10884  (12111616)               408825.41
3770155.32       16.69117  (12111616)
        408845.41   3770155.32       17.09109  (12111616)               408865.41
3770155.32       17.26466  (12111616)
        408885.41   3770155.32       17.16538  (12111616)               408905.41
3770155.32       17.20570  (15011115)
        408925.41   3770155.32       20.37920  (15022217)               408945.41
3770155.32       25.00206  (15022217)
        408965.41   3770155.32       29.95931  (15022217)               408985.41
3770155.32       34.96869  (15022217)
        409005.41   3770155.32       39.65994  (15022217)               409025.41
3770155.32       43.58477  (15022217)
        409045.41   3770155.32       46.26969  (15022217)               408745.41
3770175.32       13.27209  (12111616)
        408765.41   3770175.32       13.95407  (12111616)               408785.41
3770175.32       14.54170  (12111616)
        408805.41   3770175.32       15.00069  (12111616)               408825.41
3770175.32       15.30279  (12111616)
        408845.41   3770175.32       15.41237  (12111616)               408865.41
3770175.32       15.29374  (12111616)
        408885.41   3770175.32       15.20635  (15011115)               408905.41
3770175.32       17.10992  (15022217)
        408925.41   3770175.32       20.98842  (15022217)               408945.41
3770175.32       25.20410  (15022217)
        408965.41   3770175.32       29.57095  (15022217)               408985.41
3770175.32       33.80907  (15022217)
        409005.41   3770175.32       37.58641  (15022217)               409025.41
3770175.32       40.52764  (15022217)
        409045.41   3770175.32       42.26564  (15022217)               409065.41
3770175.32       42.50437  (15022217)
        409085.41   3770175.32       41.07590  (15022217)               409105.41
3770175.32       38.01962  (15022217)
        409125.41   3770175.32       36.68766  (16123116)               408765.41
3770195.32       13.19289  (12111616)
        408785.41   3770195.32       13.55104  (12111616)               408805.41
3770195.32       13.77376  (12111616)
        408825.41   3770195.32       13.83752  (12111616)               408845.41
3770195.32       13.71312  (12111616)
        408865.41   3770195.32       13.52646  (15011115)               408885.41
3770195.32       14.62597  (15011115)
        408905.41   3770195.32       17.74418  (15022217)               408925.41
3770195.32       21.34085  (15022217)
        408945.41   3770195.32       25.12827  (15022217)               408965.41
3770195.32       28.91704  (15022217)
        408985.41   3770195.32       32.44704  (15022217)               409005.41
3770195.32       35.43009  (15022217)
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE1 ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , L0000029 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 409145.41 | 3770195.32 | 39.10359 | (16123116) | 409165.41 | 3770195.32 | 42.11580 | (16123116) |
| 409185.41 | 3770195.32 | 42.27627 | (16123116) | 409205.41 | 3770195.32 | 39.53565 | (16123116) |
| 408785.41 | 3770215.32 | 12.46280 | (12111616) | 408805.41 | 3770215.32 | 12.49171 | (12111616) |
| 408825.41 | 3770215.32 | 12.35818 | (12111616) | 408845.41 | 3770215.32 | 12.09526 | (15011115) |
| 408865.41 | 3770215.32 | 13.08513 | (15011115) | 408885.41 | 3770215.32 | 15.09932 | (15022217) |
| 408905.41 | 3770215.32 | 18.17509 | (15022217) | 408925.41 | 3770215.32 | 21.46523 | (15022217) |
| 408945.41 | 3770215.32 | 24.82283 | (15022217) | 408965.41 | 3770215.32 | 28.06085 | (15022217) |
| 408985.41 | 3770215.32 | 30.95311 | (15022217) | 409005.41 | | | |

3770215.32 33.25672 (15022217)
409025.41 3770215.32 34.72366 (15022217) 409045.41
3770215.32 35.14652 (15022217)
409065.41 3770215.32 34.40466 (15022217) 409085.41
3770215.32 32.48820 (15022217)
409105.41 3770215.32 29.50837 (15022217) 409125.41
3770215.32 31.34959 (16123116)
409145.41 3770215.32 35.90931 (16123116) 409165.41
3770215.32 38.53310 (16123116)
409185.41 3770215.32 38.70123 (16123116) 409205.41
3770215.32 36.37189 (16123116)
409225.41 3770215.32 31.98433 (16123116) 408805.41
3770235.32 11.19295 (12111616)
408825.41 3770235.32 10.90950 (12111616) 408845.41
3770235.32 11.77074 (15011115)
408865.41 3770235.32 12.92042 (15022217) 408885.41
3770235.32 15.56523 (15022217)
408905.41 3770235.32 18.42009 (15022217) 408925.41
3770235.32 21.38897 (15022217)
408945.41 3770235.32 24.32891 (15022217) 408965.41
3770235.32 27.06390 (15022217)
408985.41 3770235.32 29.39488 (15022217) 409005.41
3770235.32 31.11563 (15022217)
409025.41 3770235.32 32.04045 (15022217) 409045.41
3770235.32 32.03026 (15022217)
409065.41 3770235.32 31.00563 (15022217) 409085.41
3770235.32 28.99777 (15022217)
409105.41 3770235.32 26.13684 (15022217) 409125.41
3770235.32 29.11300 (16123116)
409145.41 3770235.32 33.11349 (16123116) 409165.41
3770235.32 35.41259 (16123116)
409185.41 3770235.32 35.58557 (16123116) 409205.41
3770235.32 33.59271 (16123116)
409225.41 3770235.32 29.78848 (16123116) 409245.41
3770235.32 27.84432 (15011116)
408805.41 3770255.32 9.92455 (12111616) 408825.41
3770255.32 10.62028 (15011115)
408845.41 3770255.32 11.30703 (15011115) 408865.41
3770255.32 13.39818 (15022217)
408885.41 3770255.32 15.88020 (15022217) 408905.41
3770255.32 18.49732 (15022217)
408925.41 3770255.32 21.14448 (15022217) 408945.41
3770255.32 23.68867 (15022217)
408965.41 3770255.32 25.96669 (15022217) 408985.41
3770255.32 27.80772 (15022217)
409005.41 3770255.32 29.04185 (15022217) 409025.41
3770255.32 29.53216 (15022217)
409045.41 3770255.32 29.19276 (15022217) 409065.41
3770255.32 27.97995 (15022217)
409085.41 3770255.32 25.94574 (15022217) 409105.41

3770255.32       24.19833  (12021917)
        409125.41   3770255.32       27.11231  (16123116)                409145.41
3770255.32       30.64302  (16123116)
        409165.41   3770255.32       32.67145  (16123116)                409185.41
3770255.32       32.84733  (16123116)
        409205.41   3770255.32       31.13327  (16123116)                409225.41
3770255.32       27.81693  (16123116)
        409245.41   3770255.32       25.74989  (15011116)                409265.41
3770255.32       24.40122  (16013017)
        409365.41   3770255.32       24.51977  (16020617)                409385.41
3770255.32       23.17311  (16020617)
        408825.41   3770275.32       10.24440  (15011115)                408845.41
3770275.32       11.58792  (15022217)
        408865.41   3770275.32       13.74996  (15022217)                408885.41
3770275.32       16.05571  (15022217)

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  SLINE1   ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002 , L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010 , L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018 , L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026 , L0000027    , L0000028    , L0000029    ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - -

409025.41 3770275.32 27.20929 (15022217) 409045.41
3770275.32 26.61405 (15022217)
409065.41 3770275.32 25.28455 (15022217) 409085.41
3770275.32 23.27088 (15022217)
409105.41 3770275.32 22.66281 (12021917) 409125.41
3770275.32 25.31473 (16123116)
409145.41 3770275.32 28.44691 (16123116) 409165.41
3770275.32 30.24789 (16123116)
409185.41 3770275.32 30.42543 (16123116) 409205.41
3770275.32 28.94311 (16123116)
409225.41 3770275.32 26.07146 (16123116) 409245.41
3770275.32 23.94847 (15011116)
409265.41 3770275.32 22.91079 (16013017) 409345.41
3770275.32 23.60590 (16020617)
409365.41 3770275.32 22.98685 (16020617) 409385.41
3770275.32 21.95033 (16020617)
409405.41 3770275.32 20.53734 (16020617) 408845.41
3770295.32 11.95471 (15022217)
408865.41 3770295.32 13.98588 (15022217) 408885.41
3770295.32 16.10624 (15022217)
408905.41 3770295.32 18.23483 (15022217) 408925.41
3770295.32 20.27303 (15022217)
408945.41 3770295.32 22.10788 (15022217) 408965.41
3770295.32 23.61031 (15022217)
408985.41 3770295.32 24.66757 (15022217) 409005.41
3770295.32 25.17635 (15022217)
409025.41 3770295.32 25.06049 (15022217) 409045.41
3770295.32 24.28833 (15022217)
409065.41 3770295.32 22.88419 (15022217) 409085.41
3770295.32 20.91957 (15022217)
409105.41 3770295.32 21.26834 (12021917) 409125.41
3770295.32 23.69292 (16123116)
409145.41 3770295.32 26.48444 (16123116) 409165.41
3770295.32 28.09311 (16123116)
409185.41 3770295.32 28.26947 (16123116) 409205.41
3770295.32 26.98177 (16123116)
409225.41 3770295.32 24.47718 (16123116) 409245.41
3770295.32 22.25677 (15011116)
409265.41 3770295.32 21.30157 (16013017) 409285.41
3770295.32 20.39287 (16020617)
409305.41 3770295.32 21.33128 (16020617) 409325.41
3770295.32 21.86468 (16020617)
409345.41 3770295.32 21.83257 (16020617) 409365.41
3770295.32 21.41847 (16020617)
409385.41 3770295.32 20.67539 (16020617) 409405.41
3770295.32 19.64039 (16020617)
409425.41 3770295.32 18.31185 (16020617) 408865.41
3770315.32 14.11624 (15022217)
408885.41 3770315.32 16.04682 (15022217) 408905.41
3770315.32 17.93843 (15022217)

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        408925.41   3770315.32       19.69871  (15022217)               408945.41
3770315.32       21.22408  (15022217)
        408965.41   3770315.32       22.40898  (15022217)               408985.41
3770315.32       23.16212  (15022217)
        409005.41   3770315.32       23.40123  (15022217)               409025.41
3770315.32       23.07669  (15022217)
        409045.41   3770315.32       22.17990  (15022217)               409065.41
3770315.32       20.74155  (15022217)
        409085.41   3770315.32       18.84708  (15022217)               409105.41
3770315.32       19.99781  (12021917)
        409125.41   3770315.32       22.22294  (16123116)               409145.41
3770315.32       24.72345  (16123116)
        409165.41   3770315.32       26.16759  (16123116)               409185.41
3770315.32       26.34156  (16123116)
        409205.41   3770315.32       25.21724  (16123116)               409225.41
3770315.32       22.95658  (16123116)
        409245.41   3770315.32       20.62985  (15011116)               409265.41
3770315.32       19.87624  (15011116)
        409285.41   3770315.32       19.08266  (16013017)               409305.41
3770315.32       19.47981  (16020617)
        409325.41   3770315.32       20.05826  (16020617)               409345.41
3770315.32       20.14820  (16020617)
        409365.41   3770315.32       19.92435  (16020617)               409385.41
3770315.32       19.44874  (16020617)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                  PAGE  59
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE1   ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    , L0000029    ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
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Y-COORD (M)        CONC     (YYMMDDHH)
 - - -
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3770355.32       23.04913  (16123116)
        409205.41   3770355.32       22.18180  (16123116)                409225.41
3770355.32       20.39306  (16123116)
        409245.41   3770355.32       17.91173  (16123116)                409265.41
3770355.32       17.50068  (15011116)
        409285.41   3770355.32       17.07705  (16013017)                409305.41
3770355.32       16.16372  (16020617)
        409325.41   3770355.32       16.81813  (16020617)                409345.41
3770355.32       17.18178  (16020617)
        409365.41   3770355.32       17.39333  (12110815)                409385.41
3770355.32       17.57393  (12110815)
        409405.41   3770355.32       17.15428  (12110815)                409425.41
3770355.32       16.09786  (16020617)
        409445.41   3770355.32       15.19536  (16020617)                409465.41
3770355.32       14.23677  (13041318)
        409485.41   3770355.32       14.12803  (15102517)                408905.41
3770375.32       16.60658  (15022217)
        408925.41   3770375.32       17.65694  (15022217)                408945.41
3770375.32       18.44639  (15022217)
        408965.41   3770375.32       18.91335  (15022217)                408985.41
3770375.32       19.01475  (15022217)
        409005.41   3770375.32       18.71984  (15022217)                409025.41
3770375.32       18.02979  (15022217)
        409045.41   3770375.32       16.97204  (15022217)                409065.41
3770375.32       15.59164  (15022217)
        409085.41   3770375.32       15.96350  (12021917)                409105.41
3770375.32       16.80032  (12021917)
        409125.41   3770375.32       18.55400  (16123116)                409145.41
3770375.32       20.39766  (16123116)
        409165.41   3770375.32       21.47042  (16123116)                409185.41
3770375.32       21.63541  (16123116)
        409205.41   3770375.32       20.86975  (16123116)                409225.41
3770375.32       19.27013  (16123116)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                  PAGE  60
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE1   ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
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, L0000027    , L0000028    , L0000029    ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10    IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 409245.41 | 3770375.32 | 17.03327 | (16123116) | 409265.41 | 3770375.32 | 16.45686 | (15011116) |
| 409285.41 | 3770375.32 | 16.16489 | (16013017) | 409305.41 | 3770375.32 | 15.32102 | (16013017) |
| 409325.41 | 3770375.32 | 15.45693 | (16020617) | 409345.41 | 3770375.32 | 15.91449 | (16020617) |
| 409365.41 | 3770375.32 | 16.37319 | (12110815) | 409385.41 | 3770375.32 | 16.69470 | (12110815) |
| 409405.41 | 3770375.32 | 16.40690 | (12110815) | 409425.41 | 3770375.32 | 15.56472 | (12110815) |
| 409445.41 | 3770375.32 | 14.58660 | (16020617) | 409465.41 | 3770375.32 | 13.71069 | (16020617) |
| 409485.41 | 3770375.32 | 13.01040 | (13041318) | 408925.41 | 3770395.32 | 16.92505 | (15022217) |
| 408945.41 | 3770395.32 | 17.52271 | (15022217) | 408965.41 | 3770395.32 | 17.81577 | (15022217) |
| 408985.41 | 3770395.32 | 17.77009 | (15022217) | 409005.41 | 3770395.32 | 17.37083 | (15022217) |
| 409025.41 | 3770395.32 | 16.62412 | (15022217) | 409045.41 | 3770395.32 | 15.55810 | (15022217) |
| 409065.41 | 3770395.32 | 14.22373 | (15022217) | 409085.41 | 3770395.32 | 15.18488 | (12021917) |
| 409105.41 | 3770395.32 | 15.90311 | (12021917) | 409125.41 | 3770395.32 | 17.53277 | (16123116) |
| 409165.41 | 3770395.32 | 20.18981 | (16123116) | 409185.41 | 3770395.32 | 20.35106 | (16123116) |
| 409205.41 | 3770395.32 | 19.67292 | (16123116) | 409225.41 | 3770395.32 | 18.23791 | (16123116) |
| 409245.41 | 3770395.32 | 16.21556 | (16123116) | 409265.41 | 3770395.32 | 15.47421 | (15011116) |
| 409285.41 | 3770395.32 | 15.24311 | (16013017) | 409305.41 | 3770395.32 | 14.78397 | (16013017) |
| 409325.41 | 3770395.32 | 14.28378 | (16020617) | 409345.41 | 3770395.32 | 14.73191 | (16020617) |
| 409365.41 | 3770395.32 | 15.15355 | (12110815) | 409385.41 | 3770395.32 | 15.60492 | (12110815) |
| 409405.41 | 3770395.32 | 15.48001 | (12110815) | 409425.41 | 3770395.32 | 14.92913 | (12110815) |

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        409445.41   3770395.32       13.98272  (12110815)                409465.41
3770395.32       13.21997  (16020617)
        408945.41   3770415.32       16.62014  (15022217)                408965.41
3770415.32       16.76679  (15022217)
        408985.41   3770415.32       16.60213  (15022217)                409005.41
3770415.32       16.12076  (15022217)
        409025.41   3770415.32       15.33528  (15022217)                409045.41
3770415.32       14.27660  (15022217)
        409065.41   3770415.32       13.47728  (12021917)                409085.41
3770415.32       14.46073  (12021917)
        409105.41   3770415.32       15.07688  (12021917)                409185.41
3770415.32       19.18044  (16123116)
        409205.41   3770415.32       18.57820  (16123116)                409225.41
3770415.32       17.28695  (16123116)
        409245.41   3770415.32       15.45351  (16123116)                409265.41
3770415.32       14.57173  (15011116)
        409285.41   3770415.32       14.43786  (16013017)                409305.41
3770415.32       14.02278  (16013017)
        409325.41   3770415.32       13.29230  (16013017)                409345.41
3770415.32       13.69075  (16020617)
        409365.41   3770415.32       14.15769  (12110815)                409385.41
3770415.32       14.52488  (12110815)
        409405.41   3770415.32       14.59365  (12110815)                409425.41
3770415.32       14.28978  (12110815)
        408965.41   3770435.32       15.76696  (15022217)                408985.41
3770435.32       15.50742  (15022217)
        409005.41   3770435.32       14.97518  (15022217)                409025.41
3770435.32       14.16181  (15022217)
        409045.41   3770435.32       13.11526  (15022217)                409065.41
3770435.32       12.91618  (12021917)
        409205.41   3770435.32       17.57419  (16123116)                409225.41
3770435.32       16.40895  (16123116)
        409245.41   3770435.32       14.74244  (16123116)                409265.41
3770435.32       13.73729  (15011116)
        409285.41   3770435.32       13.69776  (16013017)                409305.41
3770435.32       13.33306  (16013017)
        409325.41   3770435.32       12.83936  (16013017)                409345.41
3770435.32       12.71165  (16020617)
        409365.41   3770435.32       13.21341  (12110815)                409385.41
3770435.32       13.57659  (12110815)
        409405.41   3770435.32       13.78832  (12110815)                408985.41
3770455.32       14.48126  (15022217)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  61
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE1 ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , L0000029 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 409005.41 | 3770455.32 | 13.90509 | (15022217) | 409025.41 | 3770455.32 | 13.08285 | (15022217) |
| 409045.41 | 3770455.32 | 12.06213 | (15022217) | 409225.41 | 3770455.32 | 15.60178 | (16123116) |
| 409245.41 | 3770455.32 | 14.07870 | (16123116) | 409265.41 | 3770455.32 | 12.96203 | (15011116) |
| 409285.41 | 3770455.32 | 13.00655 | (16013017) | 409305.41 | 3770455.32 | 12.90539 | (16013017) |
| 409325.41 | 3770455.32 | 12.36428 | (16013017) | 409345.41 | 3770455.32 | 11.77551 | (16020617) |
| 409365.41 | 3770455.32 | 12.28178 | (12110815) | 409385.41 | 3770455.32 | 12.84546 | (12110815) |
| 408985.41 | 3770475.32 | 13.52245 | (15022217) | 409005.41 | 3770475.32 | 12.90951 | (15022217) |
| 409025.41 | 3770475.32 | 12.09117 | (15022217) | 409245.41 | 3770475.32 | 13.51100 | (16123116) |
| 409265.41 | 3770475.32 | 12.28800 | (15011116) | 409285.41 | 3770475.32 | 12.38397 | (16013017) |
| 409305.41 | 3770475.32 | 12.32693 | (16013017) | 409325.41 | 3770475.32 | 11.84965 | (16013017) |
| 409345.41 | 3770475.32 | 11.01765 | (16013017) | 409365.41 | 3770475.32 | 11.35674 | (12110815) |
| 409005.41 | 3770495.32 | 11.99334 | (15022217) | 409265.41 | 3770495.32 | 11.69023 | (15011116) |
| 409285.41 | 3770495.32 | 11.80214 | (16013017) | 409305.41 | 3770495.32 | 11.71111 | (16013017) |
| 409325.41 | 3770495.32 | 11.31248 | (16013017) | 409285.41 | 3770515.32 | 11.22850 | (16013017) |
| 409305.41 | 3770515.32 | 11.07890 | (16013017) | 409620.32 | | | |

3769917.48  46.43471  (12043018)
  409594.45  3769937.88  55.92996  (12043018)  409641.70
3769936.39  45.62170  (12043018)
  409617.33  3769956.28  52.82295  (12043018)  409558.14
3769968.22  63.90343  (12043018)
  409518.34  3769997.07  73.58322  (12121716)  409513.37
3770011.50  72.85016  (12121716)
  409533.76  3770024.43  65.70104  (12121716)  409551.67
3770011.00  64.14375  (12121716)
  409573.06  3769996.08  58.61060  (12121716)  409557.64
3770022.94  61.66903  (12121716)
  409573.06  3770033.39  57.72626  (12121716)  409598.43
3770016.47  53.91399  (12121716)
  409609.87  3770032.39  51.76229  (12121716)  409595.94
3770037.86  53.67715  (12121716)
  409585.00  3770047.31  53.82311  (12121716)  409619.32
3770048.81  48.98675  (12121716)
  409656.63  3770027.42  43.40210  (12121716)  409680.50
3770017.47  40.35060  (12043018)
  409693.93  3770013.99  39.50517  (12043018)  409708.86
3770011.50  38.21649  (12043018)
  409607.88  3770068.21  48.66375  (12121716)  409589.47
3770065.72  50.26660  (12121716)
  409579.53  3770065.72  50.88964  (12121716)  409552.17
3770058.26  54.28892  (12121716)
  408953.25  3769647.96  32.33546  (12021216)  408703.21
3769848.54  33.50777  (12033117)
  408758.17  3769919.06  61.56810  (12033117)  408757.25
3769928.22  61.30113  (12033117)
  408629.03  3769906.24  36.77674  (12033117)  408596.97
3769864.11  25.28629  (12033117)
  408548.43  3769905.32  27.77866  (12033117)  408501.72
3769896.17  22.74793  (12033117)
  408462.34  3769854.95  15.31544  (12120215)  408378.08
3769883.34  14.37052  (12033117)
  408352.44  3769866.86  11.95765  (12120215)  408352.44
3769829.31  10.28338  (12120215)
  408378.28  3769790.74  8.71681  (12120215)  408664.62
3769570.02  8.66969  (16093007)
  408755.60  3769593.88  11.55600  (16093007)  408812.27
3769570.02  13.07357  (15022109)
  408871.92  3769584.94  17.62924  (15022109)  408658.51
3770080.18  18.17988  (12033117)
  409005.15  3770499.71  11.81174  (15022217)  409148.50
3770383.08  20.13666  (16123116)
  409289.43  3770534.53  10.62873  (16013017)  409506.48
3770366.88  13.67981  (15102517)
  409379.33  3770230.01  25.23155  (16020617)  409302.39
3770294.80  21.26289  (16020617)
  409203.58  3770183.84  41.94681  (16123116)  409149.31

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  SLINE1   ***
                                    INCLUDING SOURCE(S):     L0000001    , L0000002 , L0000003    , L0000004    , L0000005    ,
                                       L0000006    , L0000007    , L0000008    , L0000009    , L0000010 , L0000011    , L0000012    , L0000013    ,
                                       L0000014    , L0000015    , L0000016    , L0000017    , L0000018 , L0000019    , L0000020    , L0000021    ,
                                       L0000022    , L0000023    , L0000024    , L0000025    , L0000026 , L0000027    , L0000028    , L0000029    ,

                                                  *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10    IN MICROGRAMS/M**3
                      **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
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                L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                      ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        408660.46   3769574.73       54.21469  (12111715)               408680.46
3769574.73       54.47868  (12111715)
        408820.46   3769574.73       39.19580  (12101116)               408640.46
3769594.73       54.07361  (12111715)
        408660.46   3769594.73       58.49597  (12111715)               408680.46
3769594.73       60.29667  (12111715)
        408700.46   3769594.73       61.76493  (12021515)               408720.46
3769594.73       63.82482  (12021515)
        408740.46   3769594.73       62.22781  (12021515)               408760.46
3769594.73       57.01636  (12021515)
        408780.46   3769594.73       48.97847  (12021515)               408800.46
3769594.73       39.23503  (12021515)
        408820.46   3769594.73       43.41847  (12101116)               408840.46
3769594.73       46.79446  (12101116)
        408860.46   3769594.73       47.45740  (12101116)               408880.46
3769594.73       54.52131  (12042618)
        408620.46   3769614.73       48.12212  (12111715)               408640.46
3769614.73       56.08501  (12111715)
        408660.46   3769614.73       62.51861  (12111715)               408680.46
3769614.73       66.30859  (12111715)
        408700.46   3769614.73       66.67976  (12111715)               408720.46
3769614.73       70.42514  (12021515)
        408740.46   3769614.73       70.07253  (12021515)               408760.46
3769614.73       65.33441  (12021515)
        408780.46   3769614.73       56.79558  (12021515)               408800.46
3769614.73       45.85233  (12021515)
        408820.46   3769614.73       48.41666  (12101116)               408840.46
3769614.73       52.09241  (12101116)
        408860.46   3769614.73       54.76337  (12042618)               408880.46
3769614.73       62.28805  (12042618)
        408900.46   3769614.73       66.62304  (12042618)               408600.46
3769634.73       37.86379  (12111715)
        408620.46   3769634.73       47.51593  (12111715)               408640.46
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3769634.73       57.25953  (12111715)
        408660.46   3769634.73       65.97239  (12111715)                408680.46
3769634.73       72.28380  (12111715)
        408700.46   3769634.73       74.97768  (12111715)                408720.46
3769634.73       77.57843  (12021515)
        408740.46   3769634.73       79.01348  (12021515)                408760.46
3769634.73       75.08883  (12021515)
        408780.46   3769634.73       66.22159  (12021515)                408800.46
3769634.73       53.96820  (12021515)
        408820.46   3769634.73       54.39940  (12101116)                408840.46
3769634.73       58.40601  (12101116)
        408860.46   3769634.73       63.73457  (12042618)                408880.46
3769634.73       71.51877  (12042618)
        408900.46   3769634.73       75.24649  (12042618)                408920.46
3769634.73       74.94441  (12042618)
        408560.46   3769654.73       22.52523  (12021216)                408580.46
3769654.73       26.99896  (12021216)
        408600.46   3769654.73       35.25418  (12111715)                408620.46
3769654.73       45.90041  (12111715)
        408640.46   3769654.73       57.39173  (12111715)                408660.46
3769654.73       68.59433  (12111715)
        408680.46   3769654.73       77.88412  (12111715)                408700.46
3769654.73       83.38222  (12111715)
        408720.46   3769654.73       84.97845  (12021515)                408740.46
3769654.73       89.01898  (12021515)
        408760.46   3769654.73       86.60090  (12021515)                408780.46
3769654.73       77.73210  (12021515)
        408800.46   3769654.73       64.04550  (12021515)                408820.46
3769654.73       61.64635  (12101116)
        408840.46   3769654.73       65.99855  (12101116)                408860.46
3769654.73       74.48400  (12042618)
        408880.46   3769654.73       82.40975  (12042618)                408900.46
3769654.73       84.99434  (12042618)
        408920.46   3769654.73       83.79588  (12120216)                408940.46
3769654.73       84.77673  (12120216)
        408540.46   3769674.73       19.85811  (15022109)                408560.46
3769674.73       22.13209  (15022109)
        408580.46   3769674.73       25.94949  (12021216)                408600.46
3769674.73       31.87044  (12111715)
        408620.46   3769674.73       43.19376  (12111715)                408640.46
3769674.73       56.24407  (12111715)
        408660.46   3769674.73       69.98902  (12111715)                408680.46
3769674.73       82.66496  (12111715)
        408700.46   3769674.73       92.00510  (12111715)                408720.46
3769674.73       95.93799  (12111715)
        408740.46   3769674.73      100.33974  (12021515)                408760.46
3769674.73      100.25151  (12021515)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE2 ***
INCLUDING SOURCE(S): L0000030 , L0000031 , L0000032 , L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 , L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 , L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 , L0000057 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 408780.46 | 3769674.73 | 91.86557 | (12021515) | 408800.46 | 3769674.73 | 76.68862 | (12021515) |
| 408820.46 | 3769674.73 | 70.53085 | (12101116) | 408840.46 | 3769674.73 | 75.25132 | (12101116) |
| 408860.46 | 3769674.73 | 87.81946 | (12042618) | 408880.46 | 3769674.73 | 95.45208 | (12042618) |
| 408900.46 | 3769674.73 | 95.97222 | (12042618) | 408520.46 | 3769694.73 | 18.87528 | (16093007) |
| 408540.46 | 3769694.73 | 20.40806 | (16093007) | 408560.46 | 3769694.73 | 22.72675 | (15022109) |
| 408580.46 | 3769694.73 | 25.59389 | (15022109) | 408600.46 | 3769694.73 | 30.23064 | (12021216) |
| 408620.46 | 3769694.73 | 39.37295 | (12111715) | 408640.46 | 3769694.73 | 53.62296 | (12111715) |
| 408660.46 | 3769694.73 | 69.80457 | (12111715) | 408680.46 | 3769694.73 | 86.19991 | (12111715) |
| 408700.46 | 3769694.73 | 100.30404 | (12111715) | 408720.46 | 3769694.73 | 109.07704 | (12111715) |
| 408740.46 | 3769694.73 | 113.00853 | (12021515) | 408760.46 | 3769694.73 | 116.47205 | (12021515) |
| 408780.46 | 3769694.73 | 109.39118 | (12021515) | 408800.46 | 3769694.73 | 92.78018 | (12021515) |
| 408820.46 | 3769694.73 | 81.60096 | (12101116) | 408840.46 | 3769694.73 | 89.44160 | (12042618) |

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        408860.46   3769694.73      104.45850  (12042618)              408880.46
3769694.73      111.19380  (12042618)
        408480.46   3769714.73       20.07942  (12022717)              408500.46
3769714.73       19.70546  (12022717)
        408520.46   3769714.73       19.87015  (16093007)              408540.46
3769714.73       21.59563  (16093007)
        408560.46   3769714.73       23.52885  (16093007)              408580.46
3769714.73       26.26953  (15022109)
        408600.46   3769714.73       29.94544  (15022109)              408620.46
3769714.73       35.69559  (12021216)
        408640.46   3769714.73       49.42788  (12111715)              408660.46
3769714.73       67.65438  (12111715)
        408680.46   3769714.73       87.92150  (12111715)              408700.46
3769714.73      107.60708  (12111715)
        408720.46   3769714.73      122.91865  (12111715)              408740.46
3769714.73      129.31957  (12111715)
        408760.46   3769714.73      135.76627  (12021515)              408780.46
3769714.73      131.38080  (12021515)
        408800.46   3769714.73      113.65575  (12021515)              408820.46
3769714.73       95.73469  (12101116)
        408840.46   3769714.73      109.24890  (12042618)              408860.46
3769714.73      125.27658  (12042618)
        408460.46   3769734.73       24.83106  (12022717)              408480.46
3769734.73       25.18873  (12022717)
        408500.46   3769734.73       25.34318  (12022717)              408520.46
3769734.73       25.26193  (12022717)
        408540.46   3769734.73       24.91230  (12022717)              408560.46
3769734.73       24.99066  (16093007)
        408580.46   3769734.73       27.48096  (16093007)              408600.46
3769734.73       30.71223  (15022109)
        408620.46   3769734.73       35.52556  (15022109)              408640.46
3769734.73       43.66563  (12111715)
        408660.46   3769734.73       63.19784  (12111715)              408680.46
3769734.73       86.91553  (12111715)
        408700.46   3769734.73      112.77178  (12111715)              408720.46
3769734.73      136.40520  (12111715)
        408740.46   3769734.73      151.37420  (12111715)              408760.46
3769734.73      158.64396  (12021515)
        408780.46   3769734.73      159.24442  (12021515)              408800.46
3769734.73      141.29812  (12021515)
        408820.46   3769734.73      114.24578  (12101116)              408840.46
3769734.73      135.50541  (12042618)
        408440.46   3769754.73       28.14076  (12022717)              408460.46
3769754.73       29.24406  (12022717)
        408480.46   3769754.73       30.28442  (12022717)              408500.46
3769754.73       31.19219  (12022717)
        408520.46   3769754.73       31.92581  (12022717)              408540.46
3769754.73       32.43556  (12022717)
        408560.46   3769754.73       32.61416  (12022717)              408580.46
3769754.73       32.33064  (12022717)
```

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE2   ***
                                   INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                  L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                  L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                  L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        408720.46   3769754.73      147.78367  (12111715)                408740.46
3769754.73      175.00896  (12111715)
        408760.46   3769754.73      185.93850  (12111715)                408780.46
3769754.73      194.96820  (12021515)
        408800.46   3769754.73      178.90574  (12021515)                408400.46
3769774.73       27.80153  (12022717)
        408420.46   3769774.73       29.48159  (12022717)                408440.46
3769774.73       31.22462  (12022717)
        408460.46   3769774.73       33.01348  (12022717)                408480.46
3769774.73       34.83737  (12022717)
        408500.46   3769774.73       36.68103  (12022717)                408520.46
3769774.73       38.45313  (12022717)
        408540.46   3769774.73       40.12504  (12022717)                408560.46
3769774.73       41.59798  (12022717)
        408580.46   3769774.73       42.73819  (12022717)                408600.46

3769774.73 43.48181 (12022717)
408620.46 3769774.73 43.57219 (12022717) 408640.46
3769774.73 44.72289 (16093007)
408660.46 3769774.73 52.75608 (15022109) 408680.46
3769774.73 74.25795 (12111715)
408700.46 3769774.73 111.08651 (12111715) 408720.46
3769774.73 155.22651 (12111715)
408740.46 3769774.73 198.31166 (12111715) 408760.46
3769774.73 226.60499 (12111715)
408780.46 3769774.73 241.74803 (12021515) 408380.46
3769794.73 26.84501 (12022717)
408400.46 3769794.73 28.78961 (12022717) 408420.46
3769794.73 30.90559 (12022717)
408440.46 3769794.73 33.19255 (12022717) 408460.46
3769794.73 35.63690 (12022717)
408480.46 3769794.73 38.24111 (12022717) 408500.46
3769794.73 41.07079 (12022717)
408520.46 3769794.73 43.97349 (12022717) 408540.46
3769794.73 47.00080 (12022717)
408560.46 3769794.73 50.11826 (12022717) 408580.46
3769794.73 53.22484 (12022717)
408600.46 3769794.73 56.51524 (12022717) 408620.46
3769794.73 59.31576 (12022717)
408640.46 3769794.73 61.30315 (12022717) 408660.46
3769794.73 62.13476 (12022717)
408680.46 3769794.73 66.65645 (15022109) 408700.46
3769794.73 101.66056 (12111715)
408720.46 3769794.73 155.81963 (12111715) 408740.46
3769794.73 219.31762 (12111715)
408760.46 3769794.73 274.21366 (12111715) 408380.46
3769814.73 26.44458 (12022717)
408400.46 3769814.73 28.68364 (12022717) 408420.46
3769814.73 31.04708 (12022717)
408440.46 3769814.73 33.73189 (12022717) 408460.46
3769814.73 36.72196 (12022717)
408480.46 3769814.73 39.96151 (12022717) 408500.46
3769814.73 43.62236 (12022717)
408520.46 3769814.73 47.53011 (12022717) 408540.46
3769814.73 51.95618 (12022717)
408560.46 3769814.73 56.90776 (12022717) 408580.46
3769814.73 62.30769 (12022717)
408600.46 3769814.73 68.19352 (12022717) 408620.46
3769814.73 74.54678 (12022717)
408640.46 3769814.73 81.17057 (12022717) 408660.46
3769814.73 87.59039 (12022717)
408680.46 3769814.73 92.82877 (12022717) 408700.46
3769814.73 95.37713 (12022717)
408720.46 3769814.73 147.03843 (12111715) 408740.46
3769814.73 232.39991 (12111715)
408360.46 3769834.73 23.12778 (12022717) 408380.46

3769834.73       25.03421  (12022717)
        408400.46   3769834.73       27.33653  (12022717)                408420.46
3769834.73       29.84756  (12022717)
        408440.46   3769834.73       32.70932  (12022717)                408460.46
3769834.73       35.94875  (12022717)
        408480.46   3769834.73       39.61440  (12022717)                408500.46
3769834.73       43.77048  (12022717)
        408520.46   3769834.73       48.50995  (12022717)                408540.46
3769834.73       54.00448  (12022717)
        408560.46   3769834.73       60.40527  (12022717)                408580.46
3769834.73       67.79706  (12022717)
        408600.46   3769834.73       76.27382  (12022717)                408620.46
3769834.73       86.19435  (12022717)
        408640.46   3769834.73       97.78264  (12022717)                408660.46
3769834.73      111.23564  (12022717)

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  SLINE2   ***
                                 INCLUDING SOURCE(S):     L0000030    , L0000031 , L0000032    , L0000033    , L0000034    ,
                 L0000035    , L0000036    , L0000037    , L0000038    , L0000039 , L0000040    , L0000041    , L0000042    ,
                 L0000043    , L0000044    , L0000045    , L0000046    , L0000047 , L0000048    , L0000049    , L0000050    ,
                 L0000051    , L0000052    , L0000053    , L0000054    , L0000055 , L0000056    , L0000057    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        408680.46   3769834.73      126.45477  (12022717)                408700.46
3769834.73      141.26604  (12022717)
        408360.46   3769854.73       25.33891  (12120215)                408380.46
3769854.73       27.30319  (12120215)
        408400.46   3769854.73       29.46300  (12120215)                408420.46
3769854.73       31.93538  (12120215)

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        408440.46   3769854.73       34.68878  (12120215)                408460.46
3769854.73       37.81407  (12120215)
        408480.46   3769854.73       41.39342  (12120215)                408500.46
3769854.73       45.46247  (12120215)
        408520.46   3769854.73       50.20060  (12120215)                408540.46
3769854.73       55.70166  (12120215)
        408560.46   3769854.73       62.10516  (12120215)                408580.46
3769854.73       69.64044  (12120215)
        408600.46   3769854.73       78.66533  (12120215)                408620.46
3769854.73       90.85190  (12022717)
        408640.46   3769854.73      106.32067  (12022717)                408660.46
3769854.73      125.96826  (12022717)
        408680.46   3769854.73      151.31370  (12022717)                408700.46
3769854.73      182.51977  (12022717)
        408380.46   3769874.73       31.99023  (12120215)                408400.46
3769874.73       34.72767  (12120215)
        408500.46   3769874.73       55.40881  (12120215)                408520.46
3769874.73       61.77774  (12120215)
        408540.46   3769874.73       69.27419  (12120215)                408560.46
3769874.73       78.14519  (12120215)
        408580.46   3769874.73       88.82634  (12120215)                408620.46
3769874.73      118.56618  (12120215)
        408640.46   3769874.73      139.46842  (12120215)                408660.46
3769874.73      166.78900  (12120215)
        408680.46   3769874.73      203.29418  (12120215)                408700.46
3769874.73      254.24964  (12120215)
        408720.46   3769874.73      328.55657  (12033117)                408500.46
3769894.73       66.36588  (12033117)
        408520.46   3769894.73       74.80171  (12033117)                408540.46
3769894.73       84.80880  (12033117)
        408560.46   3769894.73       96.76152  (12033117)                408620.46
3769894.73      153.31238  (12033117)
        408640.46   3769894.73      183.55482  (12033117)                408660.46
3769894.73      224.53736  (12033117)
        408680.46   3769894.73      280.38850  (12033117)                408700.46
3769894.73      363.54168  (12033117)
        408720.46   3769894.73      492.38819  (12033117)                408680.46
3769914.73      324.53183  (12033117)
        408700.46   3769914.73      413.94184  (12033117)                408720.46
3769914.73      546.03518  (12033117)
        408740.46   3769914.73      756.97828  (12033117)                408885.41
3770075.32      106.48434  (16020617)
        408905.41   3770075.32      101.28120  (16020617)                408925.41
3770075.32       91.34316  (16020617)
        408945.41   3770075.32       86.54986  (12071919)                408965.41
3770075.32       96.83504  (12071919)
        408685.41   3770095.32       62.97453  (15022217)                408705.41
3770095.32       75.91204  (15022217)
        408725.41   3770095.32       86.96414  (15022217)                408745.41
3770095.32       94.00209  (15022217)
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        408765.41   3770095.32       95.15239  (15022217)               408785.41
3770095.32       88.91603  (15022217)
        408805.41   3770095.32       91.51758  (16123116)               408865.41
3770095.32       85.73340  (16020617)
        408885.41   3770095.32       89.61924  (16020617)               408905.41
3770095.32       87.22485  (16020617)
        408925.41   3770095.32       80.59595  (16020617)               408945.41
3770095.32       71.81112  (16020617)
        408965.41   3770095.32       73.09660  (12071919)               408985.41
3770095.32       80.71545  (12071919)
        409005.41   3770095.32       85.46050  (12071919)               409025.41
3770095.32       87.52055  (12071919)
        409045.41   3770095.32       87.11161  (12071919)               408705.41
3770115.32       70.01620  (15022217)
        408725.41   3770115.32       77.62820  (15022217)               408745.41
3770115.32       81.57826  (15022217)
        408765.41   3770115.32       80.59412  (15022217)               408785.41
3770115.32       74.14848  (15022217)
        408805.41   3770115.32       80.19516  (16123116)               408825.41
3770115.32       85.33127  (16123116)
        408845.41   3770115.32       81.93428  (16123116)               408865.41
3770115.32       72.12455  (16020617)
        408885.41   3770115.32       75.89378  (16020617)               408905.41
3770115.32       75.51687  (16020617)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  67
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE2   ***
                                 INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                 L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                 L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                 L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
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Y-COORD (M)        CONC     (YYMMDDHH)
 - - -
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3770175.32       51.55591  (16123116)
        408885.41   3770175.32       47.78160  (16020617)                408905.41
3770175.32       49.91344  (16020617)
        408925.41   3770175.32       49.99987  (16020617)                408945.41
3770175.32       48.44665  (16020617)
        408965.41   3770175.32       45.39776  (16020617)                408985.41
3770175.32       41.59625  (16020617)
        409005.41   3770175.32       39.27852  (15102517)                409025.41
3770175.32       38.18538  (15102517)
        409045.41   3770175.32       40.79432  (12071919)                409065.41
3770175.32       44.35303  (12071919)
        409085.41   3770175.32       47.00198  (12071919)                409105.41
3770175.32       48.85886  (12071919)
        409125.41   3770175.32       49.54055  (12071919)                408765.41
3770195.32       43.68088  (15022217)
        408785.41   3770195.32       44.35341  (16123116)                408805.41
3770195.32       51.04907  (16123116)
        408825.41   3770195.32       53.61253  (16123116)                408845.41
3770195.32       51.81170  (16123116)
        408865.41   3770195.32       46.87071  (16123116)                408885.41
3770195.32       42.59646  (15011116)
        408905.41   3770195.32       43.67959  (16020617)                408925.41
3770195.32       44.33942  (16020617)
        408945.41   3770195.32       43.66557  (16020617)                408965.41
3770195.32       41.63881  (16020617)
        408985.41   3770195.32       38.80674  (16020617)                409005.41
3770195.32       35.28667  (16020617)
        409025.41   3770195.32       34.72818  (15102517)                409045.41
3770195.32       33.63050  (15102517)
        409065.41   3770195.32       36.07188  (12071919)                409085.41
3770195.32       39.09916  (12071919)
        409105.41   3770195.32       41.47140  (12071919)                409125.41
3770195.32       43.02906  (12071919)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                 PAGE  68
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE2   ***
                                 INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                 L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                 L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                 L0000051    , L0000052    , L0000053    , L0000054    , L0000055
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, L0000056    , L0000057    ,  . . .      ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10    IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 409145.41 | 3770195.32 | 43.99491 | (12071919) | 409165.41 | 3770195.32 | 44.12576 | (12071919) |
| 409185.41 | 3770195.32 | 43.71065 | (12071919) | 409205.41 | 3770195.32 | 43.04451 | (12071919) |
| 408785.41 | 3770215.32 | 40.61700 | (16123116) | 408805.41 | 3770215.32 | 45.86144 | (16123116) |
| 408825.41 | 3770215.32 | 48.34107 | (16123116) | 408845.41 | 3770215.32 | 47.74641 | (16123116) |
| 408865.41 | 3770215.32 | 43.30869 | (16123116) | 408885.41 | 3770215.32 | 38.89676 | (15011116) |
| 408905.41 | 3770215.32 | 38.38136 | (16020617) | 408925.41 | 3770215.32 | 39.36030 | (16020617) |
| 408945.41 | 3770215.32 | 39.29986 | (16020617) | 408965.41 | 3770215.32 | 38.19016 | (16020617) |
| 408985.41 | 3770215.32 | 36.16570 | (16020617) | 409005.41 | 3770215.32 | 33.33151 | (16020617) |
| 409025.41 | 3770215.32 | 31.32873 | (15102517) | 409045.41 | 3770215.32 | 30.88285 | (15102517) |
| 409065.41 | 3770215.32 | 29.81140 | (15102517) | 409085.41 | 3770215.32 | 32.10427 | (12071919) |
| 409105.41 | 3770215.32 | 34.75478 | (12071919) | 409125.41 | 3770215.32 | 36.84347 | (12071919) |
| 409145.41 | 3770215.32 | 38.26334 | (12071919) | 409165.41 | 3770215.32 | 39.19582 | (12071919) |
| 409185.41 | 3770215.32 | 39.50964 | (12071919) | 409205.41 | 3770215.32 | 39.31245 | (12071919) |
| 409225.41 | 3770215.32 | 39.08615 | (12071919) | 408805.41 | 3770235.32 | 41.94454 | (16123116) |
| 408825.41 | 3770235.32 | 44.58619 | (16123116) | 408845.41 | 3770235.32 | 44.15127 | (16123116) |
| 408865.41 | 3770235.32 | 40.09701 | (16123116) | 408885.41 | 3770235.32 | 35.35021 | (15011116) |
| 408905.41 | 3770235.32 | 33.79201 | (16020617) | 408925.41 | 3770235.32 | 35.10714 | (16020617) |
| 408945.41 | 3770235.32 | 35.45776 | (16020617) | 408965.41 | 3770235.32 | 34.87671 | (16020617) |
| 408985.41 | 3770235.32 | 33.46027 | (16020617) | 409005.41 | 3770235.32 | 31.37796 | (16020617) |

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        409025.41   3770235.32       28.77877  (16020617)                409045.41
3770235.32       28.16579  (15102517)
        409065.41   3770235.32       27.62254  (15102517)                409085.41
3770235.32       26.58516  (15102517)
        409105.41   3770235.32       28.74264  (12071919)                409125.41
3770235.32       31.07548  (12071919)
        409145.41   3770235.32       32.94276  (12071919)                409165.41
3770235.32       34.38407  (12071919)
        409185.41   3770235.32       35.32999  (12071919)                409205.41
3770235.32       35.71689  (12071919)
        409225.41   3770235.32       35.67242  (12071919)                409245.41
3770235.32       35.63454  (12071919)
        408805.41   3770255.32       38.54897  (16123116)                408825.41
3770255.32       41.06424  (16123116)
        408845.41   3770255.32       40.59446  (16123116)                408865.41
3770255.32       37.06780  (16123116)
        408885.41   3770255.32       32.20978  (15011116)                408905.41
3770255.32       30.20847  (15011116)
        408925.41   3770255.32       31.41812  (16020617)                408945.41
3770255.32       32.01682  (16020617)
        408965.41   3770255.32       31.84131  (16020617)                408985.41
3770255.32       30.92154  (16020617)
        409005.41   3770255.32       29.42752  (16020617)                409025.41
3770255.32       27.39677  (16020617)
        409045.41   3770255.32       25.53659  (15102517)                409065.41
3770255.32       25.40533  (15102517)
        409085.41   3770255.32       24.84192  (15102517)                409105.41
3770255.32       23.87289  (15102517)
        409125.41   3770255.32       25.88417  (12071919)                409145.41
3770255.32       27.94237  (12071919)
        409165.41   3770255.32       29.66990  (12071919)                409185.41
3770255.32       31.05520  (12071919)
        409205.41   3770255.32       32.01700  (12071919)                409225.41
3770255.32       32.43624  (12071919)
        409245.41   3770255.32       32.85375  (12071919)                409265.41
3770255.32       32.96325  (12071919)
        409365.41   3770255.32       27.72756  (12071919)                409385.41
3770255.32       26.18361  (12071919)
        408825.41   3770275.32       37.08294  (16123116)                408845.41
3770275.32       36.67178  (16123116)
        408865.41   3770275.32       33.96640  (16123116)                408885.41
3770275.32       29.53090  (15011116)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***       14:11:35

                                PAGE  69
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE2 ***

INCLUDING SOURCE(S): L0000030 , L0000031 , L0000032 , L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 , L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 , L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 , L0000057 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 408905.41 | 3770275.32 | 28.17069 | (15011116) | 408925.41 | 3770275.32 | 28.19286 | (16020617) |
| 408945.41 | 3770275.32 | 28.91647 | (16020617) | 408965.41 | 3770275.32 | 29.13542 | (16020617) |
| 408985.41 | 3770275.32 | 28.63442 | (16020617) | 409005.41 | 3770275.32 | 27.47969 | (16020617) |
| 409025.41 | 3770275.32 | 25.84340 | (16020617) | 409045.41 | 3770275.32 | 23.90707 | (16020617) |
| 409065.41 | 3770275.32 | 23.23510 | (15102517) | 409085.41 | 3770275.32 | 23.03990 | (15102517) |
| 409105.41 | 3770275.32 | 22.45978 | (15102517) | 409125.41 | 3770275.32 | 21.52616 | (15102517) |
| 409145.41 | 3770275.32 | 23.40057 | (12071919) | 409165.41 | 3770275.32 | 25.25502 | (12071919) |
| 409185.41 | 3770275.32 | 26.86918 | (12071919) | 409205.41 | 3770275.32 | 28.31140 | (12071919) |
| 409225.41 | 3770275.32 | 29.34795 | (12071919) | 409245.41 | 3770275.32 | 29.99947 | (12071919) |
| 409265.41 | 3770275.32 | 30.32726 | (12071919) | 409345.41 | 3770275.32 | 28.33692 | (12071919) |
| 409365.41 | 3770275.32 | 27.28658 | (12071919) | 409385.41 | 3770275.32 | 26.06056 | (12071919) |
| 409405.41 | 3770275.32 | 24.63751 | (12071919) | 408845.41 | 3770295.32 | 33.64125 | (16123116) |
| 408865.41 | 3770295.32 | 31.47032 | (16123116) | 408885.41 | 3770295.32 | 27.33616 | (16123116) |
| 408905.41 | 3770295.32 | 26.10459 | (15011116) | 408925.41 | 3770295.32 | 25.23663 | (16020617) |
| 408945.41 | 3770295.32 | 26.15570 | (16020617) | 408965.41 | | | |

3770295.32 26.58959 (16020617)
408985.41 3770295.32 26.35179 (16020617) 409005.41
3770295.32 25.53796 (16020617)
409025.41 3770295.32 24.28979 (16020617) 409045.41
3770295.32 22.72166 (16020617)
409065.41 3770295.32 21.12508 (15102517) 409085.41
3770295.32 21.24758 (15102517)
409105.41 3770295.32 20.99471 (15102517) 409125.41
3770295.32 20.39120 (15102517)
409145.41 3770295.32 19.52080 (15102517) 409165.41
3770295.32 21.27457 (12071919)
409185.41 3770295.32 22.93286 (12071919) 409205.41
3770295.32 24.41137 (12071919)
409225.41 3770295.32 25.80913 (12071919) 409245.41
3770295.32 26.78189 (12071919)
409265.41 3770295.32 27.35282 (12071919) 409285.41
3770295.32 27.63911 (12071919)
409305.41 3770295.32 27.75426 (12071919) 409325.41
3770295.32 27.61842 (12071919)
409345.41 3770295.32 27.04051 (12071919) 409365.41
3770295.32 26.30256 (12071919)
409385.41 3770295.32 25.44657 (12071919) 409405.41
3770295.32 24.47654 (12071919)
409425.41 3770295.32 23.30545 (12071919) 408865.41
3770315.32 29.26802 (16123116)
408885.41 3770315.32 25.63167 (16123116) 408905.41
3770315.32 24.19074 (15011116)
408925.41 3770315.32 22.93122 (16013017) 408945.41
3770315.32 23.67931 (16020617)
408965.41 3770315.32 24.24823 (16020617) 408985.41
3770315.32 24.21042 (16020617)
409005.41 3770315.32 23.70477 (16020617) 409025.41
3770315.32 22.80050 (16020617)
409045.41 3770315.32 21.55749 (16020617) 409065.41
3770315.32 20.10624 (16020617)
409085.41 3770315.32 19.50588 (15102517) 409105.41
3770315.32 19.50503 (15102517)
409125.41 3770315.32 19.17690 (15102517) 409145.41
3770315.32 18.56229 (15102517)
409165.41 3770315.32 17.77172 (15102517) 409185.41
3770315.32 19.41826 (12071919)
409205.41 3770315.32 20.91085 (12071919) 409225.41
3770315.32 22.34687 (12071919)
409245.41 3770315.32 23.53087 (12071919) 409265.41
3770315.32 24.35674 (12071919)
409285.41 3770315.32 24.98591 (12071919) 409305.41
3770315.32 25.51515 (12071919)
409325.41 3770315.32 25.65001 (12071919) 409345.41
3770315.32 25.37914 (12071919)
409365.41 3770315.32 24.97398 (12071919) 409385.41

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  SLINE2   ***
                                 INCLUDING SOURCE(S):     L0000030    , L0000031 , L0000032    , L0000033    , L0000034    ,
                 L0000035    , L0000036    , L0000037    , L0000038    , L0000039 , L0000040    , L0000041    , L0000042    ,
                 L0000043    , L0000044    , L0000045    , L0000046    , L0000047 , L0000048    , L0000049    , L0000050    ,
                 L0000051    , L0000052    , L0000053    , L0000054    , L0000055 , L0000056    , L0000057    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        409405.41   3770315.32       23.94489  (12071919)               409425.41   3770315.32       22.97902  (12071919)
        409445.41   3770315.32       22.00975  (12071919)               408885.41   3770335.32       24.04954  (16123116)
        408905.41   3770335.32       22.51213  (15011116)               408925.41   3770335.32       21.49103  (16013017)
        408945.41   3770335.32       21.43086  (16020617)               408965.41   3770335.32       22.09100  (16020617)
        408985.41   3770335.32       22.25176  (16020617)               409005.41   3770335.32       22.00712  (16020617)
        409025.41   3770335.32       21.42021  (16020617)               409045.41   3770335.32       20.53951  (16020617)
        409065.41   3770335.32       19.36879  (16020617)               409085.41   3770335.32       17.91251  (16020617)
        409105.41   3770335.32       18.02756  (15102517)               409125.41   3770335.32       17.90681  (15102517)
        409145.41   3770335.32       17.56933  (15102517)               409165.41   3770335.32       17.00484  (15102517)
        409185.41   3770335.32       16.26366  (12071919)               409205.41   3770335.32       17.77941  (12071919)

409225.41 3770335.32 19.14196 (12071919) 409245.41 3770335.32 20.40409 (12071919)
409265.41 3770335.32 21.45336 (12071919) 409285.41 3770335.32 22.32981 (12071919)
409305.41 3770335.32 23.06982 (12071919) 409325.41 3770335.32 23.44338 (12071919)
409345.41 3770335.32 23.44314 (12071919) 409365.41 3770335.32 23.38113 (12071919)
409385.41 3770335.32 23.29603 (12071919) 409405.41 3770335.32 23.07716 (12071919)
409425.41 3770335.32 22.38515 (12071919) 409445.41 3770335.32 21.59315 (12071919)
409465.41 3770335.32 20.77554 (12071919) 408905.41 3770355.32 20.94260 (15011116)
408925.41 3770355.32 20.21544 (16013017) 408945.41 3770355.32 19.46250 (16020617)
408965.41 3770355.32 20.18479 (16020617) 408985.41 3770355.32 20.48953 (16020617)
409005.41 3770355.32 20.45724 (16020617) 409025.41 3770355.32 20.11790 (16020617)
409045.41 3770355.32 19.42975 (16020617) 409065.41 3770355.32 18.48315 (16020617)
409085.41 3770355.32 17.27568 (16020617) 409105.41 3770355.32 16.59171 (15102517)
409125.41 3770355.32 16.66725 (15102517) 409145.41 3770355.32 16.52186 (15102517)
409165.41 3770355.32 16.14673 (15102517) 409185.41 3770355.32 15.60592 (15102517)
409205.41 3770355.32 14.94523 (12071919) 409225.41 3770355.32 16.32010 (12071919)
409245.41 3770355.32 17.59877 (12071919) 409265.41 3770355.32 18.75899 (12071919)
409285.41 3770355.32 19.76661 (12071919) 409305.41 3770355.32 20.55682 (12071919)
409325.41 3770355.32 21.15778 (12071919) 409345.41 3770355.32 21.54238 (12071919)
409365.41 3770355.32 21.80781 (12071919) 409385.41 3770355.32 21.94349 (12071919)
409405.41 3770355.32 21.89336 (12071919) 409425.41 3770355.32 21.52813 (12071919)
409445.41 3770355.32 20.98004 (12071919) 409465.41 3770355.32 20.33472 (12071919)
409485.41 3770355.32 19.63553 (12071919) 408905.41 3770375.32 19.50498 (15011116)
408925.41 3770375.32 19.03522 (16013017) 408945.41 3770375.32 18.03888 (16013017)
408965.41 3770375.32 18.48245 (16020617) 408985.41 3770375.32 18.89485 (16020617)
409005.41 3770375.32 19.02226 (16020617) 409025.41 3770375.32 18.85784 (16020617)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: SLINE2 ***
INCLUDING SOURCE(S): L0000030 , L0000031 , L0000032 , L0000033 , L0000034 ,
L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 , L0000041 , L0000042 ,
L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 , L0000049 , L0000050 ,
L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 , L0000057 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 409045.41 | 3770375.32 | 18.31111 | (16020617) | 409065.41 | 3770375.32 | 17.55636 | (16020617) |
| 409085.41 | 3770375.32 | 16.57960 | (16020617) | 409105.41 | 3770375.32 | 15.43425 | (16020617) |
| 409125.41 | 3770375.32 | 15.43014 | (15102517) | 409145.41 | 3770375.32 | 15.43744 | (15102517) |
| 409165.41 | 3770375.32 | 15.23614 | (15102517) | 409185.41 | 3770375.32 | 14.89206 | (15102517) |
| 409205.41 | 3770375.32 | 14.42846 | (15102517) | 409225.41 | 3770375.32 | 13.83855 | (15102517) |
| 409245.41 | 3770375.32 | 15.04483 | (12071919) | 409265.41 | 3770375.32 | 16.22459 | (12071919) |
| 409285.41 | 3770375.32 | 17.29838 | (12071919) | 409305.41 | 3770375.32 | 18.18991 | (12071919) |
| 409325.41 | 3770375.32 | 18.94947 | (12071919) | 409345.41 | 3770375.32 | 19.55814 | (12071919) |
| 409365.41 | 3770375.32 | 20.03830 | (12071919) | 409385.41 | 3770375.32 | 20.35786 | (12071919) |
| 409405.41 | 3770375.32 | 20.47093 | (12071919) | 409425.41 | 3770375.32 | 20.38037 | (12071919) |
| 409445.41 | 3770375.32 | 20.08892 | (12071919) | 409465.41 | | | |

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3770375.32       19.64802  (12071919)
        409485.41   3770375.32       19.11223  (12071919)                408925.41
3770395.32       17.86901  (16013017)
        408945.41   3770395.32       17.25034  (16013017)                408965.41
3770395.32       16.97981  (16020617)
        408985.41   3770395.32       17.48122  (16020617)                409005.41
3770395.32       17.67805  (16020617)
        409025.41   3770395.32       17.58387  (16020617)                409045.41
3770395.32       17.23297  (16020617)
        409065.41   3770395.32       16.63608  (16020617)                409085.41
3770395.32       15.83194  (16020617)
        409105.41   3770395.32       14.86961  (16020617)                409125.41
3770395.32       14.15400  (15102517)
        409165.41   3770395.32       14.30817  (15102517)                409185.41
3770395.32       14.14355  (15102517)
        409205.41   3770395.32       13.82106  (15102517)                409225.41
3770395.32       13.34821  (15102517)
        409245.41   3770395.32       12.76093  (15102517)                409265.41
3770395.32       13.90440  (12071919)
        409285.41   3770395.32       14.98599  (12071919)                409305.41
3770395.32       15.98925  (12071919)
        409325.41   3770395.32       16.85609  (12071919)                409345.41
3770395.32       17.55001  (12071919)
        409365.41   3770395.32       18.13200  (12071919)                409385.41
3770395.32       18.59907  (12071919)
        409405.41   3770395.32       18.86999  (12071919)                409425.41
3770395.32       18.99080  (12071919)
        409445.41   3770395.32       18.95410  (12071919)                409465.41
3770395.32       18.74805  (12071919)
        408945.41   3770415.32       16.37106  (16013017)                408965.41
3770415.32       15.57060  (16020617)
        408985.41   3770415.32       16.14020  (16020617)                409005.41
3770415.32       16.43199  (16020617)
        409025.41   3770415.32       16.57206  (12110815)                409045.41
3770415.32       16.38746  (12110815)
        409065.41   3770415.32       15.76057  (16020617)                409085.41
3770415.32       15.10184  (16020617)
        409105.41   3770415.32       14.29883  (16020617)                409185.41
3770415.32       13.34109  (15102517)
        409205.41   3770415.32       13.15820  (15102517)                409225.41
3770415.32       12.82030  (15102517)
        409245.41   3770415.32       12.35826  (15102517)                409265.41
3770415.32       11.81604  (12071919)
        409285.41   3770415.32       12.87908  (12071919)                409305.41
3770415.32       13.87962  (12071919)
        409325.41   3770415.32       14.81234  (12071919)                409345.41
3770415.32       15.62519  (12071919)
        409365.41   3770415.32       16.29422  (12071919)                409385.41
3770415.32       16.82479  (12071919)
        409405.41   3770415.32       17.24507  (12071919)                409425.41
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3770415.32       17.53804  (12071919)
        408965.41   3770435.32       14.64168  (16013017)               408985.41
3770435.32       14.89389  (16020617)
        409005.41   3770435.32       15.26951  (16020617)               409025.41
3770435.32       15.68870  (12110815)
        409045.41   3770435.32       15.64113  (12110815)               409065.41
3770435.32       15.11481  (12110815)
        409205.41   3770435.32       12.45816  (15102517)               409225.41
3770435.32       12.25370  (15102517)
        409245.41   3770435.32       11.89814  (15102517)               409265.41
3770435.32       11.48705  (15102517)
        409285.41   3770435.32       10.98356  (15102517)               409305.41
3770435.32       11.96114  (12071919)
        409325.41   3770435.32       12.88083  (12071919)               409345.41
3770435.32       13.75077  (12071919)
        409365.41   3770435.32       14.50035  (12071919)               409385.41
3770435.32       15.11050  (12071919)
        409405.41   3770435.32       15.64080  (12071919)               408985.41
3770455.32       13.74422  (16020617)

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  SLINE2   ***
                                 INCLUDING SOURCE(S):     L0000030    , L0000031 , L0000032    , L0000033    , L0000034    ,
                 L0000035    , L0000036    , L0000037    , L0000038    , L0000039 , L0000040    , L0000041    , L0000042    ,
                 L0000043    , L0000044    , L0000045    , L0000046    , L0000047 , L0000048    , L0000049    , L0000050    ,
                 L0000051    , L0000052    , L0000053    , L0000054    , L0000055 , L0000056    , L0000057    ,  . . .      ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                              ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - -

409045.41 3770455.32 14.78794 (12110815) 409225.41
3770455.32 11.66401 (15102517)
409245.41 3770455.32 11.42647 (15102517) 409265.41
3770455.32 11.10208 (15102517)
409285.41 3770455.32 10.71026 (15102517) 409305.41
3770455.32 10.25767 (15102517)
409325.41 3770455.32 11.09987 (12071919) 409345.41
3770455.32 11.97943 (12071919)
409365.41 3770455.32 12.77936 (12071919) 409385.41
3770455.32 13.48286 (12071919)
408985.41 3770475.32 12.69361 (16020617) 409005.41
3770475.32 13.13917 (16020617)
409025.41 3770475.32 13.66875 (12110815) 409245.41
3770475.32 10.93518 (15102517)
409265.41 3770475.32 10.70910 (15102517) 409285.41
3770475.32 10.39211 (15102517)
409305.41 3770475.32 10.02260 (15102517) 409325.41
3770475.32 9.56922 (15102517)
409345.41 3770475.32 10.35964 (12071919) 409365.41
3770475.32 11.16757 (12071919)
409005.41 3770495.32 12.18837 (16020617) 409265.41
3770495.32 10.27738 (15102517)
409285.41 3770495.32 10.03093 (15102517) 409305.41
3770495.32 9.72185 (15102517)
409325.41 3770495.32 9.34806 (15102517) 409285.41
3770515.32 9.62969 (15102517)
409305.41 3770515.32 9.36867 (15102517) 409620.32
3769917.48 12.17713 (12102016)
409594.45 3769937.88 12.30107 (12102016) 409641.70
3769936.39 11.23154 (12102016)
409617.33 3769956.28 12.41138 (12033018) 409558.14
3769968.22 15.56356 (12043018)
409518.34 3769997.07 21.36465 (12043018) 409513.37
3770011.50 23.23548 (12043018)
409533.76 3770024.43 22.85982 (12043018) 409551.67
3770011.00 20.49224 (12043018)
409573.06 3769996.08 17.72874 (12043018) 409557.64
3770022.94 21.13449 (12043018)
409573.06 3770033.39 20.96375 (12043018) 409598.43
3770016.47 18.15829 (12043018)
409609.87 3770032.39 18.76472 (12043018) 409595.94
3770037.86 19.91948 (12043018)
409585.00 3770047.31 21.11673 (12043018) 409619.32
3770048.81 19.25748 (12043018)
409656.63 3770027.42 16.01653 (12043018) 409680.50
3770017.47 14.23280 (12043018)
409693.93 3770013.99 13.42431 (12043018) 409708.86
3770011.50 12.66099 (12043018)
409607.88 3770068.21 20.99241 (12043018) 409589.47
3770065.72 21.83440 (12043018)

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        409579.53   3770065.72       22.38685  (12043018)               409552.17
3770058.26       23.65809  (12043018)
        408953.25   3769647.96       79.82854  (12120216)               408703.21
3769848.54      175.32480  (12022717)
        408758.17   3769919.06     1024.53971  (12033117)               408757.25
3769928.22      834.51950  (12033117)
        408629.03   3769906.24      184.30845  (12033117)               408596.97
3769864.11       87.91951  (12120215)
        408548.43   3769905.32       99.01756  (12033117)               408501.72
3769896.17       67.88676  (12033117)
        408462.34   3769854.95       38.21898  (12120215)               408378.08
3769883.34       33.50167  (12120215)
        408352.44   3769866.86       27.11076  (12120215)               408352.44
3769829.31       23.15623  (12022717)
        408378.28   3769790.74       26.60321  (12022717)               408664.62
3769570.02       53.37079  (12111715)
        408755.60   3769593.88       58.24657  (12021515)               408812.27
3769570.02       36.49972  (12101116)
        408871.92   3769584.94       48.44910  (12042618)               408658.51
3770080.18       44.93620  (15022217)
        409005.15   3770499.71       11.98957  (16020617)               409148.50
3770383.08       14.98850  (15102517)
        409289.43   3770534.53        9.16605  (15102517)               409506.48
3770366.88       18.70477  (12071919)
        409379.33   3770230.01       26.25280  (12071919)               409302.39
3770294.80       27.80631  (12071919)
        409203.58   3770183.84       45.07746  (12071919)               409149.31
3770186.27       46.75747  (12071919)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                  PAGE  73
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  SLINE2   ***
                                  INCLUDING SOURCE(S):     L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                 L0000035    , L0000036    , L0000037    , L0000038    , L0000039
, L0000040    , L0000041    , L0000042    ,
                 L0000043    , L0000044    , L0000045    , L0000046    , L0000047
, L0000048    , L0000049    , L0000050    ,
                 L0000051    , L0000052    , L0000053    , L0000054    , L0000055
, L0000056    , L0000057    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 409125.02 | 3770158.74 | 55.21884 | (12071919) | 409100.72 | 3770174.93 | 48.72750 | (12071919) |
| 409079.66 | 3770173.31 | 47.15969 | (12071919) | 409044.83 | 3770144.97 | 56.26455 | (12071919) |
| 409048.19 | 3770087.68 | 91.35610 | (12071919) | 408881.61 | 3770059.36 | 123.63678 | (16020617) |
| 408861.32 | 3770102.06 | 79.25419 | (16020617) | 408675.29 | 3770074.15 | 56.64424 | (15022217) |



*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 408660.46 | 3769574.73 | 54.57425 | (12111715) | 408680.46 | 3769574.73 | 54.91673 | (12111715) |
| 408820.46 | 3769574.73 | 39.62470 | (12101116) | 408640.46 | 3769594.73 | 54.37090 | (12111715) |
| 408660.46 | 3769594.73 | 58.83448 | (12111715) | 408680.46 | 3769594.73 | 60.69325 | (12111715) |

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        408700.46   3769594.73       62.12976  (12021515)                408720.46
3769594.73       64.23228  (12021515)
        408740.46   3769594.73       62.69283  (12021515)                408760.46
3769594.73       57.56509  (12021515)
        408780.46   3769594.73       49.65823  (12021515)                408800.46
3769594.73       40.12848  (12021515)
        408820.46   3769594.73       43.87855  (12101116)                408840.46
3769594.73       47.30119  (12101116)
        408860.46   3769594.73       48.17619  (12042618)                408880.46
3769594.73       55.36777  (12042618)
        408620.46   3769614.73       48.39116  (12111715)                408640.46
3769614.73       56.38126  (12111715)
        408660.46   3769614.73       62.84911  (12111715)                408680.46
3769614.73       66.68449  (12111715)
        408700.46   3769614.73       67.11918  (12111715)                408720.46
3769614.73       70.84050  (12021515)
        408740.46   3769614.73       70.53815  (12021515)                408760.46
3769614.73       65.86790  (12021515)
        408780.46   3769614.73       57.42810  (12021515)                408800.46
3769614.73       46.64043  (12021515)
        408820.46   3769614.73       48.90945  (12101116)                408840.46
3769614.73       52.63834  (12101116)
        408860.46   3769614.73       55.59407  (12042618)                408880.46
3769614.73       63.21185  (12042618)
        408900.46   3769614.73       67.65226  (12042618)                408600.46
3769634.73       38.11608  (12111715)
        408620.46   3769634.73       47.79031  (12111715)                408640.46
3769634.73       57.55965  (12111715)
        408660.46   3769634.73       66.30336  (12111715)                408680.46
3769634.73       72.65323  (12111715)
        408700.46   3769634.73       75.39750  (12111715)                408720.46
3769634.73       78.00686  (12021515)
        408740.46   3769634.73       79.48935  (12021515)                408760.46
3769634.73       75.62440  (12021515)
        408780.46   3769634.73       66.83736  (12021515)                408800.46
3769634.73       54.70160  (12021515)
        408820.46   3769634.73       54.92618  (12101116)                408840.46
3769634.73       58.99307  (12101116)
        408860.46   3769634.73       64.63364  (12042618)                408880.46
3769634.73       72.52558  (12042618)
        408900.46   3769634.73       76.37719  (12042618)                408920.46
3769634.73       76.21702  (12042618)
        408560.46   3769654.73       26.73451  (16093007)                408580.46
3769654.73       28.51149  (16093007)
        408600.46   3769654.73       35.51285  (12111715)                408620.46
3769654.73       46.18152  (12111715)
        408640.46   3769654.73       57.69846  (12111715)                408660.46
3769654.73       68.93080  (12111715)
        408680.46   3769654.73       78.25598  (12111715)                408700.46
3769654.73       83.79765  (12111715)
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        408720.46   3769654.73       85.42258  (12021515)                408740.46
3769654.73       89.51075  (12021515)
        408760.46   3769654.73       87.14977  (12021515)                408780.46
3769654.73       78.35249  (12021515)
        408800.46   3769654.73       64.76208  (12021515)                408820.46
3769654.73       62.20793  (12101116)
        408840.46   3769654.73       66.62804  (12101116)                408860.46
3769654.73       75.45391  (12042618)
        408880.46   3769654.73       83.50427  (12042618)                408900.46
3769654.73       86.23388  (12042618)
        408920.46   3769654.73       85.14155  (12120216)                408940.46
3769654.73       86.31036  (12120216)
        408540.46   3769674.73       26.29800  (16093007)                408560.46
3769674.73       28.14704  (16093007)
        408580.46   3769674.73       30.15919  (16093007)                408600.46
3769674.73       32.34186  (16093007)
        408620.46   3769674.73       43.48207  (12111715)                408640.46
3769674.73       56.55860  (12111715)
        408660.46   3769674.73       70.33352  (12111715)                408680.46
3769674.73       83.04416  (12111715)
        408700.46   3769674.73       92.42529  (12111715)                408720.46
3769674.73       96.40825  (12111715)
        408740.46   3769674.73      100.85023  (12021515)                408760.46
3769674.73      100.82000  (12021515)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE  75
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
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Y-COORD (M)        CONC     (YYMMDDHH)
 - - -
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3769734.73       37.67903  (12022717)
        408500.46   3769734.73       38.58274  (12022717)                408520.46
3769734.73       39.30425  (12022717)
        408540.46   3769734.73       39.81568  (12022717)                408560.46
3769734.73       40.05499  (12022717)
        408580.46   3769734.73       39.96309  (12022717)                408600.46
3769734.73       39.51926  (12022717)
        408620.46   3769734.73       42.61647  (16093007)                408640.46
3769734.73       46.80287  (16093007)
        408660.46   3769734.73       63.56842  (12111715)                408680.46
3769734.73       87.32418  (12111715)
        408700.46   3769734.73      113.22406  (12111715)                408720.46
3769734.73      136.90788  (12111715)
        408740.46   3769734.73      151.93562  (12111715)                408760.46
3769734.73      159.27852  (12021515)
        408780.46   3769734.73      159.95870  (12021515)                408800.46
3769734.73      142.10688  (12021515)
        408820.46   3769734.73      114.94101  (12101116)                408840.46
3769734.73      136.59608  (12042618)
        408440.46   3769754.73       38.46632  (12022717)                408460.46
3769754.73       40.21076  (12022717)
        408480.46   3769754.73       41.94221  (12022717)                408500.46
3769754.73       43.59505  (12022717)
        408520.46   3769754.73       45.13312  (12022717)                408540.46
3769754.73       46.51266  (12022717)
        408560.46   3769754.73       47.63223  (12022717)                408580.46
3769754.73       48.36705  (12022717)
        408600.46   3769754.73       48.64219  (12022717)                408620.46
3769754.73       48.43334  (12022717)
        408640.46   3769754.73       50.58216  (16093007)                408660.46
3769754.73       56.67270  (12111715)
        408680.46   3769754.73       82.80287  (12111715)                408700.46
3769754.73      114.86115  (12111715)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                  PAGE  76
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
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, L0000027    , L0000028    ,  . . .      ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10    IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 408720.46 | 3769754.73 | 148.29848 | (12111715) | 408740.46 | 3769754.73 | 175.58464 | (12111715) |
| 408760.46 | 3769754.73 | 186.58553 | (12111715) | 408780.46 | 3769754.73 | 195.70567 | (12021515) |
| 408800.46 | 3769754.73 | 179.74350 | (12021515) | 408400.46 | 3769774.73 | 36.07380 | (12022717) |
| 408420.46 | 3769774.73 | 38.27321 | (12022717) | 408440.46 | 3769774.73 | 40.57658 | (12022717) |
| 408460.46 | 3769774.73 | 42.97116 | (12022717) | 408480.46 | 3769774.73 | 45.45089 | (12022717) |
| 408500.46 | 3769774.73 | 48.00584 | (12022717) | 408520.46 | 3769774.73 | 50.54993 | (12022717) |
| 408540.46 | 3769774.73 | 53.06142 | (12022717) | 408560.46 | 3769774.73 | 55.44872 | (12022717) |
| 408580.46 | 3769774.73 | 57.58604 | (12022717) | 408600.46 | 3769774.73 | 59.42093 | (12022717) |
| 408620.46 | 3769774.73 | 60.70658 | (12022717) | 408640.46 | 3769774.73 | 61.15797 | (12022717) |
| 408660.46 | 3769774.73 | 61.54583 | (16093007) | 408680.46 | 3769774.73 | 74.68250 | (12111715) |
| 408700.46 | 3769774.73 | 111.55772 | (12111715) | 408720.46 | 3769774.73 | 155.75178 | (12111715) |
| 408740.46 | 3769774.73 | 198.89987 | (12111715) | 408760.46 | 3769774.73 | 227.26683 | (12111715) |
| 408780.46 | 3769774.73 | 242.50539 | (12021515) | 408380.46 | 3769794.73 | 33.70387 | (12022717) |
| 408400.46 | 3769794.73 | 36.08242 | (12022717) | 408420.46 | 3769794.73 | 38.66791 | (12022717) |
| 408440.46 | 3769794.73 | 41.46333 | (12022717) | 408460.46 | 3769794.73 | 44.45899 | (12022717) |
| 408480.46 | 3769794.73 | 47.66208 | (12022717) | 408500.46 | 3769794.73 | 51.14399 | (12022717) |
| 408520.46 | 3769794.73 | 54.75709 | (12022717) | 408540.46 | 3769794.73 | 58.56027 | (12022717) |
| 408560.46 | 3769794.73 | 62.52692 | (12022717) | 408580.46 | 3769794.73 | 66.56483 | (12022717) |
| 408600.46 | 3769794.73 | 70.88195 | (12022717) | 408620.46 | 3769794.73 | 74.81185 | (12022717) |

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        408640.46   3769794.73       78.04676  (12022717)                408660.46
3769794.73       80.26091  (12022717)
        408680.46   3769794.73       80.72752  (12022717)                408700.46
3769794.73      102.13860  (12111715)
        408720.46   3769794.73      156.35317  (12111715)                408740.46
3769794.73      219.91585  (12111715)
        408760.46   3769794.73      274.88764  (12111715)                408380.46
3769814.73       32.35065  (12022717)
        408400.46   3769814.73       34.96887  (12022717)                408420.46
3769814.73       37.74176  (12022717)
        408440.46   3769814.73       40.87162  (12022717)                408460.46
3769814.73       44.34538  (12022717)
        408480.46   3769814.73       48.11115  (12022717)                408500.46
3769814.73       52.34641  (12022717)
        408520.46   3769814.73       56.88108  (12022717)                408540.46
3769814.73       61.99459  (12022717)
        408560.46   3769814.73       67.70139  (12022717)                408580.46
3769814.73       73.93205  (12022717)
        408600.46   3769814.73       80.73426  (12022717)                408620.46
3769814.73       88.10138  (12022717)
        408640.46   3769814.73       95.85028  (12022717)                408660.46
3769814.73      103.52251  (12022717)
        408680.46   3769814.73      110.15931  (12022717)                408700.46
3769814.73      114.27424  (12022717)
        408720.46   3769814.73      147.57773  (12111715)                408740.46
3769814.73      233.00529  (12111715)
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3769834.73       33.60925  (12120215)
        408400.46   3769834.73       35.81574  (12120215)                408420.46
3769834.73       38.23097  (12120215)
        408440.46   3769834.73       40.89232  (12120215)                408460.46
3769834.73       43.83006  (12120215)
        408480.46   3769834.73       47.08087  (12120215)                408500.46
3769834.73       51.12404  (12022717)
        408520.46   3769834.73       56.39500  (12022717)                408540.46
3769834.73       62.47279  (12022717)
        408560.46   3769834.73       69.51494  (12022717)                408580.46
3769834.73       77.61322  (12022717)
        408600.46   3769834.73       86.87017  (12022717)                408620.46
3769834.73       97.65530  (12022717)
        408640.46   3769834.73      110.20476  (12022717)                408660.46
3769834.73      124.72990  (12022717)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE  77
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
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                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                           ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
        408680.46   3769834.73      141.14903  (12022717)               408700.46
3769834.73      157.30733  (12022717)
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3769854.73       39.61008  (12120215)
        408400.46   3769854.73       42.42282  (12120215)               408420.46
3769854.73       45.59063  (12120215)
        408440.46   3769854.73       49.09833  (12120215)               408460.46
3769854.73       53.03760  (12120215)
        408480.46   3769854.73       57.49469  (12120215)               408500.46
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        408520.46   3769854.73       68.29141  (12120215)               408540.46
3769854.73       74.91998  (12120215)
        408560.46   3769854.73       82.55629  (12120215)               408580.46
3769854.73       91.44185  (12120215)
        408600.46   3769854.73      101.94730  (12120215)               408620.46
3769854.73      114.39263  (12120215)
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        408680.46   3769854.73      170.38944  (12120215)               408700.46
3769854.73      198.11178  (12120215)
        408380.46   3769874.73       45.10972  (12120215)               408400.46
3769874.73       48.53854  (12120215)
        408500.46   3769874.73       73.54962  (12120215)               408520.46
3769874.73       81.01264  (12120215)
        408540.46   3769874.73       89.70113  (12120215)               408560.46
3769874.73       99.87435  (12120215)
        408580.46   3769874.73      111.98012  (12120215)               408620.46
3769874.73      144.99196  (12120215)
        408640.46   3769874.73      167.78479  (12120215)               408660.46
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3769874.73 197.44015 (12033117)
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3769874.73 292.72728 (12033117)
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3769894.73 88.83345 (12033117)
408520.46 3769894.73 98.77082 (12033117) 408540.46
3769894.73 110.41329 (12033117)
408560.46 3769894.73 124.15073 (12033117) 408620.46
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3769894.73 263.82602 (12033117)
408680.46 3769894.73 322.84442 (12033117) 408700.46
3769894.73 409.51549 (12033117)
408720.46 3769894.73 542.27839 (12033117) 408680.46
3769914.73 370.08809 (12033117)
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3769914.73 598.97186 (12033117)
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3770075.32 108.12082 (16020617)
408905.41 3770075.32 103.11008 (16020617) 408925.41
3770075.32 93.38966 (16020617)
408945.41 3770075.32 88.53130 (12071919) 408965.41
3770075.32 99.05062 (12071919)
408685.41 3770095.32 63.46429 (15022217) 408705.41
3770095.32 76.50781 (15022217)
408725.41 3770095.32 87.71130 (15022217) 408745.41
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408765.41 3770095.32 96.43552 (15022217) 408785.41
3770095.32 90.65987 (15022217)
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3770095.32 87.08696 (16020617)
408885.41 3770095.32 91.11747 (16020617) 408905.41
3770095.32 88.88695 (16020617)
408925.41 3770095.32 82.44208 (16020617) 408945.41
3770095.32 73.86186 (16020617)
408965.41 3770095.32 75.05723 (12071919) 408985.41
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3770095.32 90.14663 (12071919)
409045.41 3770095.32 89.97987 (12071919) 408705.41
3770115.32 70.69667 (15022217)
408725.41 3770115.32 78.50418 (15022217) 408745.41
3770115.32 82.73462 (15022217)
408765.41 3770115.32 82.15202 (15022217) 408785.41
3770115.32 76.27827 (15022217)
408805.41 3770115.32 80.54839 (16123116) 408825.41
3770115.32 85.71904 (16123116)
408845.41 3770115.32 82.36074 (16123116) 408865.41
3770115.32 73.37012 (16020617)
408885.41 3770115.32 77.26421 (16020617) 408905.41

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002 , L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010 , L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018 , L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026 , L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                             ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - -

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        408965.41   3770135.32       55.40480  (16020617)               408985.41
3770135.32       51.76544  (15102517)
        409005.41   3770135.32       55.34161  (12071919)               409025.41
3770135.32       60.48938  (12071919)
        408725.41   3770155.32       62.77160  (15022217)               408745.41
3770155.32       63.41106  (15022217)
        408765.41   3770155.32       60.97104  (15022217)               408785.41
3770155.32       55.36478  (15022217)
        408805.41   3770155.32       62.77243  (16123116)               408825.41
3770155.32       67.54641  (16123116)
        408845.41   3770155.32       66.27408  (16123116)               408865.41
3770155.32       57.79627  (16123116)
        408885.41   3770155.32       56.76122  (16020617)               408905.41
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        408925.41   3770155.32       57.76300  (16020617)               408945.41
3770155.32       55.12955  (16020617)
        408965.41   3770155.32       51.02194  (16020617)               408985.41
3770155.32       46.22326  (16020617)
        409005.41   3770155.32       44.90578  (15102517)               409025.41
3770155.32       48.22644  (12071919)
        409045.41   3770155.32       52.52797  (12071919)               408745.41
3770175.32       55.87628  (15022217)
        408765.41   3770175.32       53.16141  (15022217)               408785.41
3770175.32       48.93232  (16123116)
        408805.41   3770175.32       56.67459  (16123116)               408825.41
3770175.32       60.14200  (16123116)
        408845.41   3770175.32       58.22539  (16123116)               408865.41
3770175.32       51.92595  (16123116)
        408885.41   3770175.32       48.83045  (16020617)               408905.41
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        408925.41   3770175.32       51.22543  (16020617)               408945.41
3770175.32       49.77446  (16020617)
        408965.41   3770175.32       46.84838  (16020617)               408985.41
3770175.32       43.21012  (16020617)
        409005.41   3770175.32       40.74888  (16093007)               409025.41
3770175.32       41.69894  (15022217)
        409045.41   3770175.32       43.33279  (15022217)               409065.41
3770175.32       46.01435  (12071919)
        409085.41   3770175.32       48.73612  (12071919)               409105.41
3770175.32       50.65487  (12071919)
        409125.41   3770175.32       51.38482  (12071919)               408765.41
3770195.32       46.83895  (15022217)
        408785.41   3770195.32       44.60181  (16123116)               408805.41
3770195.32       51.31685  (16123116)
        408825.41   3770195.32       53.90173  (16123116)               408845.41
3770195.32       52.12540  (16123116)
        408865.41   3770195.32       47.21478  (16123116)               408885.41
3770195.32       42.94515  (15011116)
        408905.41   3770195.32       44.71259  (16020617)               408925.41
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3770195.32       44.73494  (12071919)
        408785.41   3770215.32       40.84941  (16123116)                408805.41
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        408825.41   3770215.32       48.61018  (16123116)                408845.41
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        408865.41   3770215.32       43.63052  (16123116)                408885.41
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        408905.41   3770215.32       39.32434  (16020617)                408925.41

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        408945.41   3770215.32       40.38969  (16020617)                408965.41
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        408985.41   3770215.32       37.49853  (16020617)                409005.41
3770215.32       34.89316  (16020617)
        409025.41   3770215.32       35.65561  (15022217)                409045.41
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        409065.41   3770215.32       35.19666  (15022217)                409085.41
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        409145.41   3770215.32       39.66431  (12071919)                409165.41
3770215.32       40.60823  (12071919)
        409185.41   3770215.32       40.93086  (12071919)                409205.41
3770215.32       40.75730  (12071919)
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        408945.41   3770235.32       36.45052  (16020617)                408965.41
3770235.32       35.96211  (16020617)
        408985.41   3770235.32       34.68253  (16020617)                409005.41
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        409025.41   3770235.32       32.86547  (15022217)                409045.41
3770235.32       32.80149  (15022217)
        409065.41   3770235.32       31.72300  (15022217)                409085.41
3770235.32       30.78932  (16093007)
        409105.41   3770235.32       30.38124  (16093007)                409125.41
3770235.32       32.28501  (12071919)
        409145.41   3770235.32       34.16759  (12071919)                409165.41
3770235.32       35.70578  (16123116)
        409185.41   3770235.32       36.56824  (12071919)                409205.41
3770235.32       36.96713  (12071919)
        409225.41   3770235.32       36.96550  (12071919)                409245.41
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        408845.41   3770255.32       40.84827  (16123116)                408865.41
3770255.32       37.35146  (16123116)
        408885.41   3770255.32       32.48039  (15011116)                408905.41
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        408925.41   3770255.32       32.26151  (16020617)                408945.41
3770255.32       32.92463  (16020617)
        408965.41   3770255.32       32.83639  (16020617)                408985.41
3770255.32       32.04770  (16020617)
        409005.41   3770255.32       30.76167  (16020617)                409025.41
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3770275.32       28.96648  (16020617)

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        409025.41   3770275.32       27.87624  (15022217)               409045.41
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        409065.41   3770275.32       27.01252  (16093007)               409085.41
3770275.32       26.71276  (16093007)
        409105.41   3770275.32       26.37917  (16093007)               409125.41
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        409185.41   3770275.32       30.65771  (16123116)               409205.41
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        409265.41   3770275.32       31.38969  (12071919)               409345.41
3770275.32       30.92095  (12071919)
        409365.41   3770275.32       30.76162  (12071919)               409385.41
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        409105.41   3770295.32       24.67217  (16093007)               409125.41
3770295.32       24.33887  (16093007)
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        409185.41   3770295.32       28.49044  (16123116)               409205.41
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        409225.41   3770295.32       26.66497  (12071919)               409245.41
3770295.32       27.64806  (12071919)
        409265.41   3770295.32       28.27490  (12071919)               409285.41
3770295.32       28.67240  (12071919)
        409305.41   3770295.32       28.93831  (12071919)               409325.41
3770295.32       29.04519  (12071919)
        409345.41   3770295.32       28.97024  (12071919)               409365.41
3770295.32       28.91618  (12071919)
        409385.41   3770295.32       28.91913  (12071919)               409405.41
3770295.32       29.00059  (12071919)
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        409425.41   3770295.32       29.21807  (12071919)               408865.41
3770315.32       29.53134  (16123116)
        408885.41   3770315.32       25.97034  (16123116)               408905.41
3770315.32       24.42926  (15011116)
        408925.41   3770315.32       24.35573  (16093007)               408945.41
3770315.32       24.38942  (16020617)
        408965.41   3770315.32       25.03419  (16020617)               408985.41
3770315.32       25.11268  (16020617)
        409005.41   3770315.32       24.78742  (16020617)               409025.41
3770315.32       24.15880  (16020617)
        409045.41   3770315.32       23.84361  (16093007)               409065.41
3770315.32       23.63631  (16093007)
        409085.41   3770315.32       23.39728  (16093007)               409105.41
3770315.32       23.12729  (16093007)
        409125.41   3770315.32       22.82700  (16093007)               409145.41
3770315.32       24.98601  (16123116)
        409165.41   3770315.32       26.39786  (16123116)               409185.41
3770315.32       26.55095  (16123116)
        409205.41   3770315.32       25.40958  (16123116)               409225.41
3770315.32       23.12929  (16123116)
        409245.41   3770315.32       24.30203  (12071919)               409265.41
3770315.32       25.16534  (12071919)
        409285.41   3770315.32       25.86192  (12071919)               409305.41
3770315.32       26.45352  (12071919)
        409325.41   3770315.32       26.76901  (12071919)               409345.41
3770315.32       26.88104  (12071919)
        409365.41   3770315.32       26.98121  (12071919)               409385.41
3770315.32       27.09379  (12071919)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                      ***        14:11:35

                                  PAGE  81
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
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** CONC OF PM_10 IN MICROGRAMS/M**3 **

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 409405.41 | 3770315.32 | 27.21367 | (12071919) | 409425.41 | 3770315.32 | 27.38908 | (12071919) |
| 409445.41 | 3770315.32 | 27.65353 | (12071919) | 408885.41 | 3770335.32 | 24.39413 | (16123116) |
| 408905.41 | 3770335.32 | 22.73679 | (15011116) | 408925.41 | 3770335.32 | 22.78311 | (16093007) |
| 408945.41 | 3770335.32 | 22.80375 | (16093007) | 408965.41 | 3770335.32 | 22.82308 | (16020617) |
| 408985.41 | 3770335.32 | 23.09543 | (16020617) | 409005.41 | 3770335.32 | 23.02180 | (16020617) |
| 409025.41 | 3770335.32 | 22.69206 | (16020617) | 409045.41 | 3770335.32 | 22.36526 | (16093007) |
| 409065.41 | 3770335.32 | 22.18117 | (16093007) | 409085.41 | 3770335.32 | 21.96750 | (16093007) |
| 409105.41 | 3770335.32 | 21.72470 | (16093007) | 409125.41 | 3770335.32 | 21.45398 | (16093007) |
| 409145.41 | 3770335.32 | 23.38834 | (16123116) | 409165.41 | 3770335.32 | 24.65707 | (16123116) |
| 409185.41 | 3770335.32 | 24.80750 | (16123116) | 409205.41 | 3770335.32 | 23.80615 | (16123116) |
| 409225.41 | 3770335.32 | 21.78525 | (16123116) | 409245.41 | 3770335.32 | 21.09592 | (12071919) |
| 409265.41 | 3770335.32 | 22.16610 | (12071919) | 409285.41 | 3770335.32 | 23.08374 | (12071919) |
| 409305.41 | 3770335.32 | 23.86119 | (12071919) | 409325.41 | 3770335.32 | 24.37209 | (12071919) |
| 409345.41 | 3770335.32 | 24.67555 | (12071919) | 409365.41 | 3770335.32 | 24.96292 | (12071919) |
| 409385.41 | 3770335.32 | 25.23168 | (12071919) | 409405.41 | 3770335.32 | 25.45625 | (12071919) |
| 409425.41 | 3770335.32 | 25.63148 | (12071919) | 409445.41 | 3770335.32 | 25.87957 | (12071919) |
| 409465.41 | 3770335.32 | 26.18675 | (12071919) | 408905.41 | 3770355.32 | 21.30132 | (16093007) |
| 408925.41 | 3770355.32 | 21.36342 | (16093007) | 408945.41 | 3770355.32 | 21.38876 | (16093007) |
| 408965.41 | 3770355.32 | 21.37909 | (16093007) | 408985.41 | 3770355.32 | 21.33558 | (16093007) |
| 409005.41 | 3770355.32 | 21.40964 | (16020617) | 409025.41 | 3770355.32 | 21.31022 | (16020617) |
| 409045.41 | 3770355.32 | 21.01951 | (16093007) | 409065.41 | 3770355.32 | 20.85589 | (16093007) |
| 409085.41 | 3770355.32 | 20.66501 | (16093007) | 409105.41 | | | |

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3770355.32       20.44751  (16093007)
        409125.41   3770355.32       20.20403  (16093007)                409145.41
3770355.32       21.94463  (16123116)
        409165.41   3770355.32       23.08914  (16123116)                409185.41
3770355.32       23.23514  (16123116)
        409205.41   3770355.32       22.35142  (16123116)                409225.41
3770355.32       20.54927  (16123116)
        409245.41   3770355.32       19.48060  (16020617)                409265.41
3770355.32       19.78048  (16020617)
        409285.41   3770355.32       20.41857  (12071919)                409305.41
3770355.32       21.26335  (12071919)
        409325.41   3770355.32       21.95700  (12071919)                409345.41
3770355.32       22.50308  (12071919)
        409365.41   3770355.32       22.96783  (12071919)                409385.41
3770355.32       23.35765  (12071919)
        409405.41   3770355.32       23.67046  (12071919)                409425.41
3770355.32       23.90981  (12071919)
        409445.41   3770355.32       24.16435  (12071919)                409465.41
3770355.32       24.46359  (12071919)
        409485.41   3770355.32       24.80297  (12071919)                408905.41
3770375.32       20.01616  (16093007)
        408925.41   3770375.32       20.07723  (16093007)                408945.41
3770375.32       20.10538  (16093007)
        408965.41   3770375.32       20.10175  (16093007)                408985.41
3770375.32       20.06735  (16093007)
        409005.41   3770375.32       20.00382  (16093007)                409025.41
3770375.32       19.97726  (16020617)
        409045.41   3770375.32       19.79262  (16093007)                409065.41
3770375.32       19.64712  (16093007)
        409085.41   3770375.32       19.47628  (16093007)                409105.41
3770375.32       19.28098  (16093007)
        409125.41   3770375.32       19.06194  (16093007)                409145.41
3770375.32       20.63734  (16123116)
        409165.41   3770375.32       21.67189  (16123116)                409185.41
3770375.32       21.81176  (16123116)
        409205.41   3770375.32       21.02837  (16123116)                409225.41
3770375.32       19.41555  (16123116)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE  82
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
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, L0000011    , L0000012    , L0000013    ,
                L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                           ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)             X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        409245.41   3770375.32       18.52234  (16020617)               409265.41
3770375.32       18.75766  (16020617)
        409285.41   3770375.32       18.95752  (16020617)               409305.41
3770375.32       19.06350  (16020617)
        409325.41   3770375.32       19.62808  (12071919)               409345.41
3770375.32       20.32789  (12071919)
        409365.41   3770375.32       20.93124  (12071919)               409385.41
3770375.32       21.43599  (12071919)
        409405.41   3770375.32       21.84154  (12071919)               409425.41
3770375.32       22.17865  (12071919)
        409445.41   3770375.32       22.48489  (12071919)               409465.41
3770375.32       22.80123  (12071919)
        409485.41   3770375.32       23.14446  (12071919)               408925.41
3770395.32       18.90808  (16093007)
        408945.41   3770395.32       18.93761  (16093007)               408965.41
3770395.32       18.93836  (16093007)
        408985.41   3770395.32       18.91122  (16093007)               409005.41
3770395.32       18.85707  (16093007)
        409025.41   3770395.32       18.77681  (16093007)               409045.41
3770395.32       18.67143  (16093007)
        409065.41   3770395.32       18.54175  (16093007)               409085.41
3770395.32       18.38863  (16093007)
        409105.41   3770395.32       18.21289  (16093007)               409125.41
3770395.32       18.01534  (16093007)
        409165.41   3770395.32       20.38587  (16123116)               409185.41
3770395.32       20.51838  (16123116)
        409205.41   3770395.32       19.82273  (16123116)               409225.41
3770395.32       18.37617  (16123116)
        409245.41   3770395.32       17.65612  (16020617)               409265.41
3770395.32       17.84694  (16020617)
        409285.41   3770395.32       17.99846  (16020617)               409305.41
3770395.32       18.11172  (16020617)
        409325.41   3770395.32       18.11778  (16020617)               409345.41
3770395.32       18.18879  (12071919)
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        409365.41   3770395.32       18.87426  (12071919)               409385.41
3770395.32       19.47789  (12071919)
        409405.41   3770395.32       19.98014  (12071919)               409425.41
3770395.32       20.41768  (12071919)
        409445.41   3770395.32       20.80764  (12071919)               409465.41
3770395.32       21.17123  (12071919)
        408945.41   3770415.32       17.87197  (16093007)               408965.41
3770415.32       17.87579  (16093007)
        408985.41   3770415.32       17.85416  (16093007)               409005.41
3770415.32       17.80792  (16093007)
        409025.41   3770415.32       17.73777  (16093007)               409045.41
3770415.32       17.64440  (16093007)
        409065.41   3770415.32       17.52862  (16093007)               409085.41
3770415.32       17.39113  (16093007)
        409105.41   3770415.32       17.23280  (16093007)               409185.41
3770415.32       19.34162  (16123116)
        409205.41   3770415.32       18.72062  (16123116)               409225.41
3770415.32       17.41781  (16123116)
        409245.41   3770415.32       16.87263  (16020617)               409265.41
3770415.32       17.01792  (16020617)
        409285.41   3770415.32       17.13699  (16020617)               409305.41
3770415.32       17.21346  (16020617)
        409325.41   3770415.32       17.24512  (16020617)               409345.41
3770415.32       17.14402  (16020617)
        409365.41   3770415.32       16.90835  (16020617)               409385.41
3770415.32       17.55938  (12071919)
        409405.41   3770415.32       18.14927  (12071919)               409425.41
3770415.32       18.67276  (12071919)
        408965.41   3770435.32       16.90289  (16093007)               408985.41
3770435.32       16.88561  (16093007)
        409005.41   3770435.32       16.84577  (16093007)               409025.41
3770435.32       16.78417  (16093007)
        409045.41   3770435.32       16.70135  (16093007)               409065.41
3770435.32       16.59786  (16093007)
        409205.41   3770435.32       17.71060  (16123116)               409225.41
3770435.32       16.53287  (16123116)
        409245.41   3770435.32       16.15089  (16020617)               409265.41
3770435.32       16.26174  (16020617)
        409285.41   3770435.32       16.35470  (16020617)               409305.41
3770435.32       16.40834  (16020617)
        409325.41   3770435.32       16.44197  (16020617)               409345.41
3770435.32       16.36556  (16020617)
        409365.41   3770435.32       16.15838  (16020617)               409385.41
3770435.32       15.82297  (16020617)
        409405.41   3770435.32       16.37495  (12071919)               408985.41
3770455.32       15.99607  (16093007)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

*** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP:  ALL      ***
INCLUDING SOURCE(S):     L0000001    , L0000002 , L0000003    , L0000004    , L0000005    ,
L0000006    , L0000007    , L0000008    , L0000009    , L0000010 , L0000011    , L0000012    , L0000013    ,
L0000014    , L0000015    , L0000016    , L0000017    , L0000018 , L0000019    , L0000020    , L0000021    ,
L0000022    , L0000023    , L0000024    , L0000025    , L0000026 , L0000027    , L0000028    ,  . . .      ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10    IN MICROGRAMS/M**3
**

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) |
|---|---|---|---|---|---|---|---|
| 409005.41 | 3770455.32 | 15.96169 | (16093007) | 409025.41 | 3770455.32 | 15.90740 | (16093007) |
| 409045.41 | 3770455.32 | 15.83365 | (16093007) | 409225.41 | 3770455.32 | 15.71907 | (16123116) |
| 409245.41 | 3770455.32 | 15.47964 | (16020617) | 409265.41 | 3770455.32 | 15.56662 | (16020617) |
| 409285.41 | 3770455.32 | 15.63867 | (16020617) | 409305.41 | 3770455.32 | 15.69340 | (16020617) |
| 409325.41 | 3770455.32 | 15.70182 | (16020617) | 409345.41 | 3770455.32 | 15.62832 | (16020617) |
| 409365.41 | 3770455.32 | 15.45890 | (16020617) | 409385.41 | 3770455.32 | 15.18837 | (16020617) |
| 408985.41 | 3770475.32 | 15.17714 | (16093007) | 409005.41 | 3770475.32 | 15.14744 | (16093007) |
| 409025.41 | 3770475.32 | 15.09941 | (16093007) | 409245.41 | 3770475.32 | 14.84967 | (16020617) |
| 409265.41 | 3770475.32 | 14.91891 | (16020617) | 409285.41 | 3770475.32 | 14.97882 | (16020617) |
| 409305.41 | 3770475.32 | 15.01899 | (16020617) | 409325.41 | 3770475.32 | 15.01711 | (16020617) |
| 409345.41 | 3770475.32 | 14.95045 | (16020617) | 409365.41 | 3770475.32 | 14.80380 | (16020617) |
| 409005.41 | 3770495.32 | 14.39582 | (16093007) | 409265.41 | 3770495.32 | 14.31261 | (16020617) |
| 409285.41 | 3770495.32 | 14.36536 | (16020617) | 409305.41 | | | |

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3770495.32       14.39261  (16020617)
        409325.41   3770495.32       14.38319  (16020617)                409285.41
3770515.32       13.79082  (16020617)
        409305.41   3770515.32       13.80877  (16020617)                409620.32
3769917.48       54.35577  (12043018)
        409594.45   3769937.88       66.56684  (12043018)                409641.70
3769936.39       54.55485  (12043018)
        409617.33   3769956.28       64.38799  (12043018)                409558.14
3769968.22       79.46699  (12043018)
        409518.34   3769997.07       82.82740  (12043018)                409513.37
3770011.50       83.39580  (12121716)
        409533.76   3770024.43       76.55302  (12121716)                409551.67
3770011.00       73.19241  (12043018)
        409573.06   3769996.08       73.43865  (12043018)                409557.64
3770022.94       71.10642  (12121716)
        409573.06   3770033.39       67.42493  (12121716)                409598.43
3770016.47       65.64274  (12043018)
        409609.87   3770032.39       60.92171  (12043018)                409595.94
3770037.86       62.71182  (12121716)
        409585.00   3770047.31       64.26932  (12121716)                409619.32
3770048.81       57.96038  (12121716)
        409656.63   3770027.42       56.60178  (12043018)                409680.50
3770017.47       54.58340  (12043018)
        409693.93   3770013.99       52.92948  (12043018)                409708.86
3770011.50       50.87748  (12043018)
        409607.88   3770068.21       59.86290  (12121716)                409589.47
3770065.72       62.23911  (12121716)
        409579.53   3770065.72       63.43612  (12121716)                409552.17
3770058.26       67.74728  (12121716)
        408953.25   3769647.96       81.43130  (12120216)                408703.21
3769848.54      189.48077  (12022717)
        408758.17   3769919.06     1086.10782  (12033117)                408757.25
3769928.22      895.82064  (12033117)
        408629.03   3769906.24      221.08519  (12033117)                408596.97
3769864.11      111.67586  (12120215)
        408548.43   3769905.32      126.79621  (12033117)                408501.72
3769896.17       90.63469  (12033117)
        408462.34   3769854.95       53.53443  (12120215)                408378.08
3769883.34       46.82218  (12120215)
        408352.44   3769866.86       39.06841  (12120215)                408352.44
3769829.31       29.39582  (12120215)
        408378.28   3769790.74       33.60469  (12022717)                408664.62
3769570.02       53.75255  (12111715)
        408755.60   3769593.88       58.77243  (12021515)                408812.27
3769570.02       36.90631  (12101116)
        408871.92   3769584.94       49.22722  (12042618)                408658.51
3770080.18       50.58744  (12111616)
        409005.15   3770499.71       14.23899  (16093007)                409148.50
3770383.08       20.37015  (16123116)
        409289.43   3770534.53       13.27777  (16020617)                409506.48
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3770366.88       24.21539  (12071919)
        409379.33   3770230.01       35.28128  (12071919)                409302.39
3770294.80       28.97154  (12071919)
        409203.58   3770183.84       46.93021  (12071919)                409149.31
3770186.27       48.48911  (12071919)


                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        409125.02   3770158.74       57.31879  (12071919)                409100.72
3770174.93       50.51539  (12071919)
        409079.66   3770173.31       48.89891  (12071919)                409044.83
3770144.97       58.21601  (12071919)
        409048.19   3770087.68       94.44892  (12071919)                408881.61
3770059.36      125.35233  (16020617)
        408861.32   3770102.06       80.54425  (16020617)                408675.29
3770074.15       57.06633  (15022217)

*** THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

| GROUP ID | NETWORK | AVERAGE CONC | RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) | OF TYPE | GRID-ID |
|---|---|---|---|---|---|
| SLINE1 | 1ST HIGHEST VALUE IS | 12.49953 AT | ( 409048.19, 3770087.68, 97.18, 97.18, 0.00) | DC | |
| | 2ND HIGHEST VALUE IS | 11.87118 AT | ( 409045.41, 3770095.32, 97.20, 97.20, 0.00) | DC | |
| | 3RD HIGHEST VALUE IS | 11.17291 AT | ( 409025.41, 3770095.32, 97.08, 97.08, 0.00) | DC | |
| | 4TH HIGHEST VALUE IS | 10.67178 AT | ( 408953.25, 3769647.96, 97.06, 97.06, 0.00) | DC | |
| | 5TH HIGHEST VALUE IS | 10.63229 AT | ( 409045.41, 3770115.32, 96.66, 96.66, 0.00) | DC | |
| | 6TH HIGHEST VALUE IS | 10.47467 AT | ( 409005.41, 3770095.32, 96.88, 96.88, 0.00) | DC | |
| | 7TH HIGHEST VALUE IS | 10.34808 AT | ( 408940.46, 3769654.73, 97.00, 97.00, 0.00) | DC | |
| | 8TH HIGHEST VALUE IS | 10.07631 AT | ( 409025.41, 3770115.32, 96.51, 96.51, 0.00) | DC | |
| | 9TH HIGHEST VALUE IS | 9.94237 AT | ( 408965.41, 3770075.32, 96.90, 96.90, 0.00) | DC | |
| | 10TH HIGHEST VALUE IS | 9.79262 AT | ( 408985.41, 3770095.32, 96.63, 96.63, 0.00) | DC | |
| SLINE2 | 1ST HIGHEST VALUE IS | 183.45642 AT | ( 408758.17, 3769919.06, 97.10, 97.10, 0.00) | DC | |
| | 2ND HIGHEST VALUE IS | 157.28234 AT | ( 408757.25, 3769928.22, 97.01, 97.01, 0.00) | DC | |
| | 3RD HIGHEST VALUE IS | 114.81890 AT | ( 408740.46, 3769914.73, 97.11, 97.11, 0.00) | DC | |
| | 4TH HIGHEST VALUE IS | 76.26151 AT | ( 408720.46, 3769894.73, 97.02, 97.02, 0.00) | DC | |
| | 5TH HIGHEST VALUE IS | 74.07525 AT | ( 408720.46, 3769914.73, 97.13, 97.13, 0.00) | DC | |
| | 6TH HIGHEST VALUE IS | 72.30416 AT | ( 408720.46, 3769874.73, 96.91, 96.91, 0.00) | DC | |
| | 7TH HIGHEST VALUE IS | 56.57959 AT | ( 408740.46, 3769814.73, 96.48, 96.48, 0.00) | DC | |
| | 8TH HIGHEST VALUE IS | 53.43622 AT | ( 408700.46, 3769894.73, 96.98, | | |

```
   96.98,    0.00)  DC
          9TH HIGHEST VALUE IS      52.55082 AT (  408760.46,  3769794.73,    95.20,
   95.20,    0.00)  DC
         10TH HIGHEST VALUE IS      52.44122 AT (  408700.46,  3769914.73,    97.11,
   97.11,    0.00)  DC

ALL       1ST HIGHEST VALUE IS     189.24188 AT (  408758.17,  3769919.06,    97.10,
   97.10,    0.00)  DC
          2ND HIGHEST VALUE IS     163.00724 AT (  408757.25,  3769928.22,    97.01,
   97.01,    0.00)  DC
          3RD HIGHEST VALUE IS     120.22536 AT (  408740.46,  3769914.73,    97.11,
   97.11,    0.00)  DC
          4TH HIGHEST VALUE IS      81.31637 AT (  408720.46,  3769894.73,    97.02,
   97.02,    0.00)  DC
          5TH HIGHEST VALUE IS      79.08385 AT (  408720.46,  3769914.73,    97.13,
   97.13,    0.00)  DC
          6TH HIGHEST VALUE IS      77.38893 AT (  408720.46,  3769874.73,    96.91,
   96.91,    0.00)  DC
          7TH HIGHEST VALUE IS      62.06144 AT (  408740.46,  3769814.73,    96.48,
   96.48,    0.00)  DC
          8TH HIGHEST VALUE IS      58.43452 AT (  408760.46,  3769794.73,    95.20,
   95.20,    0.00)  DC
          9TH HIGHEST VALUE IS      58.13050 AT (  408700.46,  3769894.73,    96.98,
   96.98,    0.00)  DC
         10TH HIGHEST VALUE IS      57.09630 AT (  408700.46,  3769914.73,    97.11,
   97.11,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↟ *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE  86
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                  ** CONC OF PM_10    IN MICROGRAMS/M**3
             **

                                                      DATE
                                          NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR
```

```
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - -
```

```
**********************************
*** AERMOD Finishes Successfully ***
**********************************
```

 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                          ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - -

```
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   182.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.7 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Kaiser BP.err

 **File for Summary of Results:   Kaiser BP.sum

↟ *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***

(1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,



*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\AzusaADJU\AZUS_V9_ADJU\AZUS_v9.SFC
Met Version: 16216
Profile file: ..\AzusaADJU\AZUS_V9_ADJU\AZUS_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3179 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN

Year: 2012 Year: 2012

First 24 hours of scalar data

| YR | MO | DY | JDY | HR | H0 | U* | W* | DT/DZ | ZICNV | ZIMCH | M-O LEN | Z0 | BOWEN | ALBEDO | REF WS | WD | HT | REF TA | HT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 01 | 01 | 1 | 01 | -21.3 | 0.224 | -9.000 | -9.000 | -999. | 255. | 55.3 | 0.36 | 1.68 | 1.00 | 1.80 | 20. | 9.1 | 293.1 | 5.5 |
| 12 | 01 | 01 | 1 | 02 | -32.6 | 0.342 | -9.000 | -9.000 | -999. | 481. | 128.9 | 0.36 | 1.68 | 1.00 | 2.70 | 99. | 9.1 | 293.1 | 5.5 |
| 12 | 01 | 01 | 1 | 03 | -26.4 | 0.277 | -9.000 | -9.000 | -999. | 351. | 84.1 | 0.36 | 1.68 | 1.00 | 2.20 | 14. | 9.1 | 292.0 | 5.5 |
| 12 | 01 | 01 | 1 | 04 | -32.6 | 0.342 | -9.000 | -9.000 | -999. | 480. | 128.9 | 0.36 | 1.68 | 1.00 | 2.70 | 10. | 9.1 | 292.5 | 5.5 |
| 12 | 01 | 01 | 1 | 05 | -26.4 | 0.277 | -9.000 | -9.000 | -999. | 351. | 84.1 | 0.36 | 1.68 | 1.00 | 2.20 | 12. | 9.1 | 292.5 | 5.5 |
| 12 | 01 | 01 | 1 | 06 | -21.6 | 0.224 | -9.000 | -9.000 | -999. | 256. | 55.2 | 0.36 | 1.68 | 1.00 | 1.80 | 118. | 9.1 | 289.2 | 5.5 |
| 12 | 01 | 01 | 1 | 07 | -26.6 | 0.277 | -9.000 | -9.000 | -999. | 349. | 84.1 | 0.36 | 1.68 | 1.00 | 2.20 | 64. | 9.1 | 290.9 | 5.5 |
| 12 | 01 | 01 | 1 | 08 | -1.3 | 0.062 | -9.000 | -9.000 | -999. | 124. | 16.5 | 0.36 | 1.68 | 0.55 | 0.40 | 36. | 9.1 | 290.9 | 5.5 |
| 12 | 01 | 01 | 1 | 09 | 38.1 | 0.160 | 0.348 | 0.008 | 39. | 153. | -9.5 | 0.36 | 1.68 | 0.32 | 0.90 | 124. | 9.1 | 293.8 | 5.5 |
| 12 | 01 | 01 | 1 | 10 | 99.5 | 0.179 | 0.693 | 0.007 | 119. | 181. | -5.1 | 0.36 | 1.68 | 0.25 | 0.90 | 21. | 9.1 | 298.1 | 5.5 |
| 12 | 01 | 01 | 1 | 11 | 142.6 | 0.494 | 1.086 | 0.005 | 321. | 832. | -75.2 | 0.36 | 1.68 | 0.22 | 3.60 | 141. | 9.1 | 299.9 | 5.5 |
| 12 | 01 | 01 | 1 | 12 | 162.8 | 0.442 | 1.385 | 0.005 | 582. | 709. | -47.3 | 0.36 | 1.68 | 0.21 | 3.10 | 122. | 9.1 | 299.9 | 5.5 |
| 12 | 01 | 01 | 1 | 13 | 164.4 | 0.298 | 1.634 | 0.005 | 946. | 405. | -14.3 | 0.36 | 1.68 | 0.21 | 1.80 | 114. | 9.1 | 300.9 | 5.5 |
| 12 | 01 | 01 | 1 | 14 | 142.7 | 0.293 | 1.718 | 0.005 | 1265. | 382. | -15.8 | 0.36 | 1.68 | 0.22 | 1.80 | 93. | 9.1 | 302.5 | 5.5 |
| 12 | 01 | 01 | 1 | 15 | 96.7 | 0.283 | 1.575 | 0.005 | 1438. | 361. | -20.7 | 0.36 | 1.68 | 0.26 | 1.80 | 110. | 9.1 | 303.8 | 5.5 |
| 12 | 01 | 01 | 1 | 16 | 41.5 | 0.207 | 1.201 | 0.005 | 1485. | 228. | -18.9 | 0.36 | 1.68 | 0.35 | 1.30 | 113. | 9.1 | 304.2 | 5.5 |
| 12 | 01 | 01 | 1 | 17 | -37.8 | 0.464 | -9.000 | -9.000 | -999. | 757. | 236.3 | 0.36 | 1.68 | 0.62 | 3.60 | 251. | 9.1 | 300.9 | 5.5 |
| 12 | 01 | 01 | 1 | 18 | -26.1 | 0.277 | -9.000 | -9.000 | -999. | 379. | 84.2 | 0.36 | 1.68 | 1.00 | 2.20 | 8. | 9.1 | 296.4 | 5.5 |
| 12 | 01 | 01 | 1 | 19 | -999.0 | -9.000 | -9.000 | -9.000 | -999. | -999. | -99999.0 | 0.36 | 1.68 | 1.00 | 999.00 | 999. | -9.0 | 295.9 | 5.5 |
| 12 | 01 | 01 | 1 | 20 | -5.7 | 0.107 | -9.000 | -9.000 | -999. | 84. | 19.3 | 0.36 | 1.68 | 1.00 | 0.90 | 35. | 9.1 | 295.4 | 5.5 |

```
 12 01 01   1 21  -21.3  0.224 -9.000 -9.000 -999.  255.     55.3  0.36   1.68
1.00    1.80  213.    9.1  293.8    5.5
 12 01 01   1 22  -21.3  0.224 -9.000 -9.000 -999.  255.     55.3  0.36   1.68
1.00    1.80   52.    9.1  293.8    5.5
 12 01 01   1 23  -26.3  0.277 -9.000 -9.000 -999.  349.     84.2  0.36   1.68
1.00    2.20   58.    9.1  293.8    5.5
 12 01 01   1 24  -21.4  0.224 -9.000 -9.000 -999.  256.     55.3  0.36   1.68
1.00    1.80   83.    9.1  292.5    5.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    5.5 0 -999.  -99.00   293.2   99.0  -99.00  -99.00
 12 01 01 01    9.1 1   20.    1.80  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 21112  ***   *** C:\Users\apoll\Desktop\HARP2\HARP\Kaiser
Baldwin Park\Kaiser BP\Kais ***        08/02/22
 *** AERMET - VERSION  16216 ***   ***
                       ***        14:11:35

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                       *** THE SUMMARY OF MAXIMUM PERIOD ( 43848
HRS) RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
             **


                      NETWORK
GROUP ID                      AVERAGE CONC               RECEPTOR  (XR, YR, ZELEV,
ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

SLINE1    1ST HIGHEST VALUE IS      12.49953 AT (  409048.19,  3770087.68,    97.18,
   97.18,    0.00)  DC
          2ND HIGHEST VALUE IS      11.87118 AT (  409045.41,  3770095.32,    97.20,
   97.20,    0.00)  DC
          3RD HIGHEST VALUE IS      11.17291 AT (  409025.41,  3770095.32,    97.08,
   97.08,    0.00)  DC
          4TH HIGHEST VALUE IS      10.67178 AT (  408953.25,  3769647.96,    97.06,
   97.06,    0.00)  DC
          5TH HIGHEST VALUE IS      10.63229 AT (  409045.41,  3770115.32,    96.66,
   96.66,    0.00)  DC
          6TH HIGHEST VALUE IS      10.47467 AT (  409005.41,  3770095.32,    96.88,
   96.88,    0.00)  DC
```

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          7TH HIGHEST VALUE IS      10.34808 AT (  408940.46,  3769654.73,    97.00,
   97.00,    0.00)  DC
          8TH HIGHEST VALUE IS      10.07631 AT (  409025.41,  3770115.32,    96.51,
   96.51,    0.00)  DC
          9TH HIGHEST VALUE IS       9.94237 AT (  408965.41,  3770075.32,    96.90,
   96.90,    0.00)  DC
         10TH HIGHEST VALUE IS       9.79262 AT (  408985.41,  3770095.32,    96.63,
   96.63,    0.00)  DC

SLINE2    1ST HIGHEST VALUE IS     183.45642 AT (  408758.17,  3769919.06,    97.10,
   97.10,    0.00)  DC
          2ND HIGHEST VALUE IS     157.28234 AT (  408757.25,  3769928.22,    97.01,
   97.01,    0.00)  DC
          3RD HIGHEST VALUE IS     114.81890 AT (  408740.46,  3769914.73,    97.11,
   97.11,    0.00)  DC
          4TH HIGHEST VALUE IS      76.26151 AT (  408720.46,  3769894.73,    97.02,
   97.02,    0.00)  DC
          5TH HIGHEST VALUE IS      74.07525 AT (  408720.46,  3769914.73,    97.13,
   97.13,    0.00)  DC
          6TH HIGHEST VALUE IS      72.30416 AT (  408720.46,  3769874.73,    96.91,
   96.91,    0.00)  DC
          7TH HIGHEST VALUE IS      56.57959 AT (  408740.46,  3769814.73,    96.48,
   96.48,    0.00)  DC
          8TH HIGHEST VALUE IS      53.43622 AT (  408700.46,  3769894.73,    96.98,
   96.98,    0.00)  DC
          9TH HIGHEST VALUE IS      52.55082 AT (  408760.46,  3769794.73,    95.20,
   95.20,    0.00)  DC
         10TH HIGHEST VALUE IS      52.44122 AT (  408700.46,  3769914.73,    97.11,
   97.11,    0.00)  DC

ALL       1ST HIGHEST VALUE IS     189.24188 AT (  408758.17,  3769919.06,    97.10,
   97.10,    0.00)  DC
          2ND HIGHEST VALUE IS     163.00724 AT (  408757.25,  3769928.22,    97.01,
   97.01,    0.00)  DC
          3RD HIGHEST VALUE IS     120.22536 AT (  408740.46,  3769914.73,    97.11,
   97.11,    0.00)  DC
          4TH HIGHEST VALUE IS      81.31637 AT (  408720.46,  3769894.73,    97.02,
   97.02,    0.00)  DC
          5TH HIGHEST VALUE IS      79.08385 AT (  408720.46,  3769914.73,    97.13,
   97.13,    0.00)  DC
          6TH HIGHEST VALUE IS      77.38893 AT (  408720.46,  3769874.73,    96.91,
   96.91,    0.00)  DC
          7TH HIGHEST VALUE IS      62.06144 AT (  408740.46,  3769814.73,    96.48,
   96.48,    0.00)  DC
          8TH HIGHEST VALUE IS      58.43452 AT (  408760.46,  3769794.73,    95.20,
   95.20,    0.00)  DC
          9TH HIGHEST VALUE IS      58.13050 AT (  408700.46,  3769894.73,    96.98,
   96.98,    0.00)  DC
         10TH HIGHEST VALUE IS      57.09630 AT (  408700.46,  3769914.73,    97.11,
   97.11,    0.00)  DC
```

*** THE SUMMARY OF HIGHEST  1-HR RESULTS ***

** CONC OF PM_10    IN MICROGRAMS/M**3 **

| GROUP ID | AVERAGE CONC | DATE (YYMMDDHH) | RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) | OF TYPE | GRID-ID |
|---|---|---|---|---|---|
| SLINE1 | HIGH 1ST HIGH VALUE IS | 73.58322 | ON 12121716: AT ( 409518.34, 3769997.07, 99.32, 99.32, 0.00) | DC | |
| SLINE2 | HIGH 1ST HIGH VALUE IS | 1024.53971 | ON 12033117: AT ( 408758.17, 3769919.06, 97.10, 97.10, 0.00) | DC | |
| ALL | HIGH 1ST HIGH VALUE IS | 1086.10782 | ON 12033117: AT ( 408758.17, 3769919.06, 97.10, 97.10, 0.00) | DC | |

```
*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            2 Warning Message(s)
A Total of         1684 Informational Message(s)

A Total of        43848 Hours Were Processed

A Total of           75 Calm Hours Identified

A Total of         1609 Missing Hours Identified (  3.67 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186     360       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
    0.50
ME W187     360       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
```

HARP2 - HRACalc (dated 22118) 2/3/2023 5:56:44 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
**********
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

**********
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 2

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

**********
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments.  The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

**********
INHALATION

Daily breathing rate: RMP

**Worker Adjustment Factors**
Worker adjustment factors enabled: NO

**Fraction at time at home**
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

**********
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Warm

**********
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

**********
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Kaiser Baldwin Park\KAISER BALDWIN PARK HARP\hra\ERCancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Kaiser Baldwin Park\KAISER BALDWIN PARK HARP\hra\ERCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Kaiser Baldwin Park\KAISER BALDWIN PARK HARP\hra\ERNCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Kaiser Baldwin Park\KAISER BALDWIN PARK HARP\hra\ERNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Kaiser Baldwin Park\KAISER BALDWIN PARK HARP\hra\ERNCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\apoll\Desktop\HARP2\HARP\Kaiser Baldwin Park\KAISER BALDWIN PARK HARP\hra\ERNCAcuteRiskSumByRec.csv
HRA ran successfully

| REC | GRP | NETID | X | Y | RISK_SUM | SCENARIO | INH_RISK | SOIL_RISK | DERMAL_R | MMILK_RIS | WATER_RI | FISH_RISK | CROP_RISK | BEEF_RISK | DAIRY_RISI | PIG_RISK | CHICKEN_R | EGG_RISK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ALL | | 408660.5 | 3769575 | 2.65E-07 | 2YrCancerF | 2.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 2 | ALL | | 408680.5 | 3769575 | 2.79E-07 | 2YrCancerF | 2.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 3 | ALL | | 408820.5 | 3769575 | 4.18E-07 | 2YrCancerF | 4.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 4 | ALL | | 408640.5 | 3769595 | 2.58E-07 | 2YrCancerF | 2.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 5 | ALL | | 408660.5 | 3769595 | 2.72E-07 | 2YrCancerF | 2.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 6 | ALL | | 408680.5 | 3769595 | 2.87E-07 | 2YrCancerF | 2.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 7 | ALL | | 408700.5 | 3769595 | 3.04E-07 | 2YrCancerF | 3.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 8 | ALL | | 408720.5 | 3769595 | 3.22E-07 | 2YrCancerF | 3.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 9 | ALL | | 408740.5 | 3769595 | 3.41E-07 | 2YrCancerF | 3.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 10 | ALL | | 408760.5 | 3769595 | 3.62E-07 | 2YrCancerF | 3.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 11 | ALL | | 408780.5 | 3769595 | 3.86E-07 | 2YrCancerF | 3.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 12 | ALL | | 408800.5 | 3769595 | 4.11E-07 | 2YrCancerF | 4.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 13 | ALL | | 408820.5 | 3769595 | 4.38E-07 | 2YrCancerF | 4.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 14 | ALL | | 408840.5 | 3769595 | 4.68E-07 | 2YrCancerF | 4.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 15 | ALL | | 408860.5 | 3769595 | 5.00E-07 | 2YrCancerF | 5.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 16 | ALL | | 408880.5 | 3769595 | 5.36E-07 | 2YrCancerF | 5.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 17 | ALL | | 408620.5 | 3769615 | 2.51E-07 | 2YrCancerF | 2.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 18 | ALL | | 408640.5 | 3769615 | 2.64E-07 | 2YrCancerF | 2.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 19 | ALL | | 408660.5 | 3769615 | 2.79E-07 | 2YrCancerF | 2.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 20 | ALL | | 408680.5 | 3769615 | 2.96E-07 | 2YrCancerF | 2.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 21 | ALL | | 408700.5 | 3769615 | 3.13E-07 | 2YrCancerF | 3.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 22 | ALL | | 408720.5 | 3769615 | 3.32E-07 | 2YrCancerF | 3.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 23 | ALL | | 408740.5 | 3769615 | 3.53E-07 | 2YrCancerF | 3.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 24 | ALL | | 408760.5 | 3769615 | 3.76E-07 | 2YrCancerF | 3.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 25 | ALL | | 408780.5 | 3769615 | 4.01E-07 | 2YrCancerF | 4.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 26 | ALL | | 408800.5 | 3769615 | 4.28E-07 | 2YrCancerF | 4.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 27 | ALL | | 408820.5 | 3769615 | 4.58E-07 | 2YrCancerF | 4.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 28 | ALL | | 408840.5 | 3769615 | 4.92E-07 | 2YrCancerF | 4.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 29 | ALL | | 408860.5 | 3769615 | 5.28E-07 | 2YrCancerF | 5.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 30 | ALL | | 408880.5 | 3769615 | 5.68E-07 | 2YrCancerF | 5.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 31 | ALL | | 408900.5 | 3769615 | 6.12E-07 | 2YrCancerF | 6.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 32 | ALL | | 408600.5 | 3769635 | 2.43E-07 | 2YrCancerF | 2.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 33 | ALL | | 408620.5 | 3769635 | 2.56E-07 | 2YrCancerF | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 34 | ALL | | 408640.5 | 3769635 | 2.71E-07 | 2YrCancerF | 2.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 35 | ALL | | 408660.5 | 3769635 | 2.86E-07 | 2YrCancerF | 2.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 36 | ALL | | 408680.5 | 3769635 | 3.03E-07 | 2YrCancerF | 3.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 37 | ALL | | 408700.5 | 3769635 | 3.22E-07 | 2YrCancerF | 3.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 38 | ALL | | 408720.5 | 3769635 | 3.43E-07 | 2YrCancerF | 3.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 39 | ALL | | 408740.5 | 3769635 | 3.65E-07 | 2YrCancerF | 3.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 40 | ALL | | 408760.5 | 3769635 | 3.89E-07 | 2YrCancerF | 3.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 41 | ALL | | 408780.5 | 3769635 | 4.16E-07 | 2YrCancerF | 4.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 42 | ALL | | 408800.5 | 3769635 | 4.46E-07 | 2YrCancerF | 4.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 43 | ALL | | 408820.5 | 3769635 | 4.79E-07 | 2YrCancerF | 4.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 44 | ALL | | 408840.5 | 3769635 | 5.16E-07 | 2YrCancerF | 5.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 45 | ALL | | 408860.5 | 3769635 | 5.57E-07 | 2YrCancerF | 5.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 46 | ALL | | 408880.5 | 3769635 | 6.02E-07 | 2YrCancerF | 6.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 47 | ALL | | 408900.5 | 3769635 | 6.51E-07 | 2YrCancerF | 6.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 48 | ALL | | 408920.5 | 3769635 | 7.07E-07 | 2YrCancerF | 7.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | ALL | 408560.5 | 3769655 | 2.23E-07 | 2YrCancerF | 2.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 50 | ALL | 408580.5 | 3769655 | 2.35E-07 | 2YrCancerF | 2.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 51 | ALL | 408600.5 | 3769655 | 2.47E-07 | 2YrCancerF | 2.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 52 | ALL | 408620.5 | 3769655 | 2.61E-07 | 2YrCancerF | 2.61E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 53 | ALL | 408640.5 | 3769655 | 2.76E-07 | 2YrCancerF | 2.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 54 | ALL | 408660.5 | 3769655 | 2.93E-07 | 2YrCancerF | 2.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 55 | ALL | 408680.5 | 3769655 | 3.11E-07 | 2YrCancerF | 3.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 56 | ALL | 408700.5 | 3769655 | 3.31E-07 | 2YrCancerF | 3.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 57 | ALL | 408720.5 | 3769655 | 3.52E-07 | 2YrCancerF | 3.52E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 58 | ALL | 408740.5 | 3769655 | 3.76E-07 | 2YrCancerF | 3.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 59 | ALL | 408760.5 | 3769655 | 4.02E-07 | 2YrCancerF | 4.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 60 | ALL | 408780.5 | 3769655 | 4.31E-07 | 2YrCancerF | 4.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 61 | ALL | 408800.5 | 3769655 | 4.64E-07 | 2YrCancerF | 4.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 62 | ALL | 408820.5 | 3769655 | 5.00E-07 | 2YrCancerF | 5.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 63 | ALL | 408840.5 | 3769655 | 5.41E-07 | 2YrCancerF | 5.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 64 | ALL | 408860.5 | 3769655 | 5.86E-07 | 2YrCancerF | 5.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 65 | ALL | 408880.5 | 3769655 | 6.36E-07 | 2YrCancerF | 6.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 66 | ALL | 408900.5 | 3769655 | 6.93E-07 | 2YrCancerF | 6.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 67 | ALL | 408920.5 | 3769655 | 7.56E-07 | 2YrCancerF | 7.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 68 | ALL | 408940.5 | 3769655 | 8.27E-07 | 2YrCancerF | 8.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 69 | ALL | 408540.5 | 3769675 | 2.15E-07 | 2YrCancerF | 2.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 70 | ALL | 408560.5 | 3769675 | 2.26E-07 | 2YrCancerF | 2.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 71 | ALL | 408580.5 | 3769675 | 2.38E-07 | 2YrCancerF | 2.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 72 | ALL | 408600.5 | 3769675 | 2.52E-07 | 2YrCancerF | 2.52E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 73 | ALL | 408620.5 | 3769675 | 2.66E-07 | 2YrCancerF | 2.66E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 74 | ALL | 408640.5 | 3769675 | 2.82E-07 | 2YrCancerF | 2.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 75 | ALL | 408660.5 | 3769675 | 2.99E-07 | 2YrCancerF | 2.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 76 | ALL | 408680.5 | 3769675 | 3.18E-07 | 2YrCancerF | 3.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 77 | ALL | 408700.5 | 3769675 | 3.39E-07 | 2YrCancerF | 3.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 78 | ALL | 408720.5 | 3769675 | 3.62E-07 | 2YrCancerF | 3.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 79 | ALL | 408740.5 | 3769675 | 3.87E-07 | 2YrCancerF | 3.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 80 | ALL | 408760.5 | 3769675 | 4.15E-07 | 2YrCancerF | 4.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 81 | ALL | 408780.5 | 3769675 | 4.46E-07 | 2YrCancerF | 4.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 82 | ALL | 408800.5 | 3769675 | 4.81E-07 | 2YrCancerF | 4.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 83 | ALL | 408820.5 | 3769675 | 5.20E-07 | 2YrCancerF | 5.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 84 | ALL | 408840.5 | 3769675 | 5.65E-07 | 2YrCancerF | 5.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 85 | ALL | 408860.5 | 3769675 | 6.14E-07 | 2YrCancerF | 6.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 86 | ALL | 408880.5 | 3769675 | 6.71E-07 | 2YrCancerF | 6.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 87 | ALL | 408900.5 | 3769675 | 7.35E-07 | 2YrCancerF | 7.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 88 | ALL | 408520.5 | 3769695 | 2.07E-07 | 2YrCancerF | 2.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 89 | ALL | 408540.5 | 3769695 | 2.18E-07 | 2YrCancerF | 2.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 90 | ALL | 408560.5 | 3769695 | 2.29E-07 | 2YrCancerF | 2.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 91 | ALL | 408580.5 | 3769695 | 2.42E-07 | 2YrCancerF | 2.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 92 | ALL | 408600.5 | 3769695 | 2.56E-07 | 2YrCancerF | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 93 | ALL | 408620.5 | 3769695 | 2.71E-07 | 2YrCancerF | 2.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 94 | ALL | 408640.5 | 3769695 | 2.87E-07 | 2YrCancerF | 2.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 95 | ALL | 408660.5 | 3769695 | 3.05E-07 | 2YrCancerF | 3.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 96 | ALL | 408680.5 | 3769695 | 3.24E-07 | 2YrCancerF | 3.24E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 97 | ALL | 408700.5 | 3769695 | 3.46E-07 | 2YrCancerF | 3.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98 | ALL | 408720.5 | 3769695 | 3.70E-07 | 2YrCancerR | 3.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 99 | ALL | 408740.5 | 3769695 | 3.97E-07 | 2YrCancerR | 3.97E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 100 | ALL | 408760.5 | 3769695 | 4.27E-07 | 2YrCancerR | 4.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 101 | ALL | 408780.5 | 3769695 | 4.60E-07 | 2YrCancerR | 4.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 102 | ALL | 408800.5 | 3769695 | 4.98E-07 | 2YrCancerR | 4.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 103 | ALL | 408820.5 | 3769695 | 5.40E-07 | 2YrCancerR | 5.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 104 | ALL | 408840.5 | 3769695 | 5.88E-07 | 2YrCancerR | 5.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 105 | ALL | 408860.5 | 3769695 | 6.43E-07 | 2YrCancerR | 6.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 106 | ALL | 408880.5 | 3769695 | 7.06E-07 | 2YrCancerR | 7.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 107 | ALL | 408480.5 | 3769715 | 1.90E-07 | 2YrCancerR | 1.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 108 | ALL | 408500.5 | 3769715 | 1.99E-07 | 2YrCancerR | 1.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 109 | ALL | 408520.5 | 3769715 | 2.09E-07 | 2YrCancerR | 2.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 110 | ALL | 408540.5 | 3769715 | 2.20E-07 | 2YrCancerR | 2.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 111 | ALL | 408560.5 | 3769715 | 2.32E-07 | 2YrCancerR | 2.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 112 | ALL | 408580.5 | 3769715 | 2.45E-07 | 2YrCancerR | 2.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 113 | ALL | 408600.5 | 3769715 | 2.59E-07 | 2YrCancerR | 2.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 114 | ALL | 408620.5 | 3769715 | 2.75E-07 | 2YrCancerR | 2.75E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 115 | ALL | 408640.5 | 3769715 | 2.92E-07 | 2YrCancerR | 2.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 116 | ALL | 408660.5 | 3769715 | 3.10E-07 | 2YrCancerR | 3.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 117 | ALL | 408680.5 | 3769715 | 3.31E-07 | 2YrCancerR | 3.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 118 | ALL | 408700.5 | 3769715 | 3.53E-07 | 2YrCancerR | 3.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 119 | ALL | 408720.5 | 3769715 | 3.79E-07 | 2YrCancerR | 3.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 120 | ALL | 408740.5 | 3769715 | 4.07E-07 | 2YrCancerR | 4.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 121 | ALL | 408760.5 | 3769715 | 4.38E-07 | 2YrCancerR | 4.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 122 | ALL | 408780.5 | 3769715 | 4.73E-07 | 2YrCancerR | 4.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 123 | ALL | 408800.5 | 3769715 | 5.13E-07 | 2YrCancerR | 5.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 124 | ALL | 408820.5 | 3769715 | 5.59E-07 | 2YrCancerR | 5.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 125 | ALL | 408840.5 | 3769715 | 6.11E-07 | 2YrCancerR | 6.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 126 | ALL | 408860.5 | 3769715 | 6.70E-07 | 2YrCancerR | 6.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 127 | ALL | 408460.5 | 3769735 | 1.83E-07 | 2YrCancerR | 1.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 128 | ALL | 408480.5 | 3769735 | 1.92E-07 | 2YrCancerR | 1.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 129 | ALL | 408500.5 | 3769735 | 2.01E-07 | 2YrCancerR | 2.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 130 | ALL | 408520.5 | 3769735 | 2.12E-07 | 2YrCancerR | 2.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 131 | ALL | 408540.5 | 3769735 | 2.23E-07 | 2YrCancerR | 2.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 132 | ALL | 408560.5 | 3769735 | 2.35E-07 | 2YrCancerR | 2.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 133 | ALL | 408580.5 | 3769735 | 2.48E-07 | 2YrCancerR | 2.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 134 | ALL | 408600.5 | 3769735 | 2.63E-07 | 2YrCancerR | 2.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 135 | ALL | 408620.5 | 3769735 | 2.78E-07 | 2YrCancerR | 2.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 136 | ALL | 408640.5 | 3769735 | 2.96E-07 | 2YrCancerR | 2.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 137 | ALL | 408660.5 | 3769735 | 3.15E-07 | 2YrCancerR | 3.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 138 | ALL | 408680.5 | 3769735 | 3.36E-07 | 2YrCancerR | 3.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 139 | ALL | 408700.5 | 3769735 | 3.60E-07 | 2YrCancerR | 3.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 140 | ALL | 408720.5 | 3769735 | 3.86E-07 | 2YrCancerR | 3.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 141 | ALL | 408740.5 | 3769735 | 4.16E-07 | 2YrCancerR | 4.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 142 | ALL | 408760.5 | 3769735 | 4.48E-07 | 2YrCancerR | 4.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 143 | ALL | 408780.5 | 3769735 | 4.85E-07 | 2YrCancerR | 4.85E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 144 | ALL | 408800.5 | 3769735 | 5.28E-07 | 2YrCancerR | 5.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 145 | ALL | 408820.5 | 3769735 | 5.76E-07 | 2YrCancerR | 5.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 146 | ALL | 408840.5 | 3769735 | 6.31E-07 | 2YrCancerR | 6.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 147 | ALL | 408440.5 | 3769755 | 1.76E-07 | 2YrCancerF | 1.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 148 | ALL | 408460.5 | 3769755 | 1.84E-07 | 2YrCancerF | 1.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 149 | ALL | 408480.5 | 3769755 | 1.93E-07 | 2YrCancerF | 1.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 150 | ALL | 408500.5 | 3769755 | 2.03E-07 | 2YrCancerF | 2.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 151 | ALL | 408520.5 | 3769755 | 2.13E-07 | 2YrCancerF | 2.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 152 | ALL | 408540.5 | 3769755 | 2.25E-07 | 2YrCancerF | 2.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 153 | ALL | 408560.5 | 3769755 | 2.37E-07 | 2YrCancerF | 2.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 154 | ALL | 408580.5 | 3769755 | 2.51E-07 | 2YrCancerF | 2.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 155 | ALL | 408600.5 | 3769755 | 2.65E-07 | 2YrCancerF | 2.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 156 | ALL | 408620.5 | 3769755 | 2.82E-07 | 2YrCancerF | 2.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 157 | ALL | 408640.5 | 3769755 | 2.99E-07 | 2YrCancerF | 2.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 158 | ALL | 408660.5 | 3769755 | 3.19E-07 | 2YrCancerF | 3.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 159 | ALL | 408680.5 | 3769755 | 3.41E-07 | 2YrCancerF | 3.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 160 | ALL | 408700.5 | 3769755 | 3.65E-07 | 2YrCancerF | 3.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 161 | ALL | 408720.5 | 3769755 | 3.93E-07 | 2YrCancerF | 3.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 162 | ALL | 408740.5 | 3769755 | 4.23E-07 | 2YrCancerF | 4.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 163 | ALL | 408760.5 | 3769755 | 4.57E-07 | 2YrCancerF | 4.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 164 | ALL | 408780.5 | 3769755 | 4.96E-07 | 2YrCancerF | 4.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 165 | ALL | 408800.5 | 3769755 | 5.40E-07 | 2YrCancerF | 5.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 166 | ALL | 408400.5 | 3769775 | 1.62E-07 | 2YrCancerF | 1.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 167 | ALL | 408420.5 | 3769775 | 1.69E-07 | 2YrCancerF | 1.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 168 | ALL | 408440.5 | 3769775 | 1.77E-07 | 2YrCancerF | 1.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 169 | ALL | 408460.5 | 3769775 | 1.85E-07 | 2YrCancerF | 1.85E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 170 | ALL | 408480.5 | 3769775 | 1.94E-07 | 2YrCancerF | 1.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 171 | ALL | 408500.5 | 3769775 | 2.04E-07 | 2YrCancerF | 2.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 172 | ALL | 408520.5 | 3769775 | 2.15E-07 | 2YrCancerF | 2.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 173 | ALL | 408540.5 | 3769775 | 2.26E-07 | 2YrCancerF | 2.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 174 | ALL | 408560.5 | 3769775 | 2.39E-07 | 2YrCancerF | 2.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 175 | ALL | 408580.5 | 3769775 | 2.53E-07 | 2YrCancerF | 2.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 176 | ALL | 408600.5 | 3769775 | 2.68E-07 | 2YrCancerF | 2.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 177 | ALL | 408620.5 | 3769775 | 2.84E-07 | 2YrCancerF | 2.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 178 | ALL | 408640.5 | 3769775 | 3.02E-07 | 2YrCancerF | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 179 | ALL | 408660.5 | 3769775 | 3.23E-07 | 2YrCancerF | 3.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 180 | ALL | 408680.5 | 3769775 | 3.45E-07 | 2YrCancerF | 3.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 181 | ALL | 408700.5 | 3769775 | 3.70E-07 | 2YrCancerF | 3.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 182 | ALL | 408720.5 | 3769775 | 3.98E-07 | 2YrCancerF | 3.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 183 | ALL | 408740.5 | 3769775 | 4.29E-07 | 2YrCancerF | 4.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 184 | ALL | 408760.5 | 3769775 | 4.64E-07 | 2YrCancerF | 4.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 185 | ALL | 408780.5 | 3769775 | 5.05E-07 | 2YrCancerF | 5.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 186 | ALL | 408380.5 | 3769795 | 1.55E-07 | 2YrCancerF | 1.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 187 | ALL | 408400.5 | 3769795 | 1.62E-07 | 2YrCancerF | 1.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 188 | ALL | 408420.5 | 3769795 | 1.70E-07 | 2YrCancerF | 1.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 189 | ALL | 408440.5 | 3769795 | 1.77E-07 | 2YrCancerF | 1.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 190 | ALL | 408460.5 | 3769795 | 1.86E-07 | 2YrCancerF | 1.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 191 | ALL | 408480.5 | 3769795 | 1.95E-07 | 2YrCancerF | 1.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 192 | ALL | 408500.5 | 3769795 | 2.05E-07 | 2YrCancerF | 2.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 193 | ALL | 408520.5 | 3769795 | 2.16E-07 | 2YrCancerF | 2.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 194 | ALL | 408540.5 | 3769795 | 2.28E-07 | 2YrCancerF | 2.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 195 | ALL | 408560.5 | 3769795 | 2.40E-07 | 2YrCancerF | 2.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 196 | ALL | 408580.5 | 3769795 | 2.54E-07 | 2YrCancerF | 2.54E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 197 | ALL | 408600.5 | 3769795 | 2.70E-07 | 2YrCancerF | 2.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 198 | ALL | 408620.5 | 3769795 | 2.86E-07 | 2YrCancerF | 2.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 199 | ALL | 408640.5 | 3769795 | 3.05E-07 | 2YrCancerF | 3.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 200 | ALL | 408660.5 | 3769795 | 3.25E-07 | 2YrCancerF | 3.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 201 | ALL | 408680.5 | 3769795 | 3.48E-07 | 2YrCancerF | 3.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 202 | ALL | 408700.5 | 3769795 | 3.74E-07 | 2YrCancerF | 3.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 203 | ALL | 408720.5 | 3769795 | 4.02E-07 | 2YrCancerF | 4.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 204 | ALL | 408740.5 | 3769795 | 4.34E-07 | 2YrCancerF | 4.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 205 | ALL | 408760.5 | 3769795 | 4.70E-07 | 2YrCancerF | 4.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 206 | ALL | 408380.5 | 3769815 | 1.56E-07 | 2YrCancerF | 1.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 207 | ALL | 408400.5 | 3769815 | 1.63E-07 | 2YrCancerF | 1.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 208 | ALL | 408420.5 | 3769815 | 1.70E-07 | 2YrCancerF | 1.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 209 | ALL | 408440.5 | 3769815 | 1.78E-07 | 2YrCancerF | 1.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 210 | ALL | 408460.5 | 3769815 | 1.87E-07 | 2YrCancerF | 1.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 211 | ALL | 408480.5 | 3769815 | 1.96E-07 | 2YrCancerF | 1.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 212 | ALL | 408500.5 | 3769815 | 2.06E-07 | 2YrCancerF | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 213 | ALL | 408520.5 | 3769815 | 2.17E-07 | 2YrCancerF | 2.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 214 | ALL | 408540.5 | 3769815 | 2.28E-07 | 2YrCancerF | 2.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 215 | ALL | 408560.5 | 3769815 | 2.41E-07 | 2YrCancerF | 2.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 216 | ALL | 408580.5 | 3769815 | 2.55E-07 | 2YrCancerF | 2.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 217 | ALL | 408600.5 | 3769815 | 2.71E-07 | 2YrCancerF | 2.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 218 | ALL | 408620.5 | 3769815 | 2.88E-07 | 2YrCancerF | 2.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 219 | ALL | 408640.5 | 3769815 | 3.07E-07 | 2YrCancerF | 3.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 220 | ALL | 408660.5 | 3769815 | 3.27E-07 | 2YrCancerF | 3.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 221 | ALL | 408680.5 | 3769815 | 3.51E-07 | 2YrCancerF | 3.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 222 | ALL | 408700.5 | 3769815 | 3.76E-07 | 2YrCancerF | 3.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 223 | ALL | 408720.5 | 3769815 | 4.05E-07 | 2YrCancerF | 4.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 224 | ALL | 408740.5 | 3769815 | 4.38E-07 | 2YrCancerF | 4.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 225 | ALL | 408360.5 | 3769835 | 1.50E-07 | 2YrCancerF | 1.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 226 | ALL | 408380.5 | 3769835 | 1.56E-07 | 2YrCancerF | 1.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 227 | ALL | 408400.5 | 3769835 | 1.63E-07 | 2YrCancerF | 1.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 228 | ALL | 408420.5 | 3769835 | 1.70E-07 | 2YrCancerF | 1.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 229 | ALL | 408440.5 | 3769835 | 1.78E-07 | 2YrCancerF | 1.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 230 | ALL | 408460.5 | 3769835 | 1.87E-07 | 2YrCancerF | 1.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 231 | ALL | 408480.5 | 3769835 | 1.96E-07 | 2YrCancerF | 1.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 232 | ALL | 408500.5 | 3769835 | 2.06E-07 | 2YrCancerF | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 233 | ALL | 408520.5 | 3769835 | 2.17E-07 | 2YrCancerF | 2.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 234 | ALL | 408540.5 | 3769835 | 2.29E-07 | 2YrCancerF | 2.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 235 | ALL | 408560.5 | 3769835 | 2.42E-07 | 2YrCancerF | 2.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 236 | ALL | 408580.5 | 3769835 | 2.56E-07 | 2YrCancerF | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 237 | ALL | 408600.5 | 3769835 | 2.72E-07 | 2YrCancerF | 2.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 238 | ALL | 408620.5 | 3769835 | 2.89E-07 | 2YrCancerF | 2.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 239 | ALL | 408640.5 | 3769835 | 3.07E-07 | 2YrCancerF | 3.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 240 | ALL | 408660.5 | 3769835 | 3.28E-07 | 2YrCancerF | 3.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 241 | ALL | 408680.5 | 3769835 | 3.52E-07 | 2YrCancerF | 3.52E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 242 | ALL | 408700.5 | 3769835 | 3.78E-07 | 2YrCancerF | 3.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 243 | ALL | 408360.5 | 3769855 | 1.50E-07 | 2YrCancerF | 1.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 244 | ALL | 408380.5 | 3769855 | 1.56E-07 | 2YrCancerF | 1.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 245 | ALL | 408400.5 | 3769855 | 1.63E-07 | 2YrCancerF | 1.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 246 | ALL | 408420.5 | 3769855 | 1.70E-07 | 2YrCancerF | 1.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 247 | ALL | 408440.5 | 3769855 | 1.78E-07 | 2YrCancerF | 1.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 248 | ALL | 408460.5 | 3769855 | 1.87E-07 | 2YrCancerF | 1.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 249 | ALL | 408480.5 | 3769855 | 1.96E-07 | 2YrCancerF | 1.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 250 | ALL | 408500.5 | 3769855 | 2.06E-07 | 2YrCancerF | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 251 | ALL | 408520.5 | 3769855 | 2.17E-07 | 2YrCancerF | 2.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 252 | ALL | 408540.5 | 3769855 | 2.29E-07 | 2YrCancerF | 2.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 253 | ALL | 408560.5 | 3769855 | 2.42E-07 | 2YrCancerF | 2.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 254 | ALL | 408580.5 | 3769855 | 2.56E-07 | 2YrCancerF | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 255 | ALL | 408600.5 | 3769855 | 2.72E-07 | 2YrCancerF | 2.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 256 | ALL | 408620.5 | 3769855 | 2.89E-07 | 2YrCancerF | 2.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 257 | ALL | 408640.5 | 3769855 | 3.08E-07 | 2YrCancerF | 3.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 258 | ALL | 408660.5 | 3769855 | 3.29E-07 | 2YrCancerF | 3.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 259 | ALL | 408680.5 | 3769855 | 3.52E-07 | 2YrCancerF | 3.52E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 260 | ALL | 408700.5 | 3769855 | 3.78E-07 | 2YrCancerF | 3.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 261 | ALL | 408380.5 | 3769875 | 1.56E-07 | 2YrCancerF | 1.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 262 | ALL | 408400.5 | 3769875 | 1.63E-07 | 2YrCancerF | 1.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 263 | ALL | 408500.5 | 3769875 | 2.06E-07 | 2YrCancerF | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 264 | ALL | 408520.5 | 3769875 | 2.17E-07 | 2YrCancerF | 2.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 265 | ALL | 408540.5 | 3769875 | 2.29E-07 | 2YrCancerF | 2.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 266 | ALL | 408560.5 | 3769875 | 2.42E-07 | 2YrCancerF | 2.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 267 | ALL | 408580.5 | 3769875 | 2.56E-07 | 2YrCancerF | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 268 | ALL | 408620.5 | 3769875 | 2.88E-07 | 2YrCancerF | 2.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 269 | ALL | 408640.5 | 3769875 | 3.07E-07 | 2YrCancerF | 3.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 270 | ALL | 408660.5 | 3769875 | 3.28E-07 | 2YrCancerF | 3.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 271 | ALL | 408680.5 | 3769875 | 3.51E-07 | 2YrCancerF | 3.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 272 | ALL | 408700.5 | 3769875 | 3.77E-07 | 2YrCancerF | 3.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 273 | ALL | 408720.5 | 3769875 | 4.06E-07 | 2YrCancerF | 4.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 274 | ALL | 408500.5 | 3769895 | 2.05E-07 | 2YrCancerF | 2.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 275 | ALL | 408520.5 | 3769895 | 2.16E-07 | 2YrCancerF | 2.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 276 | ALL | 408540.5 | 3769895 | 2.28E-07 | 2YrCancerF | 2.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 277 | ALL | 408560.5 | 3769895 | 2.41E-07 | 2YrCancerF | 2.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 278 | ALL | 408620.5 | 3769895 | 2.87E-07 | 2YrCancerF | 2.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 279 | ALL | 408640.5 | 3769895 | 3.06E-07 | 2YrCancerF | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 280 | ALL | 408660.5 | 3769895 | 3.26E-07 | 2YrCancerF | 3.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 281 | ALL | 408680.5 | 3769895 | 3.49E-07 | 2YrCancerF | 3.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 282 | ALL | 408700.5 | 3769895 | 3.75E-07 | 2YrCancerF | 3.75E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 283 | ALL | 408720.5 | 3769895 | 4.04E-07 | 2YrCancerF | 4.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 284 | ALL | 408680.5 | 3769915 | 3.47E-07 | 2YrCancerF | 3.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 285 | ALL | 408700.5 | 3769915 | 3.72E-07 | 2YrCancerF | 3.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 286 | ALL | 408720.5 | 3769915 | 4.00E-07 | 2YrCancerF | 4.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 287 | ALL | 408740.5 | 3769915 | 4.32E-07 | 2YrCancerF | 4.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 288 | ALL | 408885.4 | 3770075 | 5.87E-07 | 2YrCancerF | 5.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 289 | ALL | 408905.4 | 3770075 | 6.32E-07 | 2YrCancerF | 6.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 290 | ALL | 408925.4 | 3770075 | 6.82E-07 | 2YrCancerF | 6.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 291 | ALL | 408945.4 | 3770075 | 7.36E-07 | 2YrCancerF | 7.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 292 | ALL | 408965.4 | 3770075 | 7.94E-07 | 2YrCancerF | 7.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 293 | ALL | 408685.4 | 3770095 | 2.94E-07 | 2YrCancerF | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 294 | ALL | 408705.4 | 3770095 | 3.12E-07 | 2YrCancerF | 3.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 295 | ALL | 408725.4 | 3770095 | 3.30E-07 | 2YrCancerF | 3.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 296 | ALL | 408745.4 | 3770095 | 3.51E-07 | 2YrCancerF | 3.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 297 | ALL | 408765.4 | 3770095 | 3.73E-07 | 2YrCancerF | 3.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 298 | ALL | 408785.4 | 3770095 | 3.97E-07 | 2YrCancerF | 3.97E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 299 | ALL | 408805.4 | 3770095 | 4.23E-07 | 2YrCancerF | 4.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 300 | ALL | 408865.4 | 3770095 | 5.16E-07 | 2YrCancerF | 5.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 301 | ALL | 408885.4 | 3770095 | 5.53E-07 | 2YrCancerF | 5.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 302 | ALL | 408905.4 | 3770095 | 5.93E-07 | 2YrCancerF | 5.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 303 | ALL | 408925.4 | 3770095 | 6.35E-07 | 2YrCancerF | 6.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 304 | ALL | 408945.4 | 3770095 | 6.81E-07 | 2YrCancerF | 6.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 305 | ALL | 408965.4 | 3770095 | 7.30E-07 | 2YrCancerF | 7.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 306 | ALL | 408985.4 | 3770095 | 7.83E-07 | 2YrCancerF | 7.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 307 | ALL | 409005.4 | 3770095 | 8.37E-07 | 2YrCancerF | 8.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 308 | ALL | 409025.4 | 3770095 | 8.93E-07 | 2YrCancerF | 8.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 309 | ALL | 409045.4 | 3770095 | 9.49E-07 | 2YrCancerF | 9.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 310 | ALL | 408705.4 | 3770115 | 3.02E-07 | 2YrCancerF | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 311 | ALL | 408725.4 | 3770115 | 3.19E-07 | 2YrCancerF | 3.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 312 | ALL | 408745.4 | 3770115 | 3.38E-07 | 2YrCancerF | 3.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 313 | ALL | 408765.4 | 3770115 | 3.59E-07 | 2YrCancerF | 3.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 314 | ALL | 408785.4 | 3770115 | 3.81E-07 | 2YrCancerF | 3.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 315 | ALL | 408805.4 | 3770115 | 4.05E-07 | 2YrCancerF | 4.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 316 | ALL | 408825.4 | 3770115 | 4.30E-07 | 2YrCancerF | 4.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 317 | ALL | 408845.4 | 3770115 | 4.58E-07 | 2YrCancerF | 4.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 318 | ALL | 408865.4 | 3770115 | 4.89E-07 | 2YrCancerF | 4.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 319 | ALL | 408885.4 | 3770115 | 5.21E-07 | 2YrCancerF | 5.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 320 | ALL | 408905.4 | 3770115 | 5.56E-07 | 2YrCancerF | 5.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 321 | ALL | 408925.4 | 3770115 | 5.92E-07 | 2YrCancerF | 5.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 322 | ALL | 408945.4 | 3770115 | 6.31E-07 | 2YrCancerF | 6.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 323 | ALL | 408965.4 | 3770115 | 6.73E-07 | 2YrCancerF | 6.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 324 | ALL | 408985.4 | 3770115 | 7.16E-07 | 2YrCancerF | 7.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 325 | ALL | 409005.4 | 3770115 | 7.60E-07 | 2YrCancerF | 7.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 326 | ALL | 409025.4 | 3770115 | 8.05E-07 | 2YrCancerF | 8.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 327 | ALL | 409045.4 | 3770115 | 8.50E-07 | 2YrCancerF | 8.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 328 | ALL | 408705.4 | 3770135 | 2.92E-07 | 2YrCancerF | 2.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 329 | ALL | 408725.4 | 3770135 | 3.09E-07 | 2YrCancerF | 3.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 330 | ALL | 408745.4 | 3770135 | 3.26E-07 | 2YrCancerF | 3.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 331 | ALL | 408765.4 | 3770135 | 3.45E-07 | 2YrCancerF | 3.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 332 | ALL | 408785.4 | 3770135 | 3.65E-07 | 2YrCancerF | 3.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 333 | ALL | 408805.4 | 3770135 | 3.87E-07 | 2YrCancerF | 3.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 334 | ALL | 408825.4 | 3770135 | 4.10E-07 | 2YrCancerF | 4.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 335 | ALL | 408845.4 | 3770135 | 4.35E-07 | 2YrCancerF | 4.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 336 | ALL | 408865.4 | 3770135 | 4.62E-07 | 2YrCancerF | 4.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 337 | ALL | 408885.4 | 3770135 | 4.91E-07 | 2YrCancerF | 4.91E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 338 | ALL | 408905.4 | 3770135 | 5.21E-07 | 2YrCancerF | 5.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 339 | ALL | 408925.4 | 3770135 | 5.53E-07 | 2YrCancerF | 5.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 340 | ALL | 408945.4 | 3770135 | 5.86E-07 | 2YrCancerF | 5.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 341 | ALL | 408965.4 | 3770135 | 6.21E-07 | 2YrCancerF | 6.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 342 | ALL | 408985.4 | 3770135 | 6.57E-07 | 2YrCancerF | 6.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 343 | ALL | 409005.4 | 3770135 | 6.93E-07 | 2YrCancerR | 6.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 344 | ALL | 409025.4 | 3770135 | 7.30E-07 | 2YrCancerR | 7.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 345 | ALL | 408725.4 | 3770155 | 2.98E-07 | 2YrCancerR | 2.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 346 | ALL | 408745.4 | 3770155 | 3.14E-07 | 2YrCancerR | 3.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 347 | ALL | 408765.4 | 3770155 | 3.31E-07 | 2YrCancerR | 3.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 348 | ALL | 408785.4 | 3770155 | 3.50E-07 | 2YrCancerR | 3.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 349 | ALL | 408805.4 | 3770155 | 3.69E-07 | 2YrCancerR | 3.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 350 | ALL | 408825.4 | 3770155 | 3.90E-07 | 2YrCancerR | 3.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 351 | ALL | 408845.4 | 3770155 | 4.13E-07 | 2YrCancerR | 4.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 352 | ALL | 408865.4 | 3770155 | 4.37E-07 | 2YrCancerR | 4.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 353 | ALL | 408885.4 | 3770155 | 4.62E-07 | 2YrCancerR | 4.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 354 | ALL | 408905.4 | 3770155 | 4.88E-07 | 2YrCancerR | 4.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 355 | ALL | 408925.4 | 3770155 | 5.16E-07 | 2YrCancerR | 5.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 356 | ALL | 408945.4 | 3770155 | 5.45E-07 | 2YrCancerR | 5.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 357 | ALL | 408965.4 | 3770155 | 5.74E-07 | 2YrCancerR | 5.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 358 | ALL | 408985.4 | 3770155 | 6.04E-07 | 2YrCancerR | 6.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 359 | ALL | 409005.4 | 3770155 | 6.34E-07 | 2YrCancerR | 6.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 360 | ALL | 409025.4 | 3770155 | 6.64E-07 | 2YrCancerR | 6.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 361 | ALL | 409045.4 | 3770155 | 6.93E-07 | 2YrCancerR | 6.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 362 | ALL | 408745.4 | 3770175 | 3.02E-07 | 2YrCancerR | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 363 | ALL | 408765.4 | 3770175 | 3.18E-07 | 2YrCancerR | 3.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 364 | ALL | 408785.4 | 3770175 | 3.35E-07 | 2YrCancerR | 3.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 365 | ALL | 408805.4 | 3770175 | 3.53E-07 | 2YrCancerR | 3.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 366 | ALL | 408825.4 | 3770175 | 3.72E-07 | 2YrCancerR | 3.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 367 | ALL | 408845.4 | 3770175 | 3.92E-07 | 2YrCancerR | 3.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 368 | ALL | 408865.4 | 3770175 | 4.13E-07 | 2YrCancerR | 4.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 369 | ALL | 408885.4 | 3770175 | 4.35E-07 | 2YrCancerR | 4.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 370 | ALL | 408905.4 | 3770175 | 4.58E-07 | 2YrCancerR | 4.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 371 | ALL | 408925.4 | 3770175 | 4.82E-07 | 2YrCancerR | 4.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 372 | ALL | 408945.4 | 3770175 | 5.07E-07 | 2YrCancerR | 5.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 373 | ALL | 408965.4 | 3770175 | 5.32E-07 | 2YrCancerR | 5.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 374 | ALL | 408985.4 | 3770175 | 5.57E-07 | 2YrCancerR | 5.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 375 | ALL | 409005.4 | 3770175 | 5.82E-07 | 2YrCancerR | 5.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 376 | ALL | 409025.4 | 3770175 | 6.07E-07 | 2YrCancerR | 6.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 377 | ALL | 409045.4 | 3770175 | 6.31E-07 | 2YrCancerR | 6.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 378 | ALL | 409065.4 | 3770175 | 6.53E-07 | 2YrCancerR | 6.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 379 | ALL | 409085.4 | 3770175 | 6.73E-07 | 2YrCancerR | 6.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 380 | ALL | 409105.4 | 3770175 | 6.90E-07 | 2YrCancerR | 6.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 381 | ALL | 409125.4 | 3770175 | 7.03E-07 | 2YrCancerR | 7.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 382 | ALL | 408765.4 | 3770195 | 3.05E-07 | 2YrCancerR | 3.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 383 | ALL | 408785.4 | 3770195 | 3.20E-07 | 2YrCancerR | 3.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 384 | ALL | 408805.4 | 3770195 | 3.36E-07 | 2YrCancerR | 3.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 385 | ALL | 408825.4 | 3770195 | 3.54E-07 | 2YrCancerR | 3.54E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 386 | ALL | 408845.4 | 3770195 | 3.71E-07 | 2YrCancerR | 3.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 387 | ALL | 408865.4 | 3770195 | 3.90E-07 | 2YrCancerR | 3.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 388 | ALL | 408885.4 | 3770195 | 4.10E-07 | 2YrCancerR | 4.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 389 | ALL | 408905.4 | 3770195 | 4.30E-07 | 2YrCancerR | 4.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 390 | ALL | 408925.4 | 3770195 | 4.51E-07 | 2YrCancerR | 4.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 391 | ALL | 408945.4 | 3770195 | 4.72E-07 | 2YrCancerR | 4.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 392 | ALL | 408965.4 | 3770195 | 4.94E-07 | 2YrCancerF | 4.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 393 | ALL | 408985.4 | 3770195 | 5.15E-07 | 2YrCancerF | 5.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 394 | ALL | 409005.4 | 3770195 | 5.37E-07 | 2YrCancerF | 5.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 395 | ALL | 409025.4 | 3770195 | 5.57E-07 | 2YrCancerF | 5.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 396 | ALL | 409045.4 | 3770195 | 5.77E-07 | 2YrCancerF | 5.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 397 | ALL | 409065.4 | 3770195 | 5.94E-07 | 2YrCancerF | 5.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 398 | ALL | 409085.4 | 3770195 | 6.11E-07 | 2YrCancerF | 6.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 399 | ALL | 409105.4 | 3770195 | 6.24E-07 | 2YrCancerF | 6.24E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 400 | ALL | 409125.4 | 3770195 | 6.35E-07 | 2YrCancerF | 6.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 401 | ALL | 409145.4 | 3770195 | 6.42E-07 | 2YrCancerF | 6.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 402 | ALL | 409165.4 | 3770195 | 6.46E-07 | 2YrCancerF | 6.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 403 | ALL | 409185.4 | 3770195 | 6.46E-07 | 2YrCancerF | 6.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 404 | ALL | 409205.4 | 3770195 | 6.43E-07 | 2YrCancerF | 6.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 405 | ALL | 408785.4 | 3770215 | 3.06E-07 | 2YrCancerF | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 406 | ALL | 408805.4 | 3770215 | 3.21E-07 | 2YrCancerF | 3.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 407 | ALL | 408825.4 | 3770215 | 3.36E-07 | 2YrCancerF | 3.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 408 | ALL | 408845.4 | 3770215 | 3.52E-07 | 2YrCancerF | 3.52E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 409 | ALL | 408865.4 | 3770215 | 3.69E-07 | 2YrCancerF | 3.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 410 | ALL | 408885.4 | 3770215 | 3.86E-07 | 2YrCancerF | 3.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 411 | ALL | 408905.4 | 3770215 | 4.04E-07 | 2YrCancerF | 4.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 412 | ALL | 408925.4 | 3770215 | 4.22E-07 | 2YrCancerF | 4.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 413 | ALL | 408945.4 | 3770215 | 4.41E-07 | 2YrCancerF | 4.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 414 | ALL | 408965.4 | 3770215 | 4.59E-07 | 2YrCancerF | 4.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 415 | ALL | 408985.4 | 3770215 | 4.78E-07 | 2YrCancerF | 4.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 416 | ALL | 409005.4 | 3770215 | 4.96E-07 | 2YrCancerF | 4.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 417 | ALL | 409025.4 | 3770215 | 5.13E-07 | 2YrCancerF | 5.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 418 | ALL | 409045.4 | 3770215 | 5.29E-07 | 2YrCancerF | 5.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 419 | ALL | 409065.4 | 3770215 | 5.44E-07 | 2YrCancerF | 5.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 420 | ALL | 409085.4 | 3770215 | 5.57E-07 | 2YrCancerF | 5.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 421 | ALL | 409105.4 | 3770215 | 5.68E-07 | 2YrCancerF | 5.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 422 | ALL | 409125.4 | 3770215 | 5.77E-07 | 2YrCancerF | 5.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 423 | ALL | 409145.4 | 3770215 | 5.83E-07 | 2YrCancerF | 5.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 424 | ALL | 409165.4 | 3770215 | 5.86E-07 | 2YrCancerF | 5.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 425 | ALL | 409185.4 | 3770215 | 5.86E-07 | 2YrCancerF | 5.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 426 | ALL | 409205.4 | 3770215 | 5.84E-07 | 2YrCancerF | 5.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 427 | ALL | 409225.4 | 3770215 | 5.78E-07 | 2YrCancerF | 5.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 428 | ALL | 408805.4 | 3770235 | 3.06E-07 | 2YrCancerF | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 429 | ALL | 408825.4 | 3770235 | 3.20E-07 | 2YrCancerF | 3.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 430 | ALL | 408845.4 | 3770235 | 3.35E-07 | 2YrCancerF | 3.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 431 | ALL | 408865.4 | 3770235 | 3.49E-07 | 2YrCancerF | 3.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 432 | ALL | 408885.4 | 3770235 | 3.65E-07 | 2YrCancerF | 3.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 433 | ALL | 408905.4 | 3770235 | 3.80E-07 | 2YrCancerF | 3.80E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 434 | ALL | 408925.4 | 3770235 | 3.96E-07 | 2YrCancerF | 3.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 435 | ALL | 408945.4 | 3770235 | 4.12E-07 | 2YrCancerF | 4.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 436 | ALL | 408965.4 | 3770235 | 4.28E-07 | 2YrCancerF | 4.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 437 | ALL | 408985.4 | 3770235 | 4.44E-07 | 2YrCancerF | 4.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 438 | ALL | 409005.4 | 3770235 | 4.59E-07 | 2YrCancerF | 4.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 439 | ALL | 409025.4 | 3770235 | 4.74E-07 | 2YrCancerF | 4.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 440 | ALL | 409045.4 | 3770235 | 4.87E-07 | 2YrCancerF | 4.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 441 | ALL | 409065.4 | 3770235 | 5.00E-07 | 2YrCancerF | 5.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 442 | ALL | 409085.4 | 3770235 | 5.10E-07 | 2YrCancerF | 5.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 443 | ALL | 409105.4 | 3770235 | 5.20E-07 | 2YrCancerF | 5.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 444 | ALL | 409125.4 | 3770235 | 5.27E-07 | 2YrCancerF | 5.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 445 | ALL | 409145.4 | 3770235 | 5.32E-07 | 2YrCancerF | 5.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 446 | ALL | 409165.4 | 3770235 | 5.34E-07 | 2YrCancerF | 5.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 447 | ALL | 409185.4 | 3770235 | 5.35E-07 | 2YrCancerF | 5.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 448 | ALL | 409205.4 | 3770235 | 5.32E-07 | 2YrCancerF | 5.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 449 | ALL | 409225.4 | 3770235 | 5.28E-07 | 2YrCancerF | 5.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 450 | ALL | 409245.4 | 3770235 | 5.21E-07 | 2YrCancerF | 5.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 451 | ALL | 408805.4 | 3770255 | 2.92E-07 | 2YrCancerF | 2.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 452 | ALL | 408825.4 | 3770255 | 3.05E-07 | 2YrCancerF | 3.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 453 | ALL | 408845.4 | 3770255 | 3.18E-07 | 2YrCancerF | 3.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 454 | ALL | 408865.4 | 3770255 | 3.31E-07 | 2YrCancerF | 3.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 455 | ALL | 408885.4 | 3770255 | 3.45E-07 | 2YrCancerF | 3.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 456 | ALL | 408905.4 | 3770255 | 3.58E-07 | 2YrCancerF | 3.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 457 | ALL | 408925.4 | 3770255 | 3.72E-07 | 2YrCancerF | 3.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 458 | ALL | 408945.4 | 3770255 | 3.86E-07 | 2YrCancerF | 3.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 459 | ALL | 408965.4 | 3770255 | 4.00E-07 | 2YrCancerF | 4.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 460 | ALL | 408985.4 | 3770255 | 4.14E-07 | 2YrCancerF | 4.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 461 | ALL | 409005.4 | 3770255 | 4.27E-07 | 2YrCancerF | 4.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 462 | ALL | 409025.4 | 3770255 | 4.39E-07 | 2YrCancerF | 4.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 463 | ALL | 409045.4 | 3770255 | 4.50E-07 | 2YrCancerF | 4.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 464 | ALL | 409065.4 | 3770255 | 4.61E-07 | 2YrCancerF | 4.61E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 465 | ALL | 409085.4 | 3770255 | 4.70E-07 | 2YrCancerF | 4.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 466 | ALL | 409105.4 | 3770255 | 4.77E-07 | 2YrCancerF | 4.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 467 | ALL | 409125.4 | 3770255 | 4.83E-07 | 2YrCancerF | 4.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 468 | ALL | 409145.4 | 3770255 | 4.87E-07 | 2YrCancerF | 4.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 469 | ALL | 409165.4 | 3770255 | 4.90E-07 | 2YrCancerF | 4.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 470 | ALL | 409185.4 | 3770255 | 4.90E-07 | 2YrCancerF | 4.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 471 | ALL | 409205.4 | 3770255 | 4.88E-07 | 2YrCancerF | 4.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 472 | ALL | 409225.4 | 3770255 | 4.84E-07 | 2YrCancerF | 4.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 473 | ALL | 409245.4 | 3770255 | 4.79E-07 | 2YrCancerF | 4.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 474 | ALL | 409265.4 | 3770255 | 4.71E-07 | 2YrCancerF | 4.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 475 | ALL | 409365.4 | 3770255 | 4.18E-07 | 2YrCancerF | 4.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 476 | ALL | 409385.4 | 3770255 | 4.05E-07 | 2YrCancerF | 4.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 477 | ALL | 408825.4 | 3770275 | 2.90E-07 | 2YrCancerF | 2.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 478 | ALL | 408845.4 | 3770275 | 3.02E-07 | 2YrCancerF | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 479 | ALL | 408865.4 | 3770275 | 3.14E-07 | 2YrCancerF | 3.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 480 | ALL | 408885.4 | 3770275 | 3.26E-07 | 2YrCancerF | 3.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 481 | ALL | 408905.4 | 3770275 | 3.38E-07 | 2YrCancerF | 3.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 482 | ALL | 408925.4 | 3770275 | 3.50E-07 | 2YrCancerF | 3.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 483 | ALL | 408945.4 | 3770275 | 3.62E-07 | 2YrCancerF | 3.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 484 | ALL | 408965.4 | 3770275 | 3.74E-07 | 2YrCancerF | 3.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 485 | ALL | 408985.4 | 3770275 | 3.86E-07 | 2YrCancerF | 3.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 486 | ALL | 409005.4 | 3770275 | 3.97E-07 | 2YrCancerF | 3.97E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 487 | ALL | 409025.4 | 3770275 | 4.08E-07 | 2YrCancerF | 4.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 488 | ALL | 409045.4 | 3770275 | 4.18E-07 | 2YrCancerF | 4.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 489 | ALL | 409065.4 | 3770275 | 4.26E-07 | 2YrCancerF | 4.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 490 | ALL | 409085.4 | 3770275 | 4.34E-07 | 2YrCancerF | 4.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 491 | ALL | 409105.4 | 3770275 | 4.40E-07 | 2YrCancerF | 4.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 492 | ALL | 409125.4 | 3770275 | 4.45E-07 | 2YrCancerF | 4.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 493 | ALL | 409145.4 | 3770275 | 4.49E-07 | 2YrCancerF | 4.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 494 | ALL | 409165.4 | 3770275 | 4.51E-07 | 2YrCancerF | 4.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 495 | ALL | 409185.4 | 3770275 | 4.51E-07 | 2YrCancerF | 4.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 496 | ALL | 409205.4 | 3770275 | 4.49E-07 | 2YrCancerF | 4.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 497 | ALL | 409225.4 | 3770275 | 4.46E-07 | 2YrCancerF | 4.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 498 | ALL | 409245.4 | 3770275 | 4.41E-07 | 2YrCancerF | 4.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 499 | ALL | 409265.4 | 3770275 | 4.35E-07 | 2YrCancerF | 4.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 500 | ALL | 409345.4 | 3770275 | 4.00E-07 | 2YrCancerF | 4.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 501 | ALL | 409365.4 | 3770275 | 3.89E-07 | 2YrCancerF | 3.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 502 | ALL | 409385.4 | 3770275 | 3.78E-07 | 2YrCancerF | 3.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 503 | ALL | 409405.4 | 3770275 | 3.67E-07 | 2YrCancerF | 3.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 504 | ALL | 408845.4 | 3770295 | 2.87E-07 | 2YrCancerF | 2.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 505 | ALL | 408865.4 | 3770295 | 2.98E-07 | 2YrCancerF | 2.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 506 | ALL | 408885.4 | 3770295 | 3.08E-07 | 2YrCancerF | 3.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 507 | ALL | 408905.4 | 3770295 | 3.19E-07 | 2YrCancerF | 3.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 508 | ALL | 408925.4 | 3770295 | 3.30E-07 | 2YrCancerF | 3.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 509 | ALL | 408945.4 | 3770295 | 3.41E-07 | 2YrCancerF | 3.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 510 | ALL | 408965.4 | 3770295 | 3.51E-07 | 2YrCancerF | 3.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 511 | ALL | 408985.4 | 3770295 | 3.61E-07 | 2YrCancerF | 3.61E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 512 | ALL | 409005.4 | 3770295 | 3.71E-07 | 2YrCancerF | 3.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 513 | ALL | 409025.4 | 3770295 | 3.80E-07 | 2YrCancerF | 3.80E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 514 | ALL | 409045.4 | 3770295 | 3.88E-07 | 2YrCancerF | 3.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 515 | ALL | 409065.4 | 3770295 | 3.96E-07 | 2YrCancerF | 3.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 516 | ALL | 409085.4 | 3770295 | 4.02E-07 | 2YrCancerF | 4.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 517 | ALL | 409105.4 | 3770295 | 4.08E-07 | 2YrCancerF | 4.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 518 | ALL | 409125.4 | 3770295 | 4.12E-07 | 2YrCancerF | 4.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 519 | ALL | 409145.4 | 3770295 | 4.15E-07 | 2YrCancerF | 4.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 520 | ALL | 409165.4 | 3770295 | 4.16E-07 | 2YrCancerF | 4.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 521 | ALL | 409185.4 | 3770295 | 4.16E-07 | 2YrCancerF | 4.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 522 | ALL | 409205.4 | 3770295 | 4.15E-07 | 2YrCancerF | 4.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 523 | ALL | 409225.4 | 3770295 | 4.13E-07 | 2YrCancerF | 4.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 524 | ALL | 409245.4 | 3770295 | 4.09E-07 | 2YrCancerF | 4.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 525 | ALL | 409265.4 | 3770295 | 4.03E-07 | 2YrCancerF | 4.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 526 | ALL | 409285.4 | 3770295 | 3.97E-07 | 2YrCancerF | 3.97E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 527 | ALL | 409305.4 | 3770295 | 3.90E-07 | 2YrCancerF | 3.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 528 | ALL | 409325.4 | 3770295 | 3.82E-07 | 2YrCancerF | 3.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 529 | ALL | 409345.4 | 3770295 | 3.73E-07 | 2YrCancerF | 3.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 530 | ALL | 409365.4 | 3770295 | 3.64E-07 | 2YrCancerF | 3.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 531 | ALL | 409385.4 | 3770295 | 3.54E-07 | 2YrCancerF | 3.54E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 532 | ALL | 409405.4 | 3770295 | 3.44E-07 | 2YrCancerF | 3.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 533 | ALL | 409425.4 | 3770295 | 3.34E-07 | 2YrCancerF | 3.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 534 | ALL | 408865.4 | 3770315 | 2.83E-07 | 2YrCancerF | 2.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 535 | ALL | 408885.4 | 3770315 | 2.92E-07 | 2YrCancerF | 2.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 536 | ALL | 408905.4 | 3770315 | 3.02E-07 | 2YrCancerF | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 537 | ALL | 408925.4 | 3770315 | 3.11E-07 | 2YrCancerF | 3.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 538 | ALL | 408945.4 | 3770315 | 3.21E-07 | 2YrCancerF | 3.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 539 ALL | 408965.4 | 3770315 | 3.30E-07 | 2YrCancerF | 3.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 540 ALL | 408985.4 | 3770315 | 3.39E-07 | 2YrCancerF | 3.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 541 ALL | 409005.4 | 3770315 | 3.47E-07 | 2YrCancerF | 3.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 542 ALL | 409025.4 | 3770315 | 3.55E-07 | 2YrCancerF | 3.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 543 ALL | 409045.4 | 3770315 | 3.62E-07 | 2YrCancerF | 3.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 544 ALL | 409065.4 | 3770315 | 3.69E-07 | 2YrCancerF | 3.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 545 ALL | 409085.4 | 3770315 | 3.74E-07 | 2YrCancerF | 3.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 546 ALL | 409105.4 | 3770315 | 3.79E-07 | 2YrCancerF | 3.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 547 ALL | 409125.4 | 3770315 | 3.82E-07 | 2YrCancerF | 3.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 548 ALL | 409145.4 | 3770315 | 3.85E-07 | 2YrCancerF | 3.85E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 549 ALL | 409165.4 | 3770315 | 3.86E-07 | 2YrCancerF | 3.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 550 ALL | 409185.4 | 3770315 | 3.86E-07 | 2YrCancerF | 3.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 551 ALL | 409205.4 | 3770315 | 3.85E-07 | 2YrCancerF | 3.85E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 552 ALL | 409225.4 | 3770315 | 3.83E-07 | 2YrCancerF | 3.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 553 ALL | 409245.4 | 3770315 | 3.79E-07 | 2YrCancerF | 3.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 554 ALL | 409265.4 | 3770315 | 3.75E-07 | 2YrCancerF | 3.75E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 555 ALL | 409285.4 | 3770315 | 3.70E-07 | 2YrCancerF | 3.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 556 ALL | 409305.4 | 3770315 | 3.63E-07 | 2YrCancerF | 3.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 557 ALL | 409325.4 | 3770315 | 3.56E-07 | 2YrCancerF | 3.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 558 ALL | 409345.4 | 3770315 | 3.49E-07 | 2YrCancerF | 3.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 559 ALL | 409365.4 | 3770315 | 3.41E-07 | 2YrCancerF | 3.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 560 ALL | 409385.4 | 3770315 | 3.33E-07 | 2YrCancerF | 3.33E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 561 ALL | 409405.4 | 3770315 | 3.24E-07 | 2YrCancerF | 3.24E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 562 ALL | 409425.4 | 3770315 | 3.15E-07 | 2YrCancerF | 3.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 563 ALL | 409445.4 | 3770315 | 3.06E-07 | 2YrCancerF | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 564 ALL | 408885.4 | 3770335 | 2.77E-07 | 2YrCancerF | 2.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 565 ALL | 408905.4 | 3770335 | 2.86E-07 | 2YrCancerF | 2.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 566 ALL | 408925.4 | 3770335 | 2.94E-07 | 2YrCancerF | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 567 ALL | 408945.4 | 3770335 | 3.02E-07 | 2YrCancerF | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 568 ALL | 408965.4 | 3770335 | 3.10E-07 | 2YrCancerF | 3.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 569 ALL | 408985.4 | 3770335 | 3.18E-07 | 2YrCancerF | 3.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 570 ALL | 409005.4 | 3770335 | 3.25E-07 | 2YrCancerF | 3.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 571 ALL | 409025.4 | 3770335 | 3.32E-07 | 2YrCancerF | 3.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 572 ALL | 409045.4 | 3770335 | 3.39E-07 | 2YrCancerF | 3.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 573 ALL | 409065.4 | 3770335 | 3.44E-07 | 2YrCancerF | 3.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 574 ALL | 409085.4 | 3770335 | 3.49E-07 | 2YrCancerF | 3.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 575 ALL | 409105.4 | 3770335 | 3.53E-07 | 2YrCancerF | 3.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 576 ALL | 409125.4 | 3770335 | 3.56E-07 | 2YrCancerF | 3.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 577 ALL | 409145.4 | 3770335 | 3.58E-07 | 2YrCancerF | 3.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 578 ALL | 409165.4 | 3770335 | 3.59E-07 | 2YrCancerF | 3.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 579 ALL | 409185.4 | 3770335 | 3.59E-07 | 2YrCancerF | 3.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 580 ALL | 409205.4 | 3770335 | 3.58E-07 | 2YrCancerF | 3.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 581 ALL | 409225.4 | 3770335 | 3.56E-07 | 2YrCancerF | 3.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 582 ALL | 409245.4 | 3770335 | 3.53E-07 | 2YrCancerF | 3.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 583 ALL | 409265.4 | 3770335 | 3.50E-07 | 2YrCancerF | 3.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 584 ALL | 409285.4 | 3770335 | 3.45E-07 | 2YrCancerF | 3.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 585 ALL | 409305.4 | 3770335 | 3.40E-07 | 2YrCancerF | 3.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 586 ALL | 409325.4 | 3770335 | 3.34E-07 | 2YrCancerF | 3.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 587 ALL | 409345.4 | 3770335 | 3.27E-07 | 2YrCancerF | 3.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 588 ALL | 409365.4 | 3770335 | 3.20E-07 | 2YrCancerF | 3.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 589 ALL | 409385.4 | 3770335 | 3.13E-07 | 2YrCancerF | 3.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 590 ALL | 409405.4 | 3770335 | 3.05E-07 | 2YrCancerF | 3.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 591 ALL | 409425.4 | 3770335 | 2.97E-07 | 2YrCancerF | 2.97E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 592 ALL | 409445.4 | 3770335 | 2.89E-07 | 2YrCancerF | 2.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 593 ALL | 409465.4 | 3770335 | 2.81E-07 | 2YrCancerF | 2.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 594 ALL | 408905.4 | 3770355 | 2.71E-07 | 2YrCancerF | 2.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 595 ALL | 408925.4 | 3770355 | 2.78E-07 | 2YrCancerF | 2.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 596 ALL | 408945.4 | 3770355 | 2.86E-07 | 2YrCancerF | 2.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 597 ALL | 408965.4 | 3770355 | 2.93E-07 | 2YrCancerF | 2.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 598 ALL | 408985.4 | 3770355 | 2.99E-07 | 2YrCancerF | 2.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 599 ALL | 409005.4 | 3770355 | 3.06E-07 | 2YrCancerF | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 600 ALL | 409025.4 | 3770355 | 3.12E-07 | 2YrCancerF | 3.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 601 ALL | 409045.4 | 3770355 | 3.17E-07 | 2YrCancerF | 3.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 602 ALL | 409065.4 | 3770355 | 3.22E-07 | 2YrCancerF | 3.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 603 ALL | 409085.4 | 3770355 | 3.26E-07 | 2YrCancerF | 3.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 604 ALL | 409105.4 | 3770355 | 3.30E-07 | 2YrCancerF | 3.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 605 ALL | 409125.4 | 3770355 | 3.32E-07 | 2YrCancerF | 3.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 606 ALL | 409145.4 | 3770355 | 3.34E-07 | 2YrCancerF | 3.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 607 ALL | 409165.4 | 3770355 | 3.35E-07 | 2YrCancerF | 3.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 608 ALL | 409185.4 | 3770355 | 3.35E-07 | 2YrCancerF | 3.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 609 ALL | 409205.4 | 3770355 | 3.34E-07 | 2YrCancerF | 3.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 610 ALL | 409225.4 | 3770355 | 3.33E-07 | 2YrCancerF | 3.33E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 611 ALL | 409245.4 | 3770355 | 3.30E-07 | 2YrCancerF | 3.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 612 ALL | 409265.4 | 3770355 | 3.27E-07 | 2YrCancerF | 3.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 613 ALL | 409285.4 | 3770355 | 3.23E-07 | 2YrCancerF | 3.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 614 ALL | 409305.4 | 3770355 | 3.18E-07 | 2YrCancerF | 3.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 615 ALL | 409325.4 | 3770355 | 3.13E-07 | 2YrCancerF | 3.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 616 ALL | 409345.4 | 3770355 | 3.07E-07 | 2YrCancerF | 3.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 617 ALL | 409365.4 | 3770355 | 3.01E-07 | 2YrCancerF | 3.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 618 ALL | 409385.4 | 3770355 | 2.95E-07 | 2YrCancerF | 2.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 619 ALL | 409405.4 | 3770355 | 2.88E-07 | 2YrCancerF | 2.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 620 ALL | 409425.4 | 3770355 | 2.81E-07 | 2YrCancerF | 2.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 621 ALL | 409445.4 | 3770355 | 2.74E-07 | 2YrCancerF | 2.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 622 ALL | 409465.4 | 3770355 | 2.67E-07 | 2YrCancerF | 2.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 623 ALL | 409485.4 | 3770355 | 2.59E-07 | 2YrCancerF | 2.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 624 ALL | 408905.4 | 3770375 | 2.57E-07 | 2YrCancerF | 2.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 625 ALL | 408925.4 | 3770375 | 2.64E-07 | 2YrCancerF | 2.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 626 ALL | 408945.4 | 3770375 | 2.70E-07 | 2YrCancerF | 2.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 627 ALL | 408965.4 | 3770375 | 2.76E-07 | 2YrCancerF | 2.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 628 ALL | 408985.4 | 3770375 | 2.82E-07 | 2YrCancerF | 2.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 629 ALL | 409005.4 | 3770375 | 2.88E-07 | 2YrCancerF | 2.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 630 ALL | 409025.4 | 3770375 | 2.93E-07 | 2YrCancerF | 2.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 631 ALL | 409045.4 | 3770375 | 2.98E-07 | 2YrCancerF | 2.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 632 ALL | 409065.4 | 3770375 | 3.02E-07 | 2YrCancerF | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 633 ALL | 409085.4 | 3770375 | 3.06E-07 | 2YrCancerF | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 634 ALL | 409105.4 | 3770375 | 3.09E-07 | 2YrCancerF | 3.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 635 ALL | 409125.4 | 3770375 | 3.11E-07 | 2YrCancerF | 3.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 636 ALL | 409145.4 | 3770375 | 3.13E-07 | 2YrCancerF | 3.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 637 ALL | 409165.4 | 3770375 | 3.13E-07 | 2YrCancerF | 3.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 638 ALL | 409185.4 | 3770375 | 3.14E-07 | 2YrCancerF | 3.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 639 ALL | 409205.4 | 3770375 | 3.13E-07 | 2YrCancerF | 3.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 640 ALL | 409225.4 | 3770375 | 3.11E-07 | 2YrCancerF | 3.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 641 ALL | 409245.4 | 3770375 | 3.09E-07 | 2YrCancerF | 3.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 642 ALL | 409265.4 | 3770375 | 3.06E-07 | 2YrCancerF | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 643 ALL | 409285.4 | 3770375 | 3.03E-07 | 2YrCancerF | 3.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 644 ALL | 409305.4 | 3770375 | 2.99E-07 | 2YrCancerF | 2.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 645 ALL | 409325.4 | 3770375 | 2.94E-07 | 2YrCancerF | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 646 ALL | 409345.4 | 3770375 | 2.89E-07 | 2YrCancerF | 2.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 647 ALL | 409365.4 | 3770375 | 2.84E-07 | 2YrCancerF | 2.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 648 ALL | 409385.4 | 3770375 | 2.78E-07 | 2YrCancerF | 2.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 649 ALL | 409405.4 | 3770375 | 2.72E-07 | 2YrCancerF | 2.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 650 ALL | 409425.4 | 3770375 | 2.66E-07 | 2YrCancerF | 2.66E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 651 ALL | 409445.4 | 3770375 | 2.60E-07 | 2YrCancerF | 2.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 652 ALL | 409465.4 | 3770375 | 2.53E-07 | 2YrCancerF | 2.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 653 ALL | 409485.4 | 3770375 | 2.47E-07 | 2YrCancerF | 2.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 654 ALL | 408925.4 | 3770395 | 2.50E-07 | 2YrCancerF | 2.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 655 ALL | 408945.4 | 3770395 | 2.56E-07 | 2YrCancerF | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 656 ALL | 408965.4 | 3770395 | 2.62E-07 | 2YrCancerF | 2.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 657 ALL | 408985.4 | 3770395 | 2.67E-07 | 2YrCancerF | 2.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 658 ALL | 409005.4 | 3770395 | 2.72E-07 | 2YrCancerF | 2.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 659 ALL | 409025.4 | 3770395 | 2.76E-07 | 2YrCancerF | 2.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 660 ALL | 409045.4 | 3770395 | 2.81E-07 | 2YrCancerF | 2.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 661 ALL | 409065.4 | 3770395 | 2.84E-07 | 2YrCancerF | 2.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 662 ALL | 409085.4 | 3770395 | 2.87E-07 | 2YrCancerF | 2.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 663 ALL | 409105.4 | 3770395 | 2.90E-07 | 2YrCancerF | 2.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 664 ALL | 409125.4 | 3770395 | 2.92E-07 | 2YrCancerF | 2.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 665 ALL | 409165.4 | 3770395 | 2.94E-07 | 2YrCancerF | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 666 ALL | 409185.4 | 3770395 | 2.94E-07 | 2YrCancerF | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 667 ALL | 409205.4 | 3770395 | 2.94E-07 | 2YrCancerF | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 668 ALL | 409225.4 | 3770395 | 2.92E-07 | 2YrCancerF | 2.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 669 ALL | 409245.4 | 3770395 | 2.90E-07 | 2YrCancerF | 2.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 670 ALL | 409265.4 | 3770395 | 2.88E-07 | 2YrCancerF | 2.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 671 ALL | 409285.4 | 3770395 | 2.85E-07 | 2YrCancerF | 2.85E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 672 ALL | 409305.4 | 3770395 | 2.81E-07 | 2YrCancerF | 2.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 673 ALL | 409325.4 | 3770395 | 2.77E-07 | 2YrCancerF | 2.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 674 ALL | 409345.4 | 3770395 | 2.73E-07 | 2YrCancerF | 2.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 675 ALL | 409365.4 | 3770395 | 2.68E-07 | 2YrCancerF | 2.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 676 ALL | 409385.4 | 3770395 | 2.63E-07 | 2YrCancerF | 2.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 677 ALL | 409405.4 | 3770395 | 2.58E-07 | 2YrCancerF | 2.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 678 ALL | 409425.4 | 3770395 | 2.52E-07 | 2YrCancerF | 2.52E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 679 ALL | 409445.4 | 3770395 | 2.46E-07 | 2YrCancerF | 2.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 680 ALL | 409465.4 | 3770395 | 2.41E-07 | 2YrCancerF | 2.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 681 ALL | 408945.4 | 3770415 | 2.43E-07 | 2YrCancerF | 2.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 682 ALL | 408965.4 | 3770415 | 2.48E-07 | 2YrCancerF | 2.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 683 ALL | 408985.4 | 3770415 | 2.53E-07 | 2YrCancerF | 2.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 684 ALL | 409005.4 | 3770415 | 2.57E-07 | 2YrCancerF | 2.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 685 ALL | 409025.4 | 3770415 | 2.61E-07 | 2YrCancerF | 2.61E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 686 | ALL | 409045.4 | 3770415 | 2.65E-07 | 2YrCancerF | 2.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 687 | ALL | 409065.4 | 3770415 | 2.68E-07 | 2YrCancerF | 2.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 688 | ALL | 409085.4 | 3770415 | 2.71E-07 | 2YrCancerF | 2.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 689 | ALL | 409105.4 | 3770415 | 2.73E-07 | 2YrCancerF | 2.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 690 | ALL | 409185.4 | 3770415 | 2.77E-07 | 2YrCancerF | 2.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 691 | ALL | 409205.4 | 3770415 | 2.76E-07 | 2YrCancerF | 2.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 692 | ALL | 409225.4 | 3770415 | 2.75E-07 | 2YrCancerF | 2.75E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 693 | ALL | 409245.4 | 3770415 | 2.73E-07 | 2YrCancerF | 2.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 694 | ALL | 409265.4 | 3770415 | 2.71E-07 | 2YrCancerF | 2.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 695 | ALL | 409285.4 | 3770415 | 2.68E-07 | 2YrCancerF | 2.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 696 | ALL | 409305.4 | 3770415 | 2.65E-07 | 2YrCancerF | 2.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 697 | ALL | 409325.4 | 3770415 | 2.62E-07 | 2YrCancerF | 2.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 698 | ALL | 409345.4 | 3770415 | 2.58E-07 | 2YrCancerF | 2.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 699 | ALL | 409365.4 | 3770415 | 2.54E-07 | 2YrCancerF | 2.54E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 700 | ALL | 409385.4 | 3770415 | 2.49E-07 | 2YrCancerF | 2.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 701 | ALL | 409405.4 | 3770415 | 2.44E-07 | 2YrCancerF | 2.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 702 | ALL | 409425.4 | 3770415 | 2.39E-07 | 2YrCancerF | 2.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 703 | ALL | 408965.4 | 3770435 | 2.35E-07 | 2YrCancerF | 2.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 704 | ALL | 408985.4 | 3770435 | 2.39E-07 | 2YrCancerF | 2.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 705 | ALL | 409005.4 | 3770435 | 2.43E-07 | 2YrCancerF | 2.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 706 | ALL | 409025.4 | 3770435 | 2.47E-07 | 2YrCancerF | 2.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 707 | ALL | 409045.4 | 3770435 | 2.50E-07 | 2YrCancerF | 2.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 708 | ALL | 409065.4 | 3770435 | 2.53E-07 | 2YrCancerF | 2.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 709 | ALL | 409205.4 | 3770435 | 2.60E-07 | 2YrCancerF | 2.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 710 | ALL | 409225.4 | 3770435 | 2.59E-07 | 2YrCancerF | 2.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 711 | ALL | 409245.4 | 3770435 | 2.58E-07 | 2YrCancerF | 2.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 712 | ALL | 409265.4 | 3770435 | 2.56E-07 | 2YrCancerF | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 713 | ALL | 409285.4 | 3770435 | 2.53E-07 | 2YrCancerF | 2.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 714 | ALL | 409305.4 | 3770435 | 2.51E-07 | 2YrCancerF | 2.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 715 | ALL | 409325.4 | 3770435 | 2.47E-07 | 2YrCancerF | 2.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 716 | ALL | 409345.4 | 3770435 | 2.44E-07 | 2YrCancerF | 2.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 717 | ALL | 409365.4 | 3770435 | 2.40E-07 | 2YrCancerF | 2.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 718 | ALL | 409385.4 | 3770435 | 2.36E-07 | 2YrCancerF | 2.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 719 | ALL | 409405.4 | 3770435 | 2.32E-07 | 2YrCancerF | 2.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 720 | ALL | 408985.4 | 3770455 | 2.27E-07 | 2YrCancerF | 2.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 721 | ALL | 409005.4 | 3770455 | 2.31E-07 | 2YrCancerF | 2.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 722 | ALL | 409025.4 | 3770455 | 2.34E-07 | 2YrCancerF | 2.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 723 | ALL | 409045.4 | 3770455 | 2.37E-07 | 2YrCancerF | 2.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 724 | ALL | 409225.4 | 3770455 | 2.45E-07 | 2YrCancerF | 2.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 725 | ALL | 409245.4 | 3770455 | 2.44E-07 | 2YrCancerF | 2.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 726 | ALL | 409265.4 | 3770455 | 2.42E-07 | 2YrCancerF | 2.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 727 | ALL | 409285.4 | 3770455 | 2.40E-07 | 2YrCancerF | 2.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 728 | ALL | 409305.4 | 3770455 | 2.37E-07 | 2YrCancerF | 2.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 729 | ALL | 409325.4 | 3770455 | 2.34E-07 | 2YrCancerF | 2.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 730 | ALL | 409345.4 | 3770455 | 2.31E-07 | 2YrCancerF | 2.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 731 | ALL | 409365.4 | 3770455 | 2.28E-07 | 2YrCancerF | 2.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 732 | ALL | 409385.4 | 3770455 | 2.24E-07 | 2YrCancerF | 2.24E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 733 | ALL | 408985.4 | 3770475 | 2.16E-07 | 2YrCancerF | 2.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 734 | ALL | 409005.4 | 3770475 | 2.19E-07 | 2YrCancerF | 2.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 735 | ALL | 409025.4 | 3770475 | 2.22E-07 | 2YrCancerF | 2.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 736 | ALL | 409245.4 | 3770475 | 2.31E-07 | 2YrCancerF | 2.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 737 | ALL | 409265.4 | 3770475 | 2.29E-07 | 2YrCancerF | 2.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 738 | ALL | 409285.4 | 3770475 | 2.27E-07 | 2YrCancerF | 2.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 739 | ALL | 409305.4 | 3770475 | 2.25E-07 | 2YrCancerF | 2.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 740 | ALL | 409325.4 | 3770475 | 2.22E-07 | 2YrCancerF | 2.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 741 | ALL | 409345.4 | 3770475 | 2.20E-07 | 2YrCancerF | 2.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 742 | ALL | 409365.4 | 3770475 | 2.17E-07 | 2YrCancerF | 2.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 743 | ALL | 409005.4 | 3770495 | 2.08E-07 | 2YrCancerF | 2.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 744 | ALL | 409265.4 | 3770495 | 2.17E-07 | 2YrCancerF | 2.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 745 | ALL | 409285.4 | 3770495 | 2.16E-07 | 2YrCancerF | 2.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 746 | ALL | 409305.4 | 3770495 | 2.14E-07 | 2YrCancerF | 2.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 747 | ALL | 409325.4 | 3770495 | 2.11E-07 | 2YrCancerF | 2.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 748 | ALL | 409285.4 | 3770515 | 2.05E-07 | 2YrCancerF | 2.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 749 | ALL | 409305.4 | 3770515 | 2.03E-07 | 2YrCancerF | 2.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 750 | ALL | 409620.3 | 3769917 | 4.48E-07 | 2YrCancerF | 4.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 751 | ALL | 409594.5 | 3769938 | 4.92E-07 | 2YrCancerF | 4.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 752 | ALL | 409641.7 | 3769936 | 4.12E-07 | 2YrCancerF | 4.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 753 | ALL | 409617.3 | 3769956 | 4.46E-07 | 2YrCancerF | 4.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 754 | ALL | 409558.1 | 3769968 | 5.55E-07 | 2YrCancerF | 5.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 755 | ALL | 409518.3 | 3769997 | 6.27E-07 | 2YrCancerF | 6.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 756 | ALL | 409513.4 | 3770012 | 6.22E-07 | 2YrCancerF | 6.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 757 | ALL | 409533.8 | 3770024 | 5.59E-07 | 2YrCancerF | 5.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 758 | ALL | 409551.7 | 3770011 | 5.35E-07 | 2YrCancerF | 5.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 759 | ALL | 409573.1 | 3769996 | 5.05E-07 | 2YrCancerF | 5.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 760 | ALL | 409557.6 | 3770023 | 5.12E-07 | 2YrCancerF | 5.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 761 | ALL | 409573.1 | 3770033 | 4.76E-07 | 2YrCancerF | 4.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 762 | ALL | 409598.4 | 3770016 | 4.48E-07 | 2YrCancerF | 4.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 763 | ALL | 409609.9 | 3770032 | 4.21E-07 | 2YrCancerF | 4.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 764 | ALL | 409595.9 | 3770038 | 4.37E-07 | 2YrCancerF | 4.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 765 | ALL | 409585 | 3770047 | 4.46E-07 | 2YrCancerF | 4.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 766 | ALL | 409619.3 | 3770049 | 3.98E-07 | 2YrCancerF | 3.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 767 | ALL | 409656.6 | 3770027 | 3.64E-07 | 2YrCancerF | 3.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 768 | ALL | 409680.5 | 3770017 | 3.42E-07 | 2YrCancerF | 3.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 769 | ALL | 409693.9 | 3770014 | 3.29E-07 | 2YrCancerF | 3.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 770 | ALL | 409708.9 | 3770012 | 3.16E-07 | 2YrCancerF | 3.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 771 | ALL | 409607.9 | 3770068 | 3.99E-07 | 2YrCancerF | 3.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 772 | ALL | 409589.5 | 3770066 | 4.25E-07 | 2YrCancerF | 4.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 773 | ALL | 409579.5 | 3770066 | 4.38E-07 | 2YrCancerF | 4.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 774 | ALL | 409552.2 | 3770058 | 4.87E-07 | 2YrCancerF | 4.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 775 | ALL | 408953.3 | 3769648 | 8.53E-07 | 2YrCancerF | 8.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 776 | ALL | 408703.2 | 3769849 | 3.82E-07 | 2YrCancerF | 3.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 777 | ALL | 408758.2 | 3769919 | 4.62E-07 | 2YrCancerF | 4.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 778 | ALL | 408757.3 | 3769928 | 4.57E-07 | 2YrCancerF | 4.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 779 | ALL | 408629 | 3769906 | 2.94E-07 | 2YrCancerF | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 780 | ALL | 408597 | 3769864 | 2.69E-07 | 2YrCancerF | 2.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 781 | ALL | 408548.4 | 3769905 | 2.33E-07 | 2YrCancerF | 2.33E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 782 | ALL | 408501.7 | 3769896 | 2.06E-07 | 2YrCancerF | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 783 | ALL | 408462.3 | 3769855 | 1.88E-07 | 2YrCancerF | 1.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 784 | ALL | 408378.1 | 3769883 | 1.55E-07 | 2YrCancerF | 1.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 785 | ALL | 408352.4 | 3769867 | 1.47E-07 | 2YrCancerF | 1.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 786 | ALL | 408352.4 | 3769829 | 1.47E-07 | 2YrCancerF | 1.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 787 | ALL | 408378.3 | 3769791 | 1.55E-07 | 2YrCancerF | 1.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 788 | ALL | 408664.6 | 3769570 | 2.66E-07 | 2YrCancerF | 2.66E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 789 | ALL | 408755.6 | 3769594 | 3.56E-07 | 2YrCancerF | 3.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 790 | ALL | 408812.3 | 3769570 | 4.03E-07 | 2YrCancerF | 4.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 791 | ALL | 408871.9 | 3769585 | 5.06E-07 | 2YrCancerF | 5.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 792 | ALL | 408658.5 | 3770080 | 2.79E-07 | 2YrCancerF | 2.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 793 | ALL | 409005.2 | 3770500 | 2.06E-07 | 2YrCancerF | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 794 | ALL | 409148.5 | 3770383 | 3.05E-07 | 2YrCancerF | 3.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 795 | ALL | 409289.4 | 3770535 | 1.95E-07 | 2YrCancerF | 1.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 796 | ALL | 409506.5 | 3770367 | 2.45E-07 | 2YrCancerF | 2.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 797 | ALL | 409379.3 | 3770230 | 4.48E-07 | 2YrCancerF | 4.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 798 | ALL | 409302.4 | 3770295 | 3.92E-07 | 2YrCancerF | 3.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 799 | ALL | 409203.6 | 3770184 | 6.83E-07 | 2YrCancerF | 6.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 800 | ALL | 409149.3 | 3770186 | 6.74E-07 | 2YrCancerF | 6.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 801 | ALL | 409125 | 3770159 | 7.68E-07 | 2YrCancerF | 7.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 802 | ALL | 409100.7 | 3770175 | 6.88E-07 | 2YrCancerF | 6.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 803 | ALL | 409079.7 | 3770173 | 6.74E-07 | 2YrCancerF | 6.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 804 | ALL | 409044.8 | 3770145 | 7.28E-07 | 2YrCancerF | 7.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 805 | ALL | 409048.2 | 3770088 | 9.99E-07 | 2YrCancerF | 9.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 806 | ALL | 408881.6 | 3770059 | 6.06E-07 | 2YrCancerF | 6.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 807 | ALL | 408861.3 | 3770102 | 5.00E-07 | 2YrCancerF | 5.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 808 | ALL | 408675.3 | 3770074 | 2.94E-07 | 2YrCancerF | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| REC | GRP | NETID | X | Y | SCENARIO | CV | CNS | IMMUN | KIDNEY | GILV | REPRO/DE\ | RESP | SKIN | EYE | BONE/TEET | ENDO | BLOOD | ODOR | GENERAL | MAXHI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ALL | | 408660.5 | 3769575 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 2 | ALL | | 408680.5 | 3769575 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 |
| 3 | ALL | | 408820.5 | 3769575 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.45E-04 |
| 4 | ALL | | 408640.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 |
| 5 | ALL | | 408660.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |
| 6 | ALL | | 408680.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 7 | ALL | | 408700.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 8 | ALL | | 408720.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 |
| 9 | ALL | | 408740.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.00E-04 |
| 10 | ALL | | 408760.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 |
| 11 | ALL | | 408780.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 |
| 12 | ALL | | 408800.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 |
| 13 | ALL | | 408820.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 |
| 14 | ALL | | 408840.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.74E-04 |
| 15 | ALL | | 408860.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.93E-04 |
| 16 | ALL | | 408880.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-04 |
| 17 | ALL | | 408620.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 |
| 18 | ALL | | 408640.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 19 | ALL | | 408660.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 |
| 20 | ALL | | 408680.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.73E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.73E-04 |
| 21 | ALL | | 408700.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 22 | ALL | | 408720.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 |
| 23 | ALL | | 408740.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 |
| 24 | ALL | | 408760.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 |
| 25 | ALL | | 408780.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.34E-04 |
| 26 | ALL | | 408800.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.50E-04 |
| 27 | ALL | | 408820.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.68E-04 |
| 28 | ALL | | 408840.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.87E-04 |
| 29 | ALL | | 408860.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.09E-04 |
| 30 | ALL | | 408880.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.32E-04 |
| 31 | ALL | | 408900.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.58E-04 |
| 32 | ALL | | 408600.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 |
| 33 | ALL | | 408620.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 34 | ALL | | 408640.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 35 | ALL | | 408660.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 |
| 36 | ALL | | 408680.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 37 | ALL | | 408700.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 |
| 38 | ALL | | 408720.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.00E-04 |
| 39 | ALL | | 408740.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 |
| 40 | ALL | | 408760.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 |
| 41 | ALL | | 408780.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 |
| 42 | ALL | | 408800.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.61E-04 |
| 43 | ALL | | 408820.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.80E-04 |
| 44 | ALL | | 408840.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.02E-04 |
| 45 | ALL | | 408860.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 |
| 46 | ALL | | 408880.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.52E-04 |
| 47 | ALL | | 408900.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.81E-04 |
| 48 | ALL | | 408920.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.13E-04 |
| 49 | ALL | | 408560.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 |
| 50 | ALL | | 408580.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 51 | ALL | | 408600.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 |
| 52 | ALL | | 408620.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 |
| 53 | ALL | | 408640.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 |
| 54 | ALL | | 408660.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 55 | ALL | 408680.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 |
| 56 | ALL | 408700.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |
| 57 | ALL | 408720.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 58 | ALL | 408740.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 |
| 59 | ALL | 408760.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 |
| 60 | ALL | 408780.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.52E-04 |
| 61 | ALL | 408800.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.71E-04 |
| 62 | ALL | 408820.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.92E-04 |
| 63 | ALL | 408840.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-04 |
| 64 | ALL | 408860.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.42E-04 |
| 65 | ALL | 408880.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.72E-04 |
| 66 | ALL | 408900.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.05E-04 |
| 67 | ALL | 408920.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.42E-04 |
| 68 | ALL | 408940.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.83E-04 |
| 69 | ALL | 408540.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 |
| 70 | ALL | 408560.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.32E-04 |
| 71 | ALL | 408580.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 |
| 72 | ALL | 408600.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 |
| 73 | ALL | 408620.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 |
| 74 | ALL | 408640.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.65E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.65E-04 |
| 75 | ALL | 408660.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 |
| 76 | ALL | 408680.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 |
| 77 | ALL | 408700.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 |
| 78 | ALL | 408720.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.11E-04 |
| 79 | ALL | 408740.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 80 | ALL | 408760.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 |
| 81 | ALL | 408780.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.61E-04 |
| 82 | ALL | 408800.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.81E-04 |
| 83 | ALL | 408820.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.04E-04 |
| 84 | ALL | 408840.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.30E-04 |
| 85 | ALL | 408860.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.59E-04 |
| 86 | ALL | 408880.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.92E-04 |
| 87 | ALL | 408900.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.30E-04 |
| 88 | ALL | 408520.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.21E-04 |
| 89 | ALL | 408540.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 |
| 90 | ALL | 408560.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 |
| 91 | ALL | 408580.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 92 | ALL | 408600.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.49E-04 |
| 93 | ALL | 408620.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 94 | ALL | 408640.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 95 | ALL | 408660.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 96 | ALL | 408680.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 |
| 97 | ALL | 408700.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 |
| 98 | ALL | 408720.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 |
| 99 | ALL | 408740.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 100 | ALL | 408760.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.50E-04 |
| 101 | ALL | 408780.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 |
| 102 | ALL | 408800.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.91E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.91E-04 |
| 103 | ALL | 408820.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-04 |
| 104 | ALL | 408840.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.44E-04 |
| 105 | ALL | 408860.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.76E-04 |
| 106 | ALL | 408880.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.13E-04 |
| 107 | ALL | 408480.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.11E-04 |
| 108 | ALL | 408500.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.17E-04 |
| 109 | ALL | 408520.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110 | ALL | 408540.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.29E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.29E-04 |
| 111 | ALL | 408560.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 |
| 112 | ALL | 408580.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 |
| 113 | ALL | 408600.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 |
| 114 | ALL | 408620.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.61E-04 |
| 115 | ALL | 408640.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 116 | ALL | 408660.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 |
| 117 | ALL | 408680.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |
| 118 | ALL | 408700.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 |
| 119 | ALL | 408720.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 120 | ALL | 408740.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.38E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.38E-04 |
| 121 | ALL | 408760.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 |
| 122 | ALL | 408780.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.77E-04 |
| 123 | ALL | 408800.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.00E-04 |
| 124 | ALL | 408820.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.27E-04 |
| 125 | ALL | 408840.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-04 |
| 126 | ALL | 408860.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.92E-04 |
| 127 | ALL | 408460.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.07E-04 |
| 128 | ALL | 408480.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.12E-04 |
| 129 | ALL | 408500.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.18E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.18E-04 |
| 130 | ALL | 408520.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 |
| 131 | ALL | 408540.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 |
| 132 | ALL | 408560.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 133 | ALL | 408580.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 |
| 134 | ALL | 408600.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.54E-04 |
| 135 | ALL | 408620.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 |
| 136 | ALL | 408640.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.73E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.73E-04 |
| 137 | ALL | 408660.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.84E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.84E-04 |
| 138 | ALL | 408680.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 |
| 139 | ALL | 408700.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 |
| 140 | ALL | 408720.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 141 | ALL | 408740.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 |
| 142 | ALL | 408760.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 |
| 143 | ALL | 408780.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.84E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.84E-04 |
| 144 | ALL | 408800.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.08E-04 |
| 145 | ALL | 408820.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-04 |
| 146 | ALL | 408840.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-04 |
| 147 | ALL | 408440.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.03E-04 |
| 148 | ALL | 408460.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.08E-04 |
| 149 | ALL | 408480.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 |
| 150 | ALL | 408500.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 |
| 151 | ALL | 408520.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 |
| 152 | ALL | 408540.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 |
| 153 | ALL | 408560.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 |
| 154 | ALL | 408580.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 |
| 155 | ALL | 408600.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 156 | ALL | 408620.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.65E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.65E-04 |
| 157 | ALL | 408640.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 |
| 158 | ALL | 408660.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 159 | ALL | 408680.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 |
| 160 | ALL | 408700.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.14E-04 |
| 161 | ALL | 408720.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.30E-04 |
| 162 | ALL | 408740.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.47E-04 |
| 163 | ALL | 408760.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.67E-04 |
| 164 | ALL | 408780.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.90E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 165 | ALL | 408800.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-04 |
| 166 | ALL | 408400.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.44E-05 |
| 167 | ALL | 408420.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.87E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.87E-05 |
| 168 | ALL | 408440.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.03E-04 |
| 169 | ALL | 408460.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.08E-04 |
| 170 | ALL | 408480.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 171 | ALL | 408500.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 |
| 172 | ALL | 408520.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 |
| 173 | ALL | 408540.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.32E-04 |
| 174 | ALL | 408560.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 |
| 175 | ALL | 408580.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 |
| 176 | ALL | 408600.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 |
| 177 | ALL | 408620.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 |
| 178 | ALL | 408640.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 179 | ALL | 408660.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 |
| 180 | ALL | 408680.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 |
| 181 | ALL | 408700.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 |
| 182 | ALL | 408720.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.33E-04 |
| 183 | ALL | 408740.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 |
| 184 | ALL | 408760.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.72E-04 |
| 185 | ALL | 408780.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.95E-04 |
| 186 | ALL | 408380.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.08E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.08E-05 |
| 187 | ALL | 408400.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.48E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.48E-05 |
| 188 | ALL | 408420.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.91E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.91E-05 |
| 189 | ALL | 408440.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 |
| 190 | ALL | 408460.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 |
| 191 | ALL | 408480.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 192 | ALL | 408500.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |
| 193 | ALL | 408520.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 |
| 194 | ALL | 408540.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 |
| 195 | ALL | 408560.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 |
| 196 | ALL | 408580.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.49E-04 |
| 197 | ALL | 408600.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 198 | ALL | 408620.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 |
| 199 | ALL | 408640.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 200 | ALL | 408660.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 |
| 201 | ALL | 408680.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 |
| 202 | ALL | 408700.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 |
| 203 | ALL | 408720.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 |
| 204 | ALL | 408740.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 |
| 205 | ALL | 408760.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.75E-04 |
| 206 | ALL | 408380.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.10E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.10E-05 |
| 207 | ALL | 408400.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.51E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.51E-05 |
| 208 | ALL | 408420.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.94E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.94E-05 |
| 209 | ALL | 408440.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 |
| 210 | ALL | 408460.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 |
| 211 | ALL | 408480.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 212 | ALL | 408500.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |
| 213 | ALL | 408520.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 |
| 214 | ALL | 408540.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 |
| 215 | ALL | 408560.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 216 | ALL | 408580.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.49E-04 |
| 217 | ALL | 408600.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 218 | ALL | 408620.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 219 | ALL | 408640.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 220 | ALL | 408660.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 |
| 221 | ALL | 408680.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 |
| 222 | ALL | 408700.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 |
| 223 | ALL | 408720.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 |
| 224 | ALL | 408740.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 |
| 225 | ALL | 408360.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.74E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.74E-05 |
| 226 | ALL | 408380.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.12E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.12E-05 |
| 227 | ALL | 408400.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.52E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.52E-05 |
| 228 | ALL | 408420.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.96E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.96E-05 |
| 229 | ALL | 408440.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 |
| 230 | ALL | 408460.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 |
| 231 | ALL | 408480.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 |
| 232 | ALL | 408500.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.21E-04 |
| 233 | ALL | 408520.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 |
| 234 | ALL | 408540.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 |
| 235 | ALL | 408560.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 236 | ALL | 408580.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 237 | ALL | 408600.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |
| 238 | ALL | 408620.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 |
| 239 | ALL | 408640.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 |
| 240 | ALL | 408660.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 |
| 241 | ALL | 408680.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 242 | ALL | 408700.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 243 | ALL | 408360.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.75E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.75E-05 |
| 244 | ALL | 408380.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.12E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.12E-05 |
| 245 | ALL | 408400.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.52E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.52E-05 |
| 246 | ALL | 408420.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.96E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.96E-05 |
| 247 | ALL | 408440.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 |
| 248 | ALL | 408460.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 |
| 249 | ALL | 408480.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 |
| 250 | ALL | 408500.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.21E-04 |
| 251 | ALL | 408520.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 |
| 252 | ALL | 408540.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 |
| 253 | ALL | 408560.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 254 | ALL | 408580.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 255 | ALL | 408600.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |
| 256 | ALL | 408620.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 |
| 257 | ALL | 408640.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 |
| 258 | ALL | 408660.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 |
| 259 | ALL | 408680.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 260 | ALL | 408700.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 261 | ALL | 408380.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.11E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.11E-05 |
| 262 | ALL | 408400.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.51E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.51E-05 |
| 263 | ALL | 408500.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |
| 264 | ALL | 408520.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 |
| 265 | ALL | 408540.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 |
| 266 | ALL | 408560.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 267 | ALL | 408580.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 268 | ALL | 408620.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 |
| 269 | ALL | 408640.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 |
| 270 | ALL | 408660.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 |
| 271 | ALL | 408680.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 |
| 272 | ALL | 408700.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 |
| 273 | ALL | 408720.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.38E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.38E-04 |
| 274 | ALL | 408500.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 275 | ALL | 408520.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 |
| 276 | ALL | 408540.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 |
| 277 | ALL | 408560.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 278 | ALL | 408620.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 279 | ALL | 408640.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |
| 280 | ALL | 408660.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 |
| 281 | ALL | 408680.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 |
| 282 | ALL | 408700.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 |
| 283 | ALL | 408720.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 |
| 284 | ALL | 408680.5 | 3769915 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.03E-04 |
| 285 | ALL | 408700.5 | 3769915 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 |
| 286 | ALL | 408720.5 | 3769915 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.34E-04 |
| 287 | ALL | 408740.5 | 3769915 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.53E-04 |
| 288 | ALL | 408885.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-04 |
| 289 | ALL | 408905.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.70E-04 |
| 290 | ALL | 408925.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.99E-04 |
| 291 | ALL | 408945.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.30E-04 |
| 292 | ALL | 408965.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.64E-04 |
| 293 | ALL | 408685.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 294 | ALL | 408705.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 |
| 295 | ALL | 408725.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |
| 296 | ALL | 408745.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 |
| 297 | ALL | 408765.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.18E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.18E-04 |
| 298 | ALL | 408785.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 299 | ALL | 408805.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.47E-04 |
| 300 | ALL | 408865.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.02E-04 |
| 301 | ALL | 408885.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.23E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.23E-04 |
| 302 | ALL | 408905.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-04 |
| 303 | ALL | 408925.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-04 |
| 304 | ALL | 408945.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.98E-04 |
| 305 | ALL | 408965.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.27E-04 |
| 306 | ALL | 408985.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.57E-04 |
| 307 | ALL | 409005.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.89E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.89E-04 |
| 308 | ALL | 409025.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.22E-04 |
| 309 | ALL | 409045.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.55E-04 |
| 310 | ALL | 408705.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 311 | ALL | 408725.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 312 | ALL | 408745.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 |
| 313 | ALL | 408765.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 |
| 314 | ALL | 408785.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.23E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.23E-04 |
| 315 | ALL | 408805.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 |
| 316 | ALL | 408825.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.52E-04 |
| 317 | ALL | 408845.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.68E-04 |
| 318 | ALL | 408865.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.86E-04 |
| 319 | ALL | 408885.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.05E-04 |
| 320 | ALL | 408905.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.25E-04 |
| 321 | ALL | 408925.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-04 |
| 322 | ALL | 408945.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-04 |
| 323 | ALL | 408965.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.93E-04 |
| 324 | ALL | 408985.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.19E-04 |
| 325 | ALL | 409005.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.44E-04 |
| 326 | ALL | 409025.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.71E-04 |
| 327 | ALL | 409045.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.97E-04 |
| 328 | ALL | 408705.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 |
| 329 | ALL | 408725.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 330 | ALL | 408745.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 |
| 331 | ALL | 408765.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 |
| 332 | ALL | 408785.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 |
| 333 | ALL | 408805.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 334 | ALL | 408825.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 |
| 335 | ALL | 408845.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 |
| 336 | ALL | 408865.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 |
| 337 | ALL | 408885.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.87E-04 |
| 338 | ALL | 408905.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.04E-04 |
| 339 | ALL | 408925.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.23E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.23E-04 |
| 340 | ALL | 408945.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-04 |
| 341 | ALL | 408965.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.63E-04 |
| 342 | ALL | 408985.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.84E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.84E-04 |
| 343 | ALL | 409005.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.05E-04 |
| 344 | ALL | 409025.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.27E-04 |
| 345 | ALL | 408725.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 |
| 346 | ALL | 408745.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.84E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.84E-04 |
| 347 | ALL | 408765.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 |
| 348 | ALL | 408785.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 |
| 349 | ALL | 408805.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 |
| 350 | ALL | 408825.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 |
| 351 | ALL | 408845.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 |
| 352 | ALL | 408865.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.55E-04 |
| 353 | ALL | 408885.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 |
| 354 | ALL | 408905.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.86E-04 |
| 355 | ALL | 408925.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.02E-04 |
| 356 | ALL | 408945.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.18E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.18E-04 |
| 357 | ALL | 408965.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-04 |
| 358 | ALL | 408985.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.53E-04 |
| 359 | ALL | 409005.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-04 |
| 360 | ALL | 409025.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.88E-04 |
| 361 | ALL | 409045.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.05E-04 |
| 362 | ALL | 408745.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 363 | ALL | 408765.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 |
| 364 | ALL | 408785.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 |
| 365 | ALL | 408805.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 366 | ALL | 408825.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 |
| 367 | ALL | 408845.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.29E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.29E-04 |
| 368 | ALL | 408865.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 |
| 369 | ALL | 408885.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 |
| 370 | ALL | 408905.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.68E-04 |
| 371 | ALL | 408925.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.82E-04 |
| 372 | ALL | 408945.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.96E-04 |
| 373 | ALL | 408965.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.11E-04 |
| 374 | ALL | 408985.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 |
| 375 | ALL | 409005.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.41E-04 |
| 376 | ALL | 409025.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.55E-04 |
| 377 | ALL | 409045.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-04 |
| 378 | ALL | 409065.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.82E-04 |
| 379 | ALL | 409085.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.93E-04 |
| 380 | ALL | 409105.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.03E-04 |
| 381 | ALL | 409125.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.11E-04 |
| 382 | ALL | 408765.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 383 | ALL | 408785.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 384 | ALL | 408805.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 385 | ALL | 408825.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 |
| 386 | ALL | 408845.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 |
| 387 | ALL | 408865.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 |
| 388 | ALL | 408885.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 |
| 389 | ALL | 408905.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 |
| 390 | ALL | 408925.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.64E-04 |
| 391 | ALL | 408945.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.76E-04 |
| 392 | ALL | 408965.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.89E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.89E-04 |
| 393 | ALL | 408985.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.01E-04 |
| 394 | ALL | 409005.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.14E-04 |
| 395 | ALL | 409025.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 |
| 396 | ALL | 409045.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-04 |
| 397 | ALL | 409065.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.48E-04 |
| 398 | ALL | 409085.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-04 |
| 399 | ALL | 409105.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.65E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.65E-04 |
| 400 | ALL | 409125.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-04 |
| 401 | ALL | 409145.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.76E-04 |
| 402 | ALL | 409165.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.78E-04 |
| 403 | ALL | 409185.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.78E-04 |
| 404 | ALL | 409205.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.76E-04 |
| 405 | ALL | 408785.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |
| 406 | ALL | 408805.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 |
| 407 | ALL | 408825.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 |
| 408 | ALL | 408845.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 409 | ALL | 408865.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 |
| 410 | ALL | 408885.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 411 | ALL | 408905.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 |
| 412 | ALL | 408925.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.47E-04 |
| 413 | ALL | 408945.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.58E-04 |
| 414 | ALL | 408965.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 |
| 415 | ALL | 408985.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.79E-04 |
| 416 | ALL | 409005.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.90E-04 |
| 417 | ALL | 409025.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.00E-04 |
| 418 | ALL | 409045.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.09E-04 |
| 419 | ALL | 409065.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.18E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.18E-04 |
| 420 | ALL | 409085.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 |
| 421 | ALL | 409105.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.32E-04 |
| 422 | ALL | 409125.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-04 |
| 423 | ALL | 409145.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.41E-04 |
| 424 | ALL | 409165.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-04 |
| 425 | ALL | 409185.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-04 |
| 426 | ALL | 409205.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.41E-04 |
| 427 | ALL | 409225.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.38E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.38E-04 |
| 428 | ALL | 408805.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |
| 429 | ALL | 408825.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 430 | ALL | 408845.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 |
| 431 | ALL | 408865.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 |
| 432 | ALL | 408885.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 |
| 433 | ALL | 408905.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.22E-04 |
| 434 | ALL | 408925.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 435 | ALL | 408945.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 |
| 436 | ALL | 408965.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.50E-04 |
| 437 | ALL | 408985.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 |
| 438 | ALL | 409005.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 |
| 439 | ALL | 409025.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.77E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 440 | ALL | 409045.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.85E-04 |
| 441 | ALL | 409065.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.92E-04 |
| 442 | ALL | 409085.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.98E-04 |
| 443 | ALL | 409105.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.04E-04 |
| 444 | ALL | 409125.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.08E-04 |
| 445 | ALL | 409145.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.11E-04 |
| 446 | ALL | 409165.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.12E-04 |
| 447 | ALL | 409185.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-04 |
| 448 | ALL | 409205.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.11E-04 |
| 449 | ALL | 409225.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.09E-04 |
| 450 | ALL | 409245.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.05E-04 |
| 451 | ALL | 408805.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 |
| 452 | ALL | 408825.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 453 | ALL | 408845.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 |
| 454 | ALL | 408865.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |
| 455 | ALL | 408885.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.01E-04 |
| 456 | ALL | 408905.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 |
| 457 | ALL | 408925.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.18E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.18E-04 |
| 458 | ALL | 408945.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 459 | ALL | 408965.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.34E-04 |
| 460 | ALL | 408985.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.42E-04 |
| 461 | ALL | 409005.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 |
| 462 | ALL | 409025.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.57E-04 |
| 463 | ALL | 409045.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.63E-04 |
| 464 | ALL | 409065.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 |
| 465 | ALL | 409085.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.75E-04 |
| 466 | ALL | 409105.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.79E-04 |
| 467 | ALL | 409125.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.83E-04 |
| 468 | ALL | 409145.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.85E-04 |
| 469 | ALL | 409165.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.86E-04 |
| 470 | ALL | 409185.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.86E-04 |
| 471 | ALL | 409205.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.85E-04 |
| 472 | ALL | 409225.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.83E-04 |
| 473 | ALL | 409245.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.80E-04 |
| 474 | ALL | 409265.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.76E-04 |
| 475 | ALL | 409365.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.44E-04 |
| 476 | ALL | 409385.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 |
| 477 | ALL | 408825.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 478 | ALL | 408845.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 479 | ALL | 408865.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 480 | ALL | 408885.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 |
| 481 | ALL | 408905.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 |
| 482 | ALL | 408925.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 |
| 483 | ALL | 408945.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 |
| 484 | ALL | 408965.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 |
| 485 | ALL | 408985.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 486 | ALL | 409005.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 487 | ALL | 409025.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.38E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.38E-04 |
| 488 | ALL | 409045.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.44E-04 |
| 489 | ALL | 409065.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 |
| 490 | ALL | 409085.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 |
| 491 | ALL | 409105.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.57E-04 |
| 492 | ALL | 409125.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 |
| 493 | ALL | 409145.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 |
| 494 | ALL | 409165.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.63E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 495 | ALL | 409185.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.64E-04 |
| 496 | ALL | 409205.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.63E-04 |
| 497 | ALL | 409225.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.61E-04 |
| 498 | ALL | 409245.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.58E-04 |
| 499 | ALL | 409265.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 |
| 500 | ALL | 409345.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.34E-04 |
| 501 | ALL | 409365.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 |
| 502 | ALL | 409385.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 503 | ALL | 409405.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.15E-04 |
| 504 | ALL | 408845.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 505 | ALL | 408865.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 |
| 506 | ALL | 408885.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 |
| 507 | ALL | 408905.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 508 | ALL | 408925.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |
| 509 | ALL | 408945.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 |
| 510 | ALL | 408965.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 |
| 511 | ALL | 408985.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.11E-04 |
| 512 | ALL | 409005.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 |
| 513 | ALL | 409025.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.22E-04 |
| 514 | ALL | 409045.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.27E-04 |
| 515 | ALL | 409065.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.31E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.31E-04 |
| 516 | ALL | 409085.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 |
| 517 | ALL | 409105.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.38E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.38E-04 |
| 518 | ALL | 409125.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 |
| 519 | ALL | 409145.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.42E-04 |
| 520 | ALL | 409165.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 |
| 521 | ALL | 409185.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 |
| 522 | ALL | 409205.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.43E-04 |
| 523 | ALL | 409225.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 |
| 524 | ALL | 409245.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.39E-04 |
| 525 | ALL | 409265.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 |
| 526 | ALL | 409285.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 527 | ALL | 409305.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.28E-04 |
| 528 | ALL | 409325.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.23E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.23E-04 |
| 529 | ALL | 409345.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.18E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.18E-04 |
| 530 | ALL | 409365.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 |
| 531 | ALL | 409385.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 |
| 532 | ALL | 409405.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.01E-04 |
| 533 | ALL | 409425.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 |
| 534 | ALL | 408865.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.65E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.65E-04 |
| 535 | ALL | 408885.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 |
| 536 | ALL | 408905.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 |
| 537 | ALL | 408925.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 |
| 538 | ALL | 408945.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 539 | ALL | 408965.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |
| 540 | ALL | 408985.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 |
| 541 | ALL | 409005.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.03E-04 |
| 542 | ALL | 409025.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 |
| 543 | ALL | 409045.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 |
| 544 | ALL | 409065.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.15E-04 |
| 545 | ALL | 409085.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 |
| 546 | ALL | 409105.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 547 | ALL | 409125.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.23E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.23E-04 |
| 548 | ALL | 409145.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 |
| 549 | ALL | 409165.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 550 | ALL | 409185.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 551 | ALL | 409205.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 |
| 552 | ALL | 409225.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 |
| 553 | ALL | 409245.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.22E-04 |
| 554 | ALL | 409265.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 |
| 555 | ALL | 409285.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 |
| 556 | ALL | 409305.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 |
| 557 | ALL | 409325.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.08E-04 |
| 558 | ALL | 409345.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 |
| 559 | ALL | 409365.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 |
| 560 | ALL | 409385.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 |
| 561 | ALL | 409405.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 |
| 562 | ALL | 409425.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.84E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.84E-04 |
| 563 | ALL | 409445.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |
| 564 | ALL | 408885.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 |
| 565 | ALL | 408905.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 |
| 566 | ALL | 408925.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 567 | ALL | 408945.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 568 | ALL | 408965.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 |
| 569 | ALL | 408985.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 |
| 570 | ALL | 409005.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 |
| 571 | ALL | 409025.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 |
| 572 | ALL | 409045.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 |
| 573 | ALL | 409065.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.01E-04 |
| 574 | ALL | 409085.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 |
| 575 | ALL | 409105.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 576 | ALL | 409125.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.08E-04 |
| 577 | ALL | 409145.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.09E-04 |
| 578 | ALL | 409165.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 |
| 579 | ALL | 409185.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.10E-04 |
| 580 | ALL | 409205.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.09E-04 |
| 581 | ALL | 409225.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.08E-04 |
| 582 | ALL | 409245.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 |
| 583 | ALL | 409265.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 |
| 584 | ALL | 409285.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 |
| 585 | ALL | 409305.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 |
| 586 | ALL | 409325.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 |
| 587 | ALL | 409345.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 |
| 588 | ALL | 409365.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 589 | ALL | 409385.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 590 | ALL | 409405.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 591 | ALL | 409425.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 |
| 592 | ALL | 409445.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 |
| 593 | ALL | 409465.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 |
| 594 | ALL | 408905.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 595 | ALL | 408925.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 |
| 596 | ALL | 408945.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 |
| 597 | ALL | 408965.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 |
| 598 | ALL | 408985.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 |
| 599 | ALL | 409005.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |
| 600 | ALL | 409025.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 |
| 601 | ALL | 409045.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 |
| 602 | ALL | 409065.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 |
| 603 | ALL | 409085.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 |
| 604 | ALL | 409105.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 605 | ALL | 409125.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.94E-04 |
| 606 | ALL | 409145.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 |
| 607 | ALL | 409165.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 |
| 608 | ALL | 409185.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 |
| 609 | ALL | 409205.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 |
| 610 | ALL | 409225.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 |
| 611 | ALL | 409245.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |
| 612 | ALL | 409265.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.91E-04 |
| 613 | ALL | 409285.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 |
| 614 | ALL | 409305.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 |
| 615 | ALL | 409325.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 616 | ALL | 409345.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 |
| 617 | ALL | 409365.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 |
| 618 | ALL | 409385.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 619 | ALL | 409405.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 620 | ALL | 409425.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 |
| 621 | ALL | 409445.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 |
| 622 | ALL | 409465.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 |
| 623 | ALL | 409485.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 |
| 624 | ALL | 408905.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 625 | ALL | 408925.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.54E-04 |
| 626 | ALL | 408945.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 627 | ALL | 408965.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 |
| 628 | ALL | 408985.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.65E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.65E-04 |
| 629 | ALL | 409005.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 630 | ALL | 409025.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 631 | ALL | 409045.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 |
| 632 | ALL | 409065.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 633 | ALL | 409085.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |
| 634 | ALL | 409105.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 |
| 635 | ALL | 409125.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 |
| 636 | ALL | 409145.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 637 | ALL | 409165.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 638 | ALL | 409185.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 639 | ALL | 409205.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 640 | ALL | 409225.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.82E-04 |
| 641 | ALL | 409245.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 |
| 642 | ALL | 409265.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |
| 643 | ALL | 409285.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 644 | ALL | 409305.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 |
| 645 | ALL | 409325.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 646 | ALL | 409345.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 |
| 647 | ALL | 409365.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 |
| 648 | ALL | 409385.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 |
| 649 | ALL | 409405.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |
| 650 | ALL | 409425.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 651 | ALL | 409445.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 |
| 652 | ALL | 409465.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 |
| 653 | ALL | 409485.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 |
| 654 | ALL | 408925.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 |
| 655 | ALL | 408945.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 656 | ALL | 408965.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 |
| 657 | ALL | 408985.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 |
| 658 | ALL | 409005.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |
| 659 | ALL | 409025.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 660 | ALL | 409045.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 |
| 661 | ALL | 409065.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 |
| 662 | ALL | 409085.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 663 | ALL | 409105.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 664 | ALL | 409125.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 |
| 665 | ALL | 409165.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 666 | ALL | 409185.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 667 | ALL | 409205.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 668 | ALL | 409225.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 |
| 669 | ALL | 409245.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 670 | ALL | 409265.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 671 | ALL | 409285.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 |
| 672 | ALL | 409305.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 |
| 673 | ALL | 409325.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 |
| 674 | ALL | 409345.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 |
| 675 | ALL | 409365.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 676 | ALL | 409385.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.54E-04 |
| 677 | ALL | 409405.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 |
| 678 | ALL | 409425.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 |
| 679 | ALL | 409445.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 |
| 680 | ALL | 409465.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 681 | ALL | 408945.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 |
| 682 | ALL | 408965.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 |
| 683 | ALL | 408985.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 |
| 684 | ALL | 409005.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 685 | ALL | 409025.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 |
| 686 | ALL | 409045.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 687 | ALL | 409065.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 688 | ALL | 409085.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 689 | ALL | 409105.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 |
| 690 | ALL | 409185.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 |
| 691 | ALL | 409205.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.61E-04 |
| 692 | ALL | 409225.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.61E-04 |
| 693 | ALL | 409245.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 |
| 694 | ALL | 409265.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |
| 695 | ALL | 409285.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 696 | ALL | 409305.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 697 | ALL | 409325.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 |
| 698 | ALL | 409345.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 |
| 699 | ALL | 409365.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 |
| 700 | ALL | 409385.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 |
| 701 | ALL | 409405.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 |
| 702 | ALL | 409425.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 |
| 703 | ALL | 408965.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 704 | ALL | 408985.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 |
| 705 | ALL | 409005.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 |
| 706 | ALL | 409025.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 |
| 707 | ALL | 409045.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 |
| 708 | ALL | 409065.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 |
| 709 | ALL | 409205.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 |
| 710 | ALL | 409225.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 |
| 711 | ALL | 409245.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 |
| 712 | ALL | 409265.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 713 | ALL | 409285.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 |
| 714 | ALL | 409305.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 715 | ALL | 409325.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 |
| 716 | ALL | 409345.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 |
| 717 | ALL | 409365.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 |
| 718 | ALL | 409385.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.38E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.38E-04 |
| 719 | ALL | 409405.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 |
| 720 | ALL | 408985.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 |
| 721 | ALL | 409005.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 |
| 722 | ALL | 409025.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 723 | ALL | 409045.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.38E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.38E-04 |
| 724 | ALL | 409225.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 |
| 725 | ALL | 409245.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 |
| 726 | ALL | 409265.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 727 | ALL | 409285.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 |
| 728 | ALL | 409305.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 |
| 729 | ALL | 409325.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 730 | ALL | 409345.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 |
| 731 | ALL | 409365.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 |
| 732 | ALL | 409385.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 |
| 733 | ALL | 408985.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 |
| 734 | ALL | 409005.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 |
| 735 | ALL | 409025.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 |
| 736 | ALL | 409245.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 |
| 737 | ALL | 409265.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 |
| 738 | ALL | 409285.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 |
| 739 | ALL | 409305.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.32E-04 |
| 740 | ALL | 409325.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 |
| 741 | ALL | 409345.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 |
| 742 | ALL | 409365.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 |
| 743 | ALL | 409005.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 |
| 744 | ALL | 409265.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 |
| 745 | ALL | 409285.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 |
| 746 | ALL | 409305.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 |
| 747 | ALL | 409325.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 |
| 748 | ALL | 409285.4 | 3770515 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |
| 749 | ALL | 409305.4 | 3770515 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 |
| 750 | ALL | 409620.3 | 3769917 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 |
| 751 | ALL | 409594.5 | 3769938 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.88E-04 |
| 752 | ALL | 409641.7 | 3769936 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.41E-04 |
| 753 | ALL | 409617.3 | 3769956 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 |
| 754 | ALL | 409558.1 | 3769968 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.24E-04 |
| 755 | ALL | 409518.3 | 3769997 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.67E-04 |
| 756 | ALL | 409513.4 | 3770012 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.63E-04 |
| 757 | ALL | 409533.8 | 3770024 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.27E-04 |
| 758 | ALL | 409551.7 | 3770011 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-04 |
| 759 | ALL | 409573.1 | 3769996 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.95E-04 |
| 760 | ALL | 409557.6 | 3770023 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.00E-04 |
| 761 | ALL | 409573.1 | 3770033 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.78E-04 |
| 762 | ALL | 409598.4 | 3770016 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 |
| 763 | ALL | 409609.9 | 3770032 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.46E-04 |
| 764 | ALL | 409595.9 | 3770038 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.55E-04 |
| 765 | ALL | 409585 | 3770047 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.61E-04 |
| 766 | ALL | 409619.3 | 3770049 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 767 | ALL | 409656.6 | 3770027 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.13E-04 |
| 768 | ALL | 409680.5 | 3770017 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.00E-04 |
| 769 | ALL | 409693.9 | 3770014 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 770 | ALL | 409708.9 | 3770012 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.85E-04 |
| 771 | ALL | 409607.9 | 3770068 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.33E-04 |
| 772 | ALL | 409589.5 | 3770066 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.48E-04 |
| 773 | ALL | 409579.5 | 3770066 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 |
| 774 | ALL | 409552.2 | 3770058 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.85E-04 |
| 775 | ALL | 408953.3 | 3769648 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.99E-04 |
| 776 | ALL | 408703.2 | 3769849 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.23E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.23E-04 |
| 777 | ALL | 408758.2 | 3769919 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 |
| 778 | ALL | 408757.3 | 3769928 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.67E-04 |
| 779 | ALL | 408629 | 3769906 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 780 | ALL | 408597 | 3769864 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 781 | ALL | 408548.4 | 3769905 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 |
| 782 | ALL | 408501.7 | 3769896 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |
| 783 | ALL | 408462.3 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-04 |
| 784 | ALL | 408378.1 | 3769883 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.05E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.05E-05 |
| 785 | ALL | 408352.4 | 3769867 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.59E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.59E-05 |
| 786 | ALL | 408352.4 | 3769829 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.60E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.60E-05 |
| 787 | ALL | 408378.3 | 3769791 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.03E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.03E-05 |
| 788 | ALL | 408664.6 | 3769570 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 789 | ALL | 408755.6 | 3769594 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.08E-04 |
| 790 | ALL | 408812.3 | 3769570 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 |
| 791 | ALL | 408871.9 | 3769585 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.96E-04 |
| 792 | ALL | 408658.5 | 3770080 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 |
| 793 | ALL | 409005.2 | 3770500 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.21E-04 |
| 794 | ALL | 409148.5 | 3770383 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 795 | ALL | 409289.4 | 3770535 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 796 | ALL | 409506.5 | 3770367 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 |
| 797 | ALL | 409379.3 | 3770230 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 |
| 798 | ALL | 409302.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.29E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.29E-04 |
| 799 | ALL | 409203.6 | 3770184 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.99E-04 |
| 800 | ALL | 409149.3 | 3770186 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.94E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.94E-04 |
| 801 | ALL | 409125 | 3770159 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.49E-04 |
| 802 | ALL | 409100.7 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.02E-04 |
| 803 | ALL | 409079.7 | 3770173 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.94E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.94E-04 |
| 804 | ALL | 409044.8 | 3770145 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.26E-04 |
| 805 | ALL | 409048.2 | 3770088 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.84E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.84E-04 |
| 806 | ALL | 408881.6 | 3770059 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.54E-04 |
| 807 | ALL | 408861.3 | 3770102 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.92E-04 |
| 808 | ALL | 408675.3 | 3770074 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |

HARP2 - HRACalc (dated 22118) 2/3/2023 5:56:4M AO - uptLpt ogG

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NBLgfp*e vp*atDgh bDh vDft*DmptDgh
3*d i*D<efte* bDh: 0x25
0Y2 9ea*f bDh: 1x5833
2YM 9ea*f bDh: 0
2Y17 9ea*f bDh: 0
17Y30 9ea*f bDh: 0
17 tg 60 9ea*f bDh: 0

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ShwalatDgh: i*pe
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Wg*ke* adjpft<eht yactg*f ehamled: Tu

II.*actDgh at tD<e at wg<eII
3*d i*D<efte* tg 17 nea*f: u..
17 nea*f tg 60 nea*f: u..

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
KuSo & vNROAo PAiHWA9 KNiiSTsK

veLgfDtDgh *ate (</f): 0x05
KgDl <DBDhG deLtw (<): 0x01
ve*<al clD<ate: Wa*<

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
HuONsRuWT CRuP PAiHWA9 KNiiSTsK

Hgpfewgld tnLe: Hgpfewgldftwatsa*deh
.*actDgh leayn: 0x136
.*actDgh eBLgfed: 0x136
.*actDgh L*gtected: 0x136
.*actDgh *ggt: 0x136

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
iSNR 2 KNiiSTsK

iDe*2 adjpft<ehtf re*e pfed Dh twDf affeff<ehtx  Pleafe fee twe DhLpt yDle yg*
detaDlfx
iDe*2 - Wwat raf cwahGed: Nv g* fta*t aGe cwahGed|
CalcplatDhG cahce* *Dfk
Cahce* *Dfk m*eakdgrh mn Lgllptaht ahd *eceLtg* faXed tg:
C:\Ffe*f\aLgll\vefktgL\HARP2\HARP\EaDfe* baldrDh Pa*k\EASKNR bAovWST PARE
HARP\w*a\OubCahce*RDfkxcfX
Cahce* *Dfk tgtal mn *eceLtg* faXed tg: C:\Ffe*f\aLgll\vefktgL\HARP2\HARP\EaDfe*
baldrDh Pa*k\EASKNR bAovWST PARE HARP\w*a\OubCahce*RDfkKp<bnRecxcfX
CalcplatDhG cw*ghDc *Dfk
Cw*ghDc *Dfk m*eakdgrh mn Lgllptaht ahd *eceLtg* faXed tg:
C:\Ffe*f\aLgll\vefktgL\HARP2\HARP\EaDfe* baldrDh Pa*k\EASKNR bAovWST PARE
HARP\w*a\OubTCCw*ghDcRDfkxcfX
Cw*ghDc *Dfk tgtal mn *eceLtg* faXed tg: C:\Ffe*f\aLgll\vefktgL\HARP2\HARP\EaDfe*
baldrDh Pa*k\EASKNR bAovWST PARE HARP\w*a\OubTCCw*ghDcRDfkKp<bnRecxcfX
CalcplatDhG acpte *Dfk
Acpte *Dfk m*eakdgrh mn Lgllptaht ahd *eceLtg* faXed tg:
C:\Ffe*f\aLgll\vefktgL\HARP2\HARP\EaDfe* baldrDh Pa*k\EASKNR bAovWST PARE
HARP\w*a\OubTCAcpteRDfkxcfX
Acpte *Dfk tgtal mn *eceLtg* faXed tg: C:\Ffe*f\aLgll\vefktgL\HARP2\HARP\EaDfe*
baldrDh Pa*k\EASKNR bAovWST PARE HARP\w*a\OubTCAcpteRDfkKp<bnRecxcfX
HRA *ah fpcceffyplln
```

| REC | GRP | NETID | X | Y | RISK_SUM | SCENARIO | INH_RISK | SOIL_RISK | DERMAL_R | MMILK_RIS | WATER_RI | FISH_RISK | CROP_RISK | BEEF_RISK | DAIRY_RISI | PIG_RISK | CHICKEN_R | EGG_RISK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ALL | | 408660.5 | 3769575 | 1.57E-07 | 1.5833YrCa | 1.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 2 | ALL | | 408680.5 | 3769575 | 1.63E-07 | 1.5833YrCa | 1.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 3 | ALL | | 408820.5 | 3769575 | 1.88E-07 | 1.5833YrCa | 1.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 4 | ALL | | 408640.5 | 3769595 | 1.63E-07 | 1.5833YrCa | 1.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 5 | ALL | | 408660.5 | 3769595 | 1.71E-07 | 1.5833YrCa | 1.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 6 | ALL | | 408680.5 | 3769595 | 1.79E-07 | 1.5833YrCa | 1.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 7 | ALL | | 408700.5 | 3769595 | 1.86E-07 | 1.5833YrCa | 1.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 8 | ALL | | 408720.5 | 3769595 | 1.93E-07 | 1.5833YrCa | 1.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 9 | ALL | | 408740.5 | 3769595 | 1.99E-07 | 1.5833YrCa | 1.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 10 | ALL | | 408760.5 | 3769595 | 2.04E-07 | 1.5833YrCa | 2.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 11 | ALL | | 408780.5 | 3769595 | 2.07E-07 | 1.5833YrCa | 2.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 12 | ALL | | 408800.5 | 3769595 | 2.09E-07 | 1.5833YrCa | 2.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 13 | ALL | | 408820.5 | 3769595 | 2.10E-07 | 1.5833YrCa | 2.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 14 | ALL | | 408840.5 | 3769595 | 2.09E-07 | 1.5833YrCa | 2.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 15 | ALL | | 408860.5 | 3769595 | 2.07E-07 | 1.5833YrCa | 2.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 16 | ALL | | 408880.5 | 3769595 | 2.03E-07 | 1.5833YrCa | 2.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 17 | ALL | | 408620.5 | 3769615 | 1.67E-07 | 1.5833YrCa | 1.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 18 | ALL | | 408640.5 | 3769615 | 1.77E-07 | 1.5833YrCa | 1.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 19 | ALL | | 408660.5 | 3769615 | 1.87E-07 | 1.5833YrCa | 1.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 20 | ALL | | 408680.5 | 3769615 | 1.97E-07 | 1.5833YrCa | 1.97E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 21 | ALL | | 408700.5 | 3769615 | 2.06E-07 | 1.5833YrCa | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 22 | ALL | | 408720.5 | 3769615 | 2.15E-07 | 1.5833YrCa | 2.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 23 | ALL | | 408740.5 | 3769615 | 2.22E-07 | 1.5833YrCa | 2.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 24 | ALL | | 408760.5 | 3769615 | 2.28E-07 | 1.5833YrCa | 2.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 25 | ALL | | 408780.5 | 3769615 | 2.33E-07 | 1.5833YrCa | 2.33E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 26 | ALL | | 408800.5 | 3769615 | 2.36E-07 | 1.5833YrCa | 2.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 27 | ALL | | 408820.5 | 3769615 | 2.36E-07 | 1.5833YrCa | 2.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 28 | ALL | | 408840.5 | 3769615 | 2.35E-07 | 1.5833YrCa | 2.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 29 | ALL | | 408860.5 | 3769615 | 2.32E-07 | 1.5833YrCa | 2.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 30 | ALL | | 408880.5 | 3769615 | 2.27E-07 | 1.5833YrCa | 2.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 31 | ALL | | 408900.5 | 3769615 | 2.21E-07 | 1.5833YrCa | 2.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 32 | ALL | | 408600.5 | 3769635 | 1.70E-07 | 1.5833YrCa | 1.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 33 | ALL | | 408620.5 | 3769635 | 1.82E-07 | 1.5833YrCa | 1.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 34 | ALL | | 408640.5 | 3769635 | 1.94E-07 | 1.5833YrCa | 1.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 35 | ALL | | 408660.5 | 3769635 | 2.06E-07 | 1.5833YrCa | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 36 | ALL | | 408680.5 | 3769635 | 2.18E-07 | 1.5833YrCa | 2.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 37 | ALL | | 408700.5 | 3769635 | 2.29E-07 | 1.5833YrCa | 2.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 38 | ALL | | 408720.5 | 3769635 | 2.40E-07 | 1.5833YrCa | 2.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 39 | ALL | | 408740.5 | 3769635 | 2.50E-07 | 1.5833YrCa | 2.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 40 | ALL | | 408760.5 | 3769635 | 2.58E-07 | 1.5833YrCa | 2.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 41 | ALL | | 408780.5 | 3769635 | 2.64E-07 | 1.5833YrCa | 2.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 42 | ALL | | 408800.5 | 3769635 | 2.67E-07 | 1.5833YrCa | 2.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 43 | ALL | | 408820.5 | 3769635 | 2.69E-07 | 1.5833YrCa | 2.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 44 | ALL | | 408840.5 | 3769635 | 2.67E-07 | 1.5833YrCa | 2.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 45 | ALL | | 408860.5 | 3769635 | 2.63E-07 | 1.5833YrCa | 2.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 46 | ALL | | 408880.5 | 3769635 | 2.57E-07 | 1.5833YrCa | 2.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 47 | ALL | | 408900.5 | 3769635 | 2.48E-07 | 1.5833YrCa | 2.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 48 | ALL | | 408920.5 | 3769635 | 2.38E-07 | 1.5833YrCa | 2.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | ALL | 408560.5 | 3769655 | 1.59E-07 | 1.5833YrCa | 1.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 50 | ALL | 408580.5 | 3769655 | 1.71E-07 | 1.5833YrCa | 1.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 51 | ALL | 408600.5 | 3769655 | 1.84E-07 | 1.5833YrCa | 1.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 52 | ALL | 408620.5 | 3769655 | 1.98E-07 | 1.5833YrCa | 1.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 53 | ALL | 408640.5 | 3769655 | 2.12E-07 | 1.5833YrCa | 2.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 54 | ALL | 408660.5 | 3769655 | 2.27E-07 | 1.5833YrCa | 2.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 55 | ALL | 408680.5 | 3769655 | 2.42E-07 | 1.5833YrCa | 2.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 56 | ALL | 408700.5 | 3769655 | 2.56E-07 | 1.5833YrCa | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 57 | ALL | 408720.5 | 3769655 | 2.70E-07 | 1.5833YrCa | 2.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 58 | ALL | 408740.5 | 3769655 | 2.83E-07 | 1.5833YrCa | 2.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 59 | ALL | 408760.5 | 3769655 | 2.94E-07 | 1.5833YrCa | 2.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 60 | ALL | 408780.5 | 3769655 | 3.02E-07 | 1.5833YrCa | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 61 | ALL | 408800.5 | 3769655 | 3.07E-07 | 1.5833YrCa | 3.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 62 | ALL | 408820.5 | 3769655 | 3.08E-07 | 1.5833YrCa | 3.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 63 | ALL | 408840.5 | 3769655 | 3.06E-07 | 1.5833YrCa | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 64 | ALL | 408860.5 | 3769655 | 3.01E-07 | 1.5833YrCa | 3.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 65 | ALL | 408880.5 | 3769655 | 2.92E-07 | 1.5833YrCa | 2.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 66 | ALL | 408900.5 | 3769655 | 2.81E-07 | 1.5833YrCa | 2.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 67 | ALL | 408920.5 | 3769655 | 2.69E-07 | 1.5833YrCa | 2.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 68 | ALL | 408940.5 | 3769655 | 2.55E-07 | 1.5833YrCa | 2.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 69 | ALL | 408540.5 | 3769675 | 1.58E-07 | 1.5833YrCa | 1.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 70 | ALL | 408560.5 | 3769675 | 1.70E-07 | 1.5833YrCa | 1.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 71 | ALL | 408580.5 | 3769675 | 1.84E-07 | 1.5833YrCa | 1.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 72 | ALL | 408600.5 | 3769675 | 1.99E-07 | 1.5833YrCa | 1.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 73 | ALL | 408620.5 | 3769675 | 2.15E-07 | 1.5833YrCa | 2.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 74 | ALL | 408640.5 | 3769675 | 2.33E-07 | 1.5833YrCa | 2.33E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 75 | ALL | 408660.5 | 3769675 | 2.51E-07 | 1.5833YrCa | 2.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 76 | ALL | 408680.5 | 3769675 | 2.70E-07 | 1.5833YrCa | 2.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 77 | ALL | 408700.5 | 3769675 | 2.88E-07 | 1.5833YrCa | 2.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 78 | ALL | 408720.5 | 3769675 | 3.07E-07 | 1.5833YrCa | 3.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 79 | ALL | 408740.5 | 3769675 | 3.24E-07 | 1.5833YrCa | 3.24E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 80 | ALL | 408760.5 | 3769675 | 3.38E-07 | 1.5833YrCa | 3.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 81 | ALL | 408780.5 | 3769675 | 3.49E-07 | 1.5833YrCa | 3.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 82 | ALL | 408800.5 | 3769675 | 3.56E-07 | 1.5833YrCa | 3.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 83 | ALL | 408820.5 | 3769675 | 3.58E-07 | 1.5833YrCa | 3.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 84 | ALL | 408840.5 | 3769675 | 3.56E-07 | 1.5833YrCa | 3.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 85 | ALL | 408860.5 | 3769675 | 3.48E-07 | 1.5833YrCa | 3.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 86 | ALL | 408880.5 | 3769675 | 3.37E-07 | 1.5833YrCa | 3.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 87 | ALL | 408900.5 | 3769675 | 3.22E-07 | 1.5833YrCa | 3.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 88 | ALL | 408520.5 | 3769695 | 1.54E-07 | 1.5833YrCa | 1.54E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 89 | ALL | 408540.5 | 3769695 | 1.67E-07 | 1.5833YrCa | 1.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 90 | ALL | 408560.5 | 3769695 | 1.82E-07 | 1.5833YrCa | 1.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 91 | ALL | 408580.5 | 3769695 | 1.98E-07 | 1.5833YrCa | 1.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 92 | ALL | 408600.5 | 3769695 | 2.15E-07 | 1.5833YrCa | 2.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 93 | ALL | 408620.5 | 3769695 | 2.35E-07 | 1.5833YrCa | 2.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 94 | ALL | 408640.5 | 3769695 | 2.56E-07 | 1.5833YrCa | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 95 | ALL | 408660.5 | 3769695 | 2.78E-07 | 1.5833YrCa | 2.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 96 | ALL | 408680.5 | 3769695 | 3.02E-07 | 1.5833YrCa | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 97 | ALL | 408700.5 | 3769695 | 3.27E-07 | 1.5833YrCa | 3.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98 | ALL | 408720.5 | 3769695 | 3.51E-07 | 1.5833YrCa | 3.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 99 | ALL | 408740.5 | 3769695 | 3.74E-07 | 1.5833YrCa | 3.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 100 | ALL | 408760.5 | 3769695 | 3.94E-07 | 1.5833YrCa | 3.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 101 | ALL | 408780.5 | 3769695 | 4.09E-07 | 1.5833YrCa | 4.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 102 | ALL | 408800.5 | 3769695 | 4.19E-07 | 1.5833YrCa | 4.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 103 | ALL | 408820.5 | 3769695 | 4.22E-07 | 1.5833YrCa | 4.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 104 | ALL | 408840.5 | 3769695 | 4.19E-07 | 1.5833YrCa | 4.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 105 | ALL | 408860.5 | 3769695 | 4.08E-07 | 1.5833YrCa | 4.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 106 | ALL | 408880.5 | 3769695 | 3.92E-07 | 1.5833YrCa | 3.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 107 | ALL | 408480.5 | 3769715 | 1.38E-07 | 1.5833YrCa | 1.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 108 | ALL | 408500.5 | 3769715 | 1.49E-07 | 1.5833YrCa | 1.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 109 | ALL | 408520.5 | 3769715 | 1.62E-07 | 1.5833YrCa | 1.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 110 | ALL | 408540.5 | 3769715 | 1.77E-07 | 1.5833YrCa | 1.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 111 | ALL | 408560.5 | 3769715 | 1.93E-07 | 1.5833YrCa | 1.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 112 | ALL | 408580.5 | 3769715 | 2.12E-07 | 1.5833YrCa | 2.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 113 | ALL | 408600.5 | 3769715 | 2.33E-07 | 1.5833YrCa | 2.33E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 114 | ALL | 408620.5 | 3769715 | 2.56E-07 | 1.5833YrCa | 2.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 115 | ALL | 408640.5 | 3769715 | 2.81E-07 | 1.5833YrCa | 2.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 116 | ALL | 408660.5 | 3769715 | 3.10E-07 | 1.5833YrCa | 3.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 117 | ALL | 408680.5 | 3769715 | 3.40E-07 | 1.5833YrCa | 3.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 118 | ALL | 408700.5 | 3769715 | 3.72E-07 | 1.5833YrCa | 3.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 119 | ALL | 408720.5 | 3769715 | 4.05E-07 | 1.5833YrCa | 4.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 120 | ALL | 408740.5 | 3769715 | 4.37E-07 | 1.5833YrCa | 4.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 121 | ALL | 408760.5 | 3769715 | 4.65E-07 | 1.5833YrCa | 4.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 122 | ALL | 408780.5 | 3769715 | 4.88E-07 | 1.5833YrCa | 4.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 123 | ALL | 408800.5 | 3769715 | 5.02E-07 | 1.5833YrCa | 5.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 124 | ALL | 408820.5 | 3769715 | 5.07E-07 | 1.5833YrCa | 5.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 125 | ALL | 408840.5 | 3769715 | 5.02E-07 | 1.5833YrCa | 5.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 126 | ALL | 408860.5 | 3769715 | 4.86E-07 | 1.5833YrCa | 4.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 127 | ALL | 408460.5 | 3769735 | 1.32E-07 | 1.5833YrCa | 1.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 128 | ALL | 408480.5 | 3769735 | 1.44E-07 | 1.5833YrCa | 1.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 129 | ALL | 408500.5 | 3769735 | 1.56E-07 | 1.5833YrCa | 1.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 130 | ALL | 408520.5 | 3769735 | 1.71E-07 | 1.5833YrCa | 1.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 131 | ALL | 408540.5 | 3769735 | 1.87E-07 | 1.5833YrCa | 1.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 132 | ALL | 408560.5 | 3769735 | 2.05E-07 | 1.5833YrCa | 2.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 133 | ALL | 408580.5 | 3769735 | 2.27E-07 | 1.5833YrCa | 2.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 134 | ALL | 408600.5 | 3769735 | 2.51E-07 | 1.5833YrCa | 2.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 135 | ALL | 408620.5 | 3769735 | 2.79E-07 | 1.5833YrCa | 2.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 136 | ALL | 408640.5 | 3769735 | 3.10E-07 | 1.5833YrCa | 3.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 137 | ALL | 408660.5 | 3769735 | 3.45E-07 | 1.5833YrCa | 3.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 138 | ALL | 408680.5 | 3769735 | 3.85E-07 | 1.5833YrCa | 3.85E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 139 | ALL | 408700.5 | 3769735 | 4.27E-07 | 1.5833YrCa | 4.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 140 | ALL | 408720.5 | 3769735 | 4.72E-07 | 1.5833YrCa | 4.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 141 | ALL | 408740.5 | 3769735 | 5.17E-07 | 1.5833YrCa | 5.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 142 | ALL | 408760.5 | 3769735 | 5.59E-07 | 1.5833YrCa | 5.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 143 | ALL | 408780.5 | 3769735 | 5.93E-07 | 1.5833YrCa | 5.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 144 | ALL | 408800.5 | 3769735 | 6.15E-07 | 1.5833YrCa | 6.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 145 | ALL | 408820.5 | 3769735 | 6.23E-07 | 1.5833YrCa | 6.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 146 | ALL | 408840.5 | 3769735 | 6.14E-07 | 1.5833YrCa | 6.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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| 147 ALL | 408440.5 | 3769755 | 1.26E-07 | 1.5833YrCa | 1.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 148 ALL | 408460.5 | 3769755 | 1.37E-07 | 1.5833YrCa | 1.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 149 ALL | 408480.5 | 3769755 | 1.49E-07 | 1.5833YrCa | 1.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 150 ALL | 408500.5 | 3769755 | 1.63E-07 | 1.5833YrCa | 1.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 151 ALL | 408520.5 | 3769755 | 1.79E-07 | 1.5833YrCa | 1.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 152 ALL | 408540.5 | 3769755 | 1.97E-07 | 1.5833YrCa | 1.97E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 153 ALL | 408560.5 | 3769755 | 2.18E-07 | 1.5833YrCa | 2.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 154 ALL | 408580.5 | 3769755 | 2.42E-07 | 1.5833YrCa | 2.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 155 ALL | 408600.5 | 3769755 | 2.70E-07 | 1.5833YrCa | 2.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 156 ALL | 408620.5 | 3769755 | 3.03E-07 | 1.5833YrCa | 3.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 157 ALL | 408640.5 | 3769755 | 3.41E-07 | 1.5833YrCa | 3.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 158 ALL | 408660.5 | 3769755 | 3.85E-07 | 1.5833YrCa | 3.85E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 159 ALL | 408680.5 | 3769755 | 4.36E-07 | 1.5833YrCa | 4.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 160 ALL | 408700.5 | 3769755 | 4.93E-07 | 1.5833YrCa | 4.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 161 ALL | 408720.5 | 3769755 | 5.56E-07 | 1.5833YrCa | 5.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 162 ALL | 408740.5 | 3769755 | 6.21E-07 | 1.5833YrCa | 6.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 163 ALL | 408760.5 | 3769755 | 6.84E-07 | 1.5833YrCa | 6.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 164 ALL | 408780.5 | 3769755 | 7.37E-07 | 1.5833YrCa | 7.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 165 ALL | 408800.5 | 3769755 | 7.74E-07 | 1.5833YrCa | 7.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 166 ALL | 408400.5 | 3769775 | 1.11E-07 | 1.5833YrCa | 1.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 167 ALL | 408420.5 | 3769775 | 1.20E-07 | 1.5833YrCa | 1.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 168 ALL | 408440.5 | 3769775 | 1.30E-07 | 1.5833YrCa | 1.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 169 ALL | 408460.5 | 3769775 | 1.41E-07 | 1.5833YrCa | 1.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 170 ALL | 408480.5 | 3769775 | 1.54E-07 | 1.5833YrCa | 1.54E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 171 ALL | 408500.5 | 3769775 | 1.69E-07 | 1.5833YrCa | 1.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 172 ALL | 408520.5 | 3769775 | 1.86E-07 | 1.5833YrCa | 1.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 173 ALL | 408540.5 | 3769775 | 2.06E-07 | 1.5833YrCa | 2.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 174 ALL | 408560.5 | 3769775 | 2.30E-07 | 1.5833YrCa | 2.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 175 ALL | 408580.5 | 3769775 | 2.57E-07 | 1.5833YrCa | 2.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 176 ALL | 408600.5 | 3769775 | 2.90E-07 | 1.5833YrCa | 2.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 177 ALL | 408620.5 | 3769775 | 3.28E-07 | 1.5833YrCa | 3.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 178 ALL | 408640.5 | 3769775 | 3.74E-07 | 1.5833YrCa | 3.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 179 ALL | 408660.5 | 3769775 | 4.29E-07 | 1.5833YrCa | 4.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 180 ALL | 408680.5 | 3769775 | 4.95E-07 | 1.5833YrCa | 4.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 181 ALL | 408700.5 | 3769775 | 5.72E-07 | 1.5833YrCa | 5.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 182 ALL | 408720.5 | 3769775 | 6.60E-07 | 1.5833YrCa | 6.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 183 ALL | 408740.5 | 3769775 | 7.58E-07 | 1.5833YrCa | 7.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 184 ALL | 408760.5 | 3769775 | 8.55E-07 | 1.5833YrCa | 8.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 185 ALL | 408780.5 | 3769775 | 9.45E-07 | 1.5833YrCa | 9.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 186 ALL | 408380.5 | 3769795 | 1.05E-07 | 1.5833YrCa | 1.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 187 ALL | 408400.5 | 3769795 | 1.13E-07 | 1.5833YrCa | 1.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 188 ALL | 408420.5 | 3769795 | 1.22E-07 | 1.5833YrCa | 1.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 189 ALL | 408440.5 | 3769795 | 1.33E-07 | 1.5833YrCa | 1.33E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 190 ALL | 408460.5 | 3769795 | 1.45E-07 | 1.5833YrCa | 1.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 191 ALL | 408480.5 | 3769795 | 1.59E-07 | 1.5833YrCa | 1.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 192 ALL | 408500.5 | 3769795 | 1.75E-07 | 1.5833YrCa | 1.75E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 193 ALL | 408520.5 | 3769795 | 1.93E-07 | 1.5833YrCa | 1.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 194 ALL | 408540.5 | 3769795 | 2.15E-07 | 1.5833YrCa | 2.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 195 ALL | 408560.5 | 3769795 | 2.41E-07 | 1.5833YrCa | 2.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 196 | ALL | 408580.5 | 3769795 | 2.72E-07 | 1.5833YrCa | 2.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 197 | ALL | 408600.5 | 3769795 | 3.09E-07 | 1.5833YrCa | 3.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 198 | ALL | 408620.5 | 3769795 | 3.54E-07 | 1.5833YrCa | 3.54E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 199 | ALL | 408640.5 | 3769795 | 4.09E-07 | 1.5833YrCa | 4.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 200 | ALL | 408660.5 | 3769795 | 4.77E-07 | 1.5833YrCa | 4.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 201 | ALL | 408680.5 | 3769795 | 5.61E-07 | 1.5833YrCa | 5.61E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 202 | ALL | 408700.5 | 3769795 | 6.64E-07 | 1.5833YrCa | 6.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 203 | ALL | 408720.5 | 3769795 | 7.91E-07 | 1.5833YrCa | 7.91E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 204 | ALL | 408740.5 | 3769795 | 9.39E-07 | 1.5833YrCa | 9.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 205 | ALL | 408760.5 | 3769795 | 1.10E-06 | 1.5833YrCa | 1.10E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 206 | ALL | 408380.5 | 3769815 | 1.07E-07 | 1.5833YrCa | 1.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 207 | ALL | 408400.5 | 3769815 | 1.15E-07 | 1.5833YrCa | 1.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 208 | ALL | 408420.5 | 3769815 | 1.25E-07 | 1.5833YrCa | 1.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 209 | ALL | 408440.5 | 3769815 | 1.36E-07 | 1.5833YrCa | 1.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 210 | ALL | 408460.5 | 3769815 | 1.48E-07 | 1.5833YrCa | 1.48E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 211 | ALL | 408480.5 | 3769815 | 1.63E-07 | 1.5833YrCa | 1.63E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 212 | ALL | 408500.5 | 3769815 | 1.80E-07 | 1.5833YrCa | 1.80E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 213 | ALL | 408520.5 | 3769815 | 2.00E-07 | 1.5833YrCa | 2.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 214 | ALL | 408540.5 | 3769815 | 2.23E-07 | 1.5833YrCa | 2.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 215 | ALL | 408560.5 | 3769815 | 2.51E-07 | 1.5833YrCa | 2.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 216 | ALL | 408580.5 | 3769815 | 2.85E-07 | 1.5833YrCa | 2.85E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 217 | ALL | 408600.5 | 3769815 | 3.27E-07 | 1.5833YrCa | 3.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 218 | ALL | 408620.5 | 3769815 | 3.78E-07 | 1.5833YrCa | 3.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 219 | ALL | 408640.5 | 3769815 | 4.43E-07 | 1.5833YrCa | 4.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 220 | ALL | 408660.5 | 3769815 | 5.25E-07 | 1.5833YrCa | 5.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 221 | ALL | 408680.5 | 3769815 | 6.31E-07 | 1.5833YrCa | 6.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 222 | ALL | 408700.5 | 3769815 | 7.70E-07 | 1.5833YrCa | 7.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 223 | ALL | 408720.5 | 3769815 | 9.50E-07 | 1.5833YrCa | 9.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 224 | ALL | 408740.5 | 3769815 | 1.18E-06 | 1.5833YrCa | 1.18E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 225 | ALL | 408360.5 | 3769835 | 1.00E-07 | 1.5833YrCa | 1.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 226 | ALL | 408380.5 | 3769835 | 1.08E-07 | 1.5833YrCa | 1.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 227 | ALL | 408400.5 | 3769835 | 1.17E-07 | 1.5833YrCa | 1.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 228 | ALL | 408420.5 | 3769835 | 1.27E-07 | 1.5833YrCa | 1.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 229 | ALL | 408440.5 | 3769835 | 1.38E-07 | 1.5833YrCa | 1.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 230 | ALL | 408460.5 | 3769835 | 1.51E-07 | 1.5833YrCa | 1.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 231 | ALL | 408480.5 | 3769835 | 1.66E-07 | 1.5833YrCa | 1.66E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 232 | ALL | 408500.5 | 3769835 | 1.84E-07 | 1.5833YrCa | 1.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 233 | ALL | 408520.5 | 3769835 | 2.05E-07 | 1.5833YrCa | 2.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 234 | ALL | 408540.5 | 3769835 | 2.30E-07 | 1.5833YrCa | 2.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 235 | ALL | 408560.5 | 3769835 | 2.60E-07 | 1.5833YrCa | 2.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 236 | ALL | 408580.5 | 3769835 | 2.97E-07 | 1.5833YrCa | 2.97E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 237 | ALL | 408600.5 | 3769835 | 3.43E-07 | 1.5833YrCa | 3.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 238 | ALL | 408620.5 | 3769835 | 4.01E-07 | 1.5833YrCa | 4.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 239 | ALL | 408640.5 | 3769835 | 4.75E-07 | 1.5833YrCa | 4.75E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 240 | ALL | 408660.5 | 3769835 | 5.72E-07 | 1.5833YrCa | 5.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 241 | ALL | 408680.5 | 3769835 | 7.03E-07 | 1.5833YrCa | 7.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 242 | ALL | 408700.5 | 3769835 | 8.83E-07 | 1.5833YrCa | 8.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 243 | ALL | 408360.5 | 3769855 | 1.01E-07 | 1.5833YrCa | 1.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 244 | ALL | 408380.5 | 3769855 | 1.09E-07 | 1.5833YrCa | 1.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 245 | ALL | 408400.5 | 3769855 | 1.18E-07 | 1.5833YrCa | 1.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 246 | ALL | 408420.5 | 3769855 | 1.28E-07 | 1.5833YrCa | 1.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 247 | ALL | 408440.5 | 3769855 | 1.40E-07 | 1.5833YrCa | 1.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 248 | ALL | 408460.5 | 3769855 | 1.53E-07 | 1.5833YrCa | 1.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 249 | ALL | 408480.5 | 3769855 | 1.69E-07 | 1.5833YrCa | 1.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 250 | ALL | 408500.5 | 3769855 | 1.87E-07 | 1.5833YrCa | 1.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 251 | ALL | 408520.5 | 3769855 | 2.09E-07 | 1.5833YrCa | 2.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 252 | ALL | 408540.5 | 3769855 | 2.36E-07 | 1.5833YrCa | 2.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 253 | ALL | 408560.5 | 3769855 | 2.67E-07 | 1.5833YrCa | 2.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 254 | ALL | 408580.5 | 3769855 | 3.07E-07 | 1.5833YrCa | 3.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 255 | ALL | 408600.5 | 3769855 | 3.56E-07 | 1.5833YrCa | 3.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 256 | ALL | 408620.5 | 3769855 | 4.19E-07 | 1.5833YrCa | 4.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 257 | ALL | 408640.5 | 3769855 | 5.01E-07 | 1.5833YrCa | 5.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 258 | ALL | 408660.5 | 3769855 | 6.12E-07 | 1.5833YrCa | 6.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 259 | ALL | 408680.5 | 3769855 | 7.67E-07 | 1.5833YrCa | 7.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 260 | ALL | 408700.5 | 3769855 | 9.93E-07 | 1.5833YrCa | 9.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 261 | ALL | 408380.5 | 3769875 | 1.10E-07 | 1.5833YrCa | 1.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 262 | ALL | 408400.5 | 3769875 | 1.19E-07 | 1.5833YrCa | 1.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 263 | ALL | 408500.5 | 3769875 | 1.90E-07 | 1.5833YrCa | 1.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 264 | ALL | 408520.5 | 3769875 | 2.12E-07 | 1.5833YrCa | 2.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 265 | ALL | 408540.5 | 3769875 | 2.39E-07 | 1.5833YrCa | 2.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 266 | ALL | 408560.5 | 3769875 | 2.72E-07 | 1.5833YrCa | 2.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 267 | ALL | 408580.5 | 3769875 | 3.13E-07 | 1.5833YrCa | 3.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 268 | ALL | 408620.5 | 3769875 | 4.31E-07 | 1.5833YrCa | 4.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 269 | ALL | 408640.5 | 3769875 | 5.19E-07 | 1.5833YrCa | 5.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 270 | ALL | 408660.5 | 3769875 | 6.40E-07 | 1.5833YrCa | 6.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 271 | ALL | 408680.5 | 3769875 | 8.14E-07 | 1.5833YrCa | 8.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 272 | ALL | 408700.5 | 3769875 | 1.08E-06 | 1.5833YrCa | 1.08E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 273 | ALL | 408720.5 | 3769875 | 1.51E-06 | 1.5833YrCa | 1.51E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 274 | ALL | 408500.5 | 3769895 | 1.90E-07 | 1.5833YrCa | 1.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 275 | ALL | 408520.5 | 3769895 | 2.13E-07 | 1.5833YrCa | 2.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 276 | ALL | 408540.5 | 3769895 | 2.40E-07 | 1.5833YrCa | 2.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 277 | ALL | 408560.5 | 3769895 | 2.74E-07 | 1.5833YrCa | 2.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 278 | ALL | 408620.5 | 3769895 | 4.36E-07 | 1.5833YrCa | 4.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 279 | ALL | 408640.5 | 3769895 | 5.27E-07 | 1.5833YrCa | 5.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 280 | ALL | 408660.5 | 3769895 | 6.53E-07 | 1.5833YrCa | 6.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 281 | ALL | 408680.5 | 3769895 | 8.35E-07 | 1.5833YrCa | 8.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 282 | ALL | 408700.5 | 3769895 | 1.12E-06 | 1.5833YrCa | 1.12E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 283 | ALL | 408720.5 | 3769895 | 1.59E-06 | 1.5833YrCa | 1.59E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 284 | ALL | 408680.5 | 3769915 | 8.24E-07 | 1.5833YrCa | 8.24E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 285 | ALL | 408700.5 | 3769915 | 1.10E-06 | 1.5833YrCa | 1.10E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 286 | ALL | 408720.5 | 3769915 | 1.55E-06 | 1.5833YrCa | 1.55E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 287 | ALL | 408740.5 | 3769915 | 2.40E-06 | 1.5833YrCa | 2.40E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 288 | ALL | 408885.4 | 3770075 | 5.00E-07 | 1.5833YrCa | 5.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 289 | ALL | 408905.4 | 3770075 | 4.72E-07 | 1.5833YrCa | 4.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 290 | ALL | 408925.4 | 3770075 | 4.40E-07 | 1.5833YrCa | 4.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 291 | ALL | 408945.4 | 3770075 | 4.07E-07 | 1.5833YrCa | 4.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 292 | ALL | 408965.4 | 3770075 | 3.74E-07 | 1.5833YrCa | 3.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 293 | ALL | 408685.4 | 3770095 | 3.17E-07 | 1.5833YrCa | 3.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 294 | ALL | 408705.4 | 3770095 | 3.43E-07 | 1.5833YrCa | 3.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 295 | ALL | 408725.4 | 3770095 | 3.70E-07 | 1.5833YrCa | 3.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 296 | ALL | 408745.4 | 3770095 | 3.95E-07 | 1.5833YrCa | 3.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 297 | ALL | 408765.4 | 3770095 | 4.17E-07 | 1.5833YrCa | 4.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 298 | ALL | 408785.4 | 3770095 | 4.34E-07 | 1.5833YrCa | 4.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 299 | ALL | 408805.4 | 3770095 | 4.46E-07 | 1.5833YrCa | 4.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 300 | ALL | 408865.4 | 3770095 | 4.36E-07 | 1.5833YrCa | 4.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 301 | ALL | 408885.4 | 3770095 | 4.20E-07 | 1.5833YrCa | 4.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 302 | ALL | 408905.4 | 3770095 | 4.00E-07 | 1.5833YrCa | 4.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 303 | ALL | 408925.4 | 3770095 | 3.78E-07 | 1.5833YrCa | 3.78E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 304 | ALL | 408945.4 | 3770095 | 3.53E-07 | 1.5833YrCa | 3.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 305 | ALL | 408965.4 | 3770095 | 3.28E-07 | 1.5833YrCa | 3.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 306 | ALL | 408985.4 | 3770095 | 3.04E-07 | 1.5833YrCa | 3.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 307 | ALL | 409005.4 | 3770095 | 2.81E-07 | 1.5833YrCa | 2.81E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 308 | ALL | 409025.4 | 3770095 | 2.59E-07 | 1.5833YrCa | 2.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 309 | ALL | 409045.4 | 3770095 | 2.39E-07 | 1.5833YrCa | 2.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 310 | ALL | 408705.4 | 3770115 | 3.02E-07 | 1.5833YrCa | 3.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 311 | ALL | 408725.4 | 3770115 | 3.22E-07 | 1.5833YrCa | 3.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 312 | ALL | 408745.4 | 3770115 | 3.40E-07 | 1.5833YrCa | 3.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 313 | ALL | 408765.4 | 3770115 | 3.56E-07 | 1.5833YrCa | 3.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 314 | ALL | 408785.4 | 3770115 | 3.68E-07 | 1.5833YrCa | 3.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 315 | ALL | 408805.4 | 3770115 | 3.76E-07 | 1.5833YrCa | 3.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 316 | ALL | 408825.4 | 3770115 | 3.79E-07 | 1.5833YrCa | 3.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 317 | ALL | 408845.4 | 3770115 | 3.77E-07 | 1.5833YrCa | 3.77E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 318 | ALL | 408865.4 | 3770115 | 3.69E-07 | 1.5833YrCa | 3.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 319 | ALL | 408885.4 | 3770115 | 3.58E-07 | 1.5833YrCa | 3.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 320 | ALL | 408905.4 | 3770115 | 3.44E-07 | 1.5833YrCa | 3.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 321 | ALL | 408925.4 | 3770115 | 3.27E-07 | 1.5833YrCa | 3.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 322 | ALL | 408945.4 | 3770115 | 3.09E-07 | 1.5833YrCa | 3.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 323 | ALL | 408965.4 | 3770115 | 2.90E-07 | 1.5833YrCa | 2.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 324 | ALL | 408985.4 | 3770115 | 2.72E-07 | 1.5833YrCa | 2.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 325 | ALL | 409005.4 | 3770115 | 2.53E-07 | 1.5833YrCa | 2.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 326 | ALL | 409025.4 | 3770115 | 2.36E-07 | 1.5833YrCa | 2.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 327 | ALL | 409045.4 | 3770115 | 2.19E-07 | 1.5833YrCa | 2.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 328 | ALL | 408705.4 | 3770135 | 2.67E-07 | 1.5833YrCa | 2.67E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 329 | ALL | 408725.4 | 3770135 | 2.82E-07 | 1.5833YrCa | 2.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 330 | ALL | 408745.4 | 3770135 | 2.96E-07 | 1.5833YrCa | 2.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 331 | ALL | 408765.4 | 3770135 | 3.08E-07 | 1.5833YrCa | 3.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 332 | ALL | 408785.4 | 3770135 | 3.17E-07 | 1.5833YrCa | 3.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 333 | ALL | 408805.4 | 3770135 | 3.23E-07 | 1.5833YrCa | 3.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 334 | ALL | 408825.4 | 3770135 | 3.25E-07 | 1.5833YrCa | 3.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 335 | ALL | 408845.4 | 3770135 | 3.23E-07 | 1.5833YrCa | 3.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 336 | ALL | 408865.4 | 3770135 | 3.17E-07 | 1.5833YrCa | 3.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 337 | ALL | 408885.4 | 3770135 | 3.09E-07 | 1.5833YrCa | 3.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 338 | ALL | 408905.4 | 3770135 | 2.99E-07 | 1.5833YrCa | 2.99E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 339 | ALL | 408925.4 | 3770135 | 2.87E-07 | 1.5833YrCa | 2.87E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 340 | ALL | 408945.4 | 3770135 | 2.73E-07 | 1.5833YrCa | 2.73E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 341 | ALL | 408965.4 | 3770135 | 2.58E-07 | 1.5833YrCa | 2.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 342 | ALL | 408985.4 | 3770135 | 2.43E-07 | 1.5833YrCa | 2.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 343 ALL | 409005.4 | 3770135 | 2.29E-07 | 1.5833YrCa | 2.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 344 ALL | 409025.4 | 3770135 | 2.15E-07 | 1.5833YrCa | 2.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 345 ALL | 408725.4 | 3770155 | 2.50E-07 | 1.5833YrCa | 2.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 346 ALL | 408745.4 | 3770155 | 2.60E-07 | 1.5833YrCa | 2.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 347 ALL | 408765.4 | 3770155 | 2.69E-07 | 1.5833YrCa | 2.69E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 348 ALL | 408785.4 | 3770155 | 2.76E-07 | 1.5833YrCa | 2.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 349 ALL | 408805.4 | 3770155 | 2.80E-07 | 1.5833YrCa | 2.80E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 350 ALL | 408825.4 | 3770155 | 2.82E-07 | 1.5833YrCa | 2.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 351 ALL | 408845.4 | 3770155 | 2.80E-07 | 1.5833YrCa | 2.80E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 352 ALL | 408865.4 | 3770155 | 2.76E-07 | 1.5833YrCa | 2.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 353 ALL | 408885.4 | 3770155 | 2.70E-07 | 1.5833YrCa | 2.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 354 ALL | 408905.4 | 3770155 | 2.62E-07 | 1.5833YrCa | 2.62E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 355 ALL | 408925.4 | 3770155 | 2.53E-07 | 1.5833YrCa | 2.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 356 ALL | 408945.4 | 3770155 | 2.42E-07 | 1.5833YrCa | 2.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 357 ALL | 408965.4 | 3770155 | 2.31E-07 | 1.5833YrCa | 2.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 358 ALL | 408985.4 | 3770155 | 2.19E-07 | 1.5833YrCa | 2.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 359 ALL | 409005.4 | 3770155 | 2.07E-07 | 1.5833YrCa | 2.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 360 ALL | 409025.4 | 3770155 | 1.96E-07 | 1.5833YrCa | 1.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 361 ALL | 409045.4 | 3770155 | 1.84E-07 | 1.5833YrCa | 1.84E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 362 ALL | 408745.4 | 3770175 | 2.31E-07 | 1.5833YrCa | 2.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 363 ALL | 408765.4 | 3770175 | 2.38E-07 | 1.5833YrCa | 2.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 364 ALL | 408785.4 | 3770175 | 2.43E-07 | 1.5833YrCa | 2.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 365 ALL | 408805.4 | 3770175 | 2.46E-07 | 1.5833YrCa | 2.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 366 ALL | 408825.4 | 3770175 | 2.47E-07 | 1.5833YrCa | 2.47E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 367 ALL | 408845.4 | 3770175 | 2.46E-07 | 1.5833YrCa | 2.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 368 ALL | 408865.4 | 3770175 | 2.43E-07 | 1.5833YrCa | 2.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 369 ALL | 408885.4 | 3770175 | 2.39E-07 | 1.5833YrCa | 2.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 370 ALL | 408905.4 | 3770175 | 2.32E-07 | 1.5833YrCa | 2.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 371 ALL | 408925.4 | 3770175 | 2.25E-07 | 1.5833YrCa | 2.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 372 ALL | 408945.4 | 3770175 | 2.17E-07 | 1.5833YrCa | 2.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 373 ALL | 408965.4 | 3770175 | 2.08E-07 | 1.5833YrCa | 2.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 374 ALL | 408985.4 | 3770175 | 1.98E-07 | 1.5833YrCa | 1.98E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 375 ALL | 409005.4 | 3770175 | 1.89E-07 | 1.5833YrCa | 1.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 376 ALL | 409025.4 | 3770175 | 1.79E-07 | 1.5833YrCa | 1.79E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 377 ALL | 409045.4 | 3770175 | 1.70E-07 | 1.5833YrCa | 1.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 378 ALL | 409065.4 | 3770175 | 1.60E-07 | 1.5833YrCa | 1.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 379 ALL | 409085.4 | 3770175 | 1.52E-07 | 1.5833YrCa | 1.52E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 380 ALL | 409105.4 | 3770175 | 1.43E-07 | 1.5833YrCa | 1.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 381 ALL | 409125.4 | 3770175 | 1.35E-07 | 1.5833YrCa | 1.35E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 382 ALL | 408765.4 | 3770195 | 2.12E-07 | 1.5833YrCa | 2.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 383 ALL | 408785.4 | 3770195 | 2.15E-07 | 1.5833YrCa | 2.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 384 ALL | 408805.4 | 3770195 | 2.18E-07 | 1.5833YrCa | 2.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 385 ALL | 408825.4 | 3770195 | 2.19E-07 | 1.5833YrCa | 2.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 386 ALL | 408845.4 | 3770195 | 2.18E-07 | 1.5833YrCa | 2.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 387 ALL | 408865.4 | 3770195 | 2.16E-07 | 1.5833YrCa | 2.16E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 388 ALL | 408885.4 | 3770195 | 2.12E-07 | 1.5833YrCa | 2.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 389 ALL | 408905.4 | 3770195 | 2.07E-07 | 1.5833YrCa | 2.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 390 ALL | 408925.4 | 3770195 | 2.02E-07 | 1.5833YrCa | 2.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 391 ALL | 408945.4 | 3770195 | 1.95E-07 | 1.5833YrCa | 1.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 392 | ALL | 408965.4 | 3770195 | 1.88E-07 | 1.5833YrCa | 1.88E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 393 | ALL | 408985.4 | 3770195 | 1.80E-07 | 1.5833YrCa | 1.80E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 394 | ALL | 409005.4 | 3770195 | 1.72E-07 | 1.5833YrCa | 1.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 395 | ALL | 409025.4 | 3770195 | 1.64E-07 | 1.5833YrCa | 1.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 396 | ALL | 409045.4 | 3770195 | 1.56E-07 | 1.5833YrCa | 1.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 397 | ALL | 409065.4 | 3770195 | 1.49E-07 | 1.5833YrCa | 1.49E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 398 | ALL | 409085.4 | 3770195 | 1.41E-07 | 1.5833YrCa | 1.41E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 399 | ALL | 409105.4 | 3770195 | 1.34E-07 | 1.5833YrCa | 1.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 400 | ALL | 409125.4 | 3770195 | 1.27E-07 | 1.5833YrCa | 1.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 401 | ALL | 409145.4 | 3770195 | 1.20E-07 | 1.5833YrCa | 1.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 402 | ALL | 409165.4 | 3770195 | 1.14E-07 | 1.5833YrCa | 1.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 403 | ALL | 409185.4 | 3770195 | 1.08E-07 | 1.5833YrCa | 1.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 404 | ALL | 409205.4 | 3770195 | 1.03E-07 | 1.5833YrCa | 1.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 405 | ALL | 408785.4 | 3770215 | 1.93E-07 | 1.5833YrCa | 1.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 406 | ALL | 408805.4 | 3770215 | 1.95E-07 | 1.5833YrCa | 1.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 407 | ALL | 408825.4 | 3770215 | 1.95E-07 | 1.5833YrCa | 1.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 408 | ALL | 408845.4 | 3770215 | 1.95E-07 | 1.5833YrCa | 1.95E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 409 | ALL | 408865.4 | 3770215 | 1.93E-07 | 1.5833YrCa | 1.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 410 | ALL | 408885.4 | 3770215 | 1.90E-07 | 1.5833YrCa | 1.90E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 411 | ALL | 408905.4 | 3770215 | 1.86E-07 | 1.5833YrCa | 1.86E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 412 | ALL | 408925.4 | 3770215 | 1.82E-07 | 1.5833YrCa | 1.82E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 413 | ALL | 408945.4 | 3770215 | 1.76E-07 | 1.5833YrCa | 1.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 414 | ALL | 408965.4 | 3770215 | 1.70E-07 | 1.5833YrCa | 1.70E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 415 | ALL | 408985.4 | 3770215 | 1.64E-07 | 1.5833YrCa | 1.64E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 416 | ALL | 409005.4 | 3770215 | 1.58E-07 | 1.5833YrCa | 1.58E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 417 | ALL | 409025.4 | 3770215 | 1.51E-07 | 1.5833YrCa | 1.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 418 | ALL | 409045.4 | 3770215 | 1.44E-07 | 1.5833YrCa | 1.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 419 | ALL | 409065.4 | 3770215 | 1.38E-07 | 1.5833YrCa | 1.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 420 | ALL | 409085.4 | 3770215 | 1.31E-07 | 1.5833YrCa | 1.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 421 | ALL | 409105.4 | 3770215 | 1.25E-07 | 1.5833YrCa | 1.25E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 422 | ALL | 409125.4 | 3770215 | 1.19E-07 | 1.5833YrCa | 1.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 423 | ALL | 409145.4 | 3770215 | 1.13E-07 | 1.5833YrCa | 1.13E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 424 | ALL | 409165.4 | 3770215 | 1.08E-07 | 1.5833YrCa | 1.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 425 | ALL | 409185.4 | 3770215 | 1.03E-07 | 1.5833YrCa | 1.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 426 | ALL | 409205.4 | 3770215 | 9.78E-08 | 1.5833YrCa | 9.78E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 427 | ALL | 409225.4 | 3770215 | 9.31E-08 | 1.5833YrCa | 9.31E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 428 | ALL | 408805.4 | 3770235 | 1.75E-07 | 1.5833YrCa | 1.75E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 429 | ALL | 408825.4 | 3770235 | 1.76E-07 | 1.5833YrCa | 1.76E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 430 | ALL | 408845.4 | 3770235 | 1.75E-07 | 1.5833YrCa | 1.75E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 431 | ALL | 408865.4 | 3770235 | 1.74E-07 | 1.5833YrCa | 1.74E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 432 | ALL | 408885.4 | 3770235 | 1.72E-07 | 1.5833YrCa | 1.72E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 433 | ALL | 408905.4 | 3770235 | 1.68E-07 | 1.5833YrCa | 1.68E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 434 | ALL | 408925.4 | 3770235 | 1.65E-07 | 1.5833YrCa | 1.65E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 435 | ALL | 408945.4 | 3770235 | 1.60E-07 | 1.5833YrCa | 1.60E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 436 | ALL | 408965.4 | 3770235 | 1.55E-07 | 1.5833YrCa | 1.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 437 | ALL | 408985.4 | 3770235 | 1.50E-07 | 1.5833YrCa | 1.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 438 | ALL | 409005.4 | 3770235 | 1.45E-07 | 1.5833YrCa | 1.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 439 | ALL | 409025.4 | 3770235 | 1.39E-07 | 1.5833YrCa | 1.39E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 440 | ALL | 409045.4 | 3770235 | 1.34E-07 | 1.5833YrCa | 1.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 441 ALL | 409065.4 | 3770235 | 1.28E-07 | 1.5833YrCa | 1.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 442 ALL | 409085.4 | 3770235 | 1.22E-07 | 1.5833YrCa | 1.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 443 ALL | 409105.4 | 3770235 | 1.17E-07 | 1.5833YrCa | 1.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 444 ALL | 409125.4 | 3770235 | 1.12E-07 | 1.5833YrCa | 1.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 445 ALL | 409145.4 | 3770235 | 1.07E-07 | 1.5833YrCa | 1.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 446 ALL | 409165.4 | 3770235 | 1.02E-07 | 1.5833YrCa | 1.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 447 ALL | 409185.4 | 3770235 | 9.74E-08 | 1.5833YrCa | 9.74E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 448 ALL | 409205.4 | 3770235 | 9.30E-08 | 1.5833YrCa | 9.30E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 449 ALL | 409225.4 | 3770235 | 8.87E-08 | 1.5833YrCa | 8.87E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 450 ALL | 409245.4 | 3770235 | 8.47E-08 | 1.5833YrCa | 8.47E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 451 ALL | 408805.4 | 3770255 | 1.59E-07 | 1.5833YrCa | 1.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 452 ALL | 408825.4 | 3770255 | 1.59E-07 | 1.5833YrCa | 1.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 453 ALL | 408845.4 | 3770255 | 1.59E-07 | 1.5833YrCa | 1.59E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 454 ALL | 408865.4 | 3770255 | 1.57E-07 | 1.5833YrCa | 1.57E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 455 ALL | 408885.4 | 3770255 | 1.56E-07 | 1.5833YrCa | 1.56E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 456 ALL | 408905.4 | 3770255 | 1.53E-07 | 1.5833YrCa | 1.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 457 ALL | 408925.4 | 3770255 | 1.50E-07 | 1.5833YrCa | 1.50E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 458 ALL | 408945.4 | 3770255 | 1.46E-07 | 1.5833YrCa | 1.46E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 459 ALL | 408965.4 | 3770255 | 1.42E-07 | 1.5833YrCa | 1.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 460 ALL | 408985.4 | 3770255 | 1.38E-07 | 1.5833YrCa | 1.38E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 461 ALL | 409005.4 | 3770255 | 1.33E-07 | 1.5833YrCa | 1.33E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 462 ALL | 409025.4 | 3770255 | 1.29E-07 | 1.5833YrCa | 1.29E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 463 ALL | 409045.4 | 3770255 | 1.24E-07 | 1.5833YrCa | 1.24E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 464 ALL | 409065.4 | 3770255 | 1.19E-07 | 1.5833YrCa | 1.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 465 ALL | 409085.4 | 3770255 | 1.14E-07 | 1.5833YrCa | 1.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 466 ALL | 409105.4 | 3770255 | 1.10E-07 | 1.5833YrCa | 1.10E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 467 ALL | 409125.4 | 3770255 | 1.05E-07 | 1.5833YrCa | 1.05E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 468 ALL | 409145.4 | 3770255 | 1.01E-07 | 1.5833YrCa | 1.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 469 ALL | 409165.4 | 3770255 | 9.64E-08 | 1.5833YrCa | 9.64E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 470 ALL | 409185.4 | 3770255 | 9.23E-08 | 1.5833YrCa | 9.23E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 471 ALL | 409205.4 | 3770255 | 8.83E-08 | 1.5833YrCa | 8.83E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 472 ALL | 409225.4 | 3770255 | 8.46E-08 | 1.5833YrCa | 8.46E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 473 ALL | 409245.4 | 3770255 | 8.09E-08 | 1.5833YrCa | 8.09E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 474 ALL | 409265.4 | 3770255 | 7.75E-08 | 1.5833YrCa | 7.75E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 475 ALL | 409365.4 | 3770255 | 6.26E-08 | 1.5833YrCa | 6.26E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 476 ALL | 409385.4 | 3770255 | 6.01E-08 | 1.5833YrCa | 6.01E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 477 ALL | 408825.4 | 3770275 | 1.45E-07 | 1.5833YrCa | 1.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 478 ALL | 408845.4 | 3770275 | 1.44E-07 | 1.5833YrCa | 1.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 479 ALL | 408865.4 | 3770275 | 1.44E-07 | 1.5833YrCa | 1.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 480 ALL | 408885.4 | 3770275 | 1.42E-07 | 1.5833YrCa | 1.42E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 481 ALL | 408905.4 | 3770275 | 1.40E-07 | 1.5833YrCa | 1.40E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 482 ALL | 408925.4 | 3770275 | 1.37E-07 | 1.5833YrCa | 1.37E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 483 ALL | 408945.4 | 3770275 | 1.34E-07 | 1.5833YrCa | 1.34E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 484 ALL | 408965.4 | 3770275 | 1.31E-07 | 1.5833YrCa | 1.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 485 ALL | 408985.4 | 3770275 | 1.27E-07 | 1.5833YrCa | 1.27E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 486 ALL | 409005.4 | 3770275 | 1.23E-07 | 1.5833YrCa | 1.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 487 ALL | 409025.4 | 3770275 | 1.19E-07 | 1.5833YrCa | 1.19E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 488 ALL | 409045.4 | 3770275 | 1.15E-07 | 1.5833YrCa | 1.15E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 489 ALL | 409065.4 | 3770275 | 1.11E-07 | 1.5833YrCa | 1.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 490 | ALL | 409085.4 | 3770275 | 1.07E-07 | 1.5833YrCa | 1.07E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 491 | ALL | 409105.4 | 3770275 | 1.03E-07 | 1.5833YrCa | 1.03E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 492 | ALL | 409125.4 | 3770275 | 9.90E-08 | 1.5833YrCa | 9.90E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 493 | ALL | 409145.4 | 3770275 | 9.50E-08 | 1.5833YrCa | 9.50E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 494 | ALL | 409165.4 | 3770275 | 9.12E-08 | 1.5833YrCa | 9.12E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 495 | ALL | 409185.4 | 3770275 | 8.75E-08 | 1.5833YrCa | 8.75E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 496 | ALL | 409205.4 | 3770275 | 8.40E-08 | 1.5833YrCa | 8.40E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 497 | ALL | 409225.4 | 3770275 | 8.05E-08 | 1.5833YrCa | 8.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 498 | ALL | 409245.4 | 3770275 | 7.73E-08 | 1.5833YrCa | 7.73E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 499 | ALL | 409265.4 | 3770275 | 7.41E-08 | 1.5833YrCa | 7.41E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 500 | ALL | 409345.4 | 3770275 | 6.30E-08 | 1.5833YrCa | 6.30E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 501 | ALL | 409365.4 | 3770275 | 6.05E-08 | 1.5833YrCa | 6.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 502 | ALL | 409385.4 | 3770275 | 5.82E-08 | 1.5833YrCa | 5.82E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 503 | ALL | 409405.4 | 3770275 | 5.59E-08 | 1.5833YrCa | 5.59E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 504 | ALL | 408845.4 | 3770295 | 1.32E-07 | 1.5833YrCa | 1.32E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 505 | ALL | 408865.4 | 3770295 | 1.31E-07 | 1.5833YrCa | 1.31E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 506 | ALL | 408885.4 | 3770295 | 1.30E-07 | 1.5833YrCa | 1.30E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 507 | ALL | 408905.4 | 3770295 | 1.28E-07 | 1.5833YrCa | 1.28E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 508 | ALL | 408925.4 | 3770295 | 1.26E-07 | 1.5833YrCa | 1.26E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 509 | ALL | 408945.4 | 3770295 | 1.24E-07 | 1.5833YrCa | 1.24E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 510 | ALL | 408965.4 | 3770295 | 1.21E-07 | 1.5833YrCa | 1.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 511 | ALL | 408985.4 | 3770295 | 1.18E-07 | 1.5833YrCa | 1.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 512 | ALL | 409005.4 | 3770295 | 1.14E-07 | 1.5833YrCa | 1.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 513 | ALL | 409025.4 | 3770295 | 1.11E-07 | 1.5833YrCa | 1.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 514 | ALL | 409045.4 | 3770295 | 1.08E-07 | 1.5833YrCa | 1.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 515 | ALL | 409065.4 | 3770295 | 1.04E-07 | 1.5833YrCa | 1.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 516 | ALL | 409085.4 | 3770295 | 1.00E-07 | 1.5833YrCa | 1.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 517 | ALL | 409105.4 | 3770295 | 9.68E-08 | 1.5833YrCa | 9.68E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 518 | ALL | 409125.4 | 3770295 | 9.32E-08 | 1.5833YrCa | 9.32E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 519 | ALL | 409145.4 | 3770295 | 8.98E-08 | 1.5833YrCa | 8.98E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 520 | ALL | 409165.4 | 3770295 | 8.64E-08 | 1.5833YrCa | 8.64E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 521 | ALL | 409185.4 | 3770295 | 8.31E-08 | 1.5833YrCa | 8.31E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 522 | ALL | 409205.4 | 3770295 | 7.99E-08 | 1.5833YrCa | 7.99E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 523 | ALL | 409225.4 | 3770295 | 7.68E-08 | 1.5833YrCa | 7.68E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 524 | ALL | 409245.4 | 3770295 | 7.38E-08 | 1.5833YrCa | 7.38E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 525 | ALL | 409265.4 | 3770295 | 7.10E-08 | 1.5833YrCa | 7.10E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 526 | ALL | 409285.4 | 3770295 | 6.82E-08 | 1.5833YrCa | 6.82E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 527 | ALL | 409305.4 | 3770295 | 6.56E-08 | 1.5833YrCa | 6.56E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 528 | ALL | 409325.4 | 3770295 | 6.31E-08 | 1.5833YrCa | 6.31E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 529 | ALL | 409345.4 | 3770295 | 6.07E-08 | 1.5833YrCa | 6.07E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 530 | ALL | 409365.4 | 3770295 | 5.84E-08 | 1.5833YrCa | 5.84E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 531 | ALL | 409385.4 | 3770295 | 5.63E-08 | 1.5833YrCa | 5.63E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 532 | ALL | 409405.4 | 3770295 | 5.42E-08 | 1.5833YrCa | 5.42E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 533 | ALL | 409425.4 | 3770295 | 5.22E-08 | 1.5833YrCa | 5.22E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 534 | ALL | 408865.4 | 3770315 | 1.21E-07 | 1.5833YrCa | 1.21E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 535 | ALL | 408885.4 | 3770315 | 1.20E-07 | 1.5833YrCa | 1.20E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 536 | ALL | 408905.4 | 3770315 | 1.18E-07 | 1.5833YrCa | 1.18E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 537 | ALL | 408925.4 | 3770315 | 1.17E-07 | 1.5833YrCa | 1.17E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 538 | ALL | 408945.4 | 3770315 | 1.14E-07 | 1.5833YrCa | 1.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 539 ALL | 408965.4 | 3770315 | 1.12E-07 | 1.5833YrCa | 1.12E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 540 ALL | 408985.4 | 3770315 | 1.09E-07 | 1.5833YrCa | 1.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 541 ALL | 409005.4 | 3770315 | 1.06E-07 | 1.5833YrCa | 1.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 542 ALL | 409025.4 | 3770315 | 1.04E-07 | 1.5833YrCa | 1.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 543 ALL | 409045.4 | 3770315 | 1.00E-07 | 1.5833YrCa | 1.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 544 ALL | 409065.4 | 3770315 | 9.73E-08 | 1.5833YrCa | 9.73E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 545 ALL | 409085.4 | 3770315 | 9.42E-08 | 1.5833YrCa | 9.42E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 546 ALL | 409105.4 | 3770315 | 9.11E-08 | 1.5833YrCa | 9.11E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 547 ALL | 409125.4 | 3770315 | 8.79E-08 | 1.5833YrCa | 8.79E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 548 ALL | 409145.4 | 3770315 | 8.49E-08 | 1.5833YrCa | 8.49E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 549 ALL | 409165.4 | 3770315 | 8.19E-08 | 1.5833YrCa | 8.19E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 550 ALL | 409185.4 | 3770315 | 7.89E-08 | 1.5833YrCa | 7.89E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 551 ALL | 409205.4 | 3770315 | 7.60E-08 | 1.5833YrCa | 7.60E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 552 ALL | 409225.4 | 3770315 | 7.32E-08 | 1.5833YrCa | 7.32E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 553 ALL | 409245.4 | 3770315 | 7.05E-08 | 1.5833YrCa | 7.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 554 ALL | 409265.4 | 3770315 | 6.79E-08 | 1.5833YrCa | 6.79E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 555 ALL | 409285.4 | 3770315 | 6.54E-08 | 1.5833YrCa | 6.54E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 556 ALL | 409305.4 | 3770315 | 6.30E-08 | 1.5833YrCa | 6.30E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 557 ALL | 409325.4 | 3770315 | 6.07E-08 | 1.5833YrCa | 6.07E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 558 ALL | 409345.4 | 3770315 | 5.85E-08 | 1.5833YrCa | 5.85E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 559 ALL | 409365.4 | 3770315 | 5.64E-08 | 1.5833YrCa | 5.64E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 560 ALL | 409385.4 | 3770315 | 5.44E-08 | 1.5833YrCa | 5.44E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 561 ALL | 409405.4 | 3770315 | 5.24E-08 | 1.5833YrCa | 5.24E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 562 ALL | 409425.4 | 3770315 | 5.06E-08 | 1.5833YrCa | 5.06E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 563 ALL | 409445.4 | 3770315 | 4.88E-08 | 1.5833YrCa | 4.88E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 564 ALL | 408885.4 | 3770335 | 1.11E-07 | 1.5833YrCa | 1.11E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 565 ALL | 408905.4 | 3770335 | 1.09E-07 | 1.5833YrCa | 1.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 566 ALL | 408925.4 | 3770335 | 1.08E-07 | 1.5833YrCa | 1.08E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 567 ALL | 408945.4 | 3770335 | 1.06E-07 | 1.5833YrCa | 1.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 568 ALL | 408965.4 | 3770335 | 1.04E-07 | 1.5833YrCa | 1.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 569 ALL | 408985.4 | 3770335 | 1.02E-07 | 1.5833YrCa | 1.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 570 ALL | 409005.4 | 3770335 | 9.93E-08 | 1.5833YrCa | 9.93E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 571 ALL | 409025.4 | 3770335 | 9.67E-08 | 1.5833YrCa | 9.67E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 572 ALL | 409045.4 | 3770335 | 9.41E-08 | 1.5833YrCa | 9.41E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 573 ALL | 409065.4 | 3770335 | 9.13E-08 | 1.5833YrCa | 9.13E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 574 ALL | 409085.4 | 3770335 | 8.86E-08 | 1.5833YrCa | 8.86E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 575 ALL | 409105.4 | 3770335 | 8.58E-08 | 1.5833YrCa | 8.58E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 576 ALL | 409125.4 | 3770335 | 8.31E-08 | 1.5833YrCa | 8.31E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 577 ALL | 409145.4 | 3770335 | 8.03E-08 | 1.5833YrCa | 8.03E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 578 ALL | 409165.4 | 3770335 | 7.76E-08 | 1.5833YrCa | 7.76E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 579 ALL | 409185.4 | 3770335 | 7.50E-08 | 1.5833YrCa | 7.50E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 580 ALL | 409205.4 | 3770335 | 7.24E-08 | 1.5833YrCa | 7.24E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 581 ALL | 409225.4 | 3770335 | 6.99E-08 | 1.5833YrCa | 6.99E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 582 ALL | 409245.4 | 3770335 | 6.74E-08 | 1.5833YrCa | 6.74E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 583 ALL | 409265.4 | 3770335 | 6.51E-08 | 1.5833YrCa | 6.51E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 584 ALL | 409285.4 | 3770335 | 6.28E-08 | 1.5833YrCa | 6.28E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 585 ALL | 409305.4 | 3770335 | 6.06E-08 | 1.5833YrCa | 6.06E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 586 ALL | 409325.4 | 3770335 | 5.84E-08 | 1.5833YrCa | 5.84E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 587 ALL | 409345.4 | 3770335 | 5.64E-08 | 1.5833YrCa | 5.64E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 588 ALL | 409365.4 | 3770335 | 5.45E-08 | 1.5833YrCa | 5.45E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 589 ALL | 409385.4 | 3770335 | 5.26E-08 | 1.5833YrCa | 5.26E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 590 ALL | 409405.4 | 3770335 | 5.07E-08 | 1.5833YrCa | 5.07E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 591 ALL | 409425.4 | 3770335 | 4.90E-08 | 1.5833YrCa | 4.90E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 592 ALL | 409445.4 | 3770335 | 4.74E-08 | 1.5833YrCa | 4.74E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 593 ALL | 409465.4 | 3770335 | 4.58E-08 | 1.5833YrCa | 4.58E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 594 ALL | 408905.4 | 3770355 | 1.02E-07 | 1.5833YrCa | 1.02E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 595 ALL | 408925.4 | 3770355 | 1.00E-07 | 1.5833YrCa | 1.00E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 596 ALL | 408945.4 | 3770355 | 9.87E-08 | 1.5833YrCa | 9.87E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 597 ALL | 408965.4 | 3770355 | 9.69E-08 | 1.5833YrCa | 9.69E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 598 ALL | 408985.4 | 3770355 | 9.50E-08 | 1.5833YrCa | 9.50E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 599 ALL | 409005.4 | 3770355 | 9.28E-08 | 1.5833YrCa | 9.28E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 600 ALL | 409025.4 | 3770355 | 9.06E-08 | 1.5833YrCa | 9.06E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 601 ALL | 409045.4 | 3770355 | 8.83E-08 | 1.5833YrCa | 8.83E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 602 ALL | 409065.4 | 3770355 | 8.59E-08 | 1.5833YrCa | 8.59E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 603 ALL | 409085.4 | 3770355 | 8.34E-08 | 1.5833YrCa | 8.34E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 604 ALL | 409105.4 | 3770355 | 8.10E-08 | 1.5833YrCa | 8.10E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 605 ALL | 409125.4 | 3770355 | 7.86E-08 | 1.5833YrCa | 7.86E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 606 ALL | 409145.4 | 3770355 | 7.61E-08 | 1.5833YrCa | 7.61E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 607 ALL | 409165.4 | 3770355 | 7.37E-08 | 1.5833YrCa | 7.37E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 608 ALL | 409185.4 | 3770355 | 7.13E-08 | 1.5833YrCa | 7.13E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 609 ALL | 409205.4 | 3770355 | 6.90E-08 | 1.5833YrCa | 6.90E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 610 ALL | 409225.4 | 3770355 | 6.67E-08 | 1.5833YrCa | 6.67E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 611 ALL | 409245.4 | 3770355 | 6.45E-08 | 1.5833YrCa | 6.45E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 612 ALL | 409265.4 | 3770355 | 6.23E-08 | 1.5833YrCa | 6.23E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 613 ALL | 409285.4 | 3770355 | 6.02E-08 | 1.5833YrCa | 6.02E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 614 ALL | 409305.4 | 3770355 | 5.82E-08 | 1.5833YrCa | 5.82E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 615 ALL | 409325.4 | 3770355 | 5.63E-08 | 1.5833YrCa | 5.63E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 616 ALL | 409345.4 | 3770355 | 5.44E-08 | 1.5833YrCa | 5.44E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 617 ALL | 409365.4 | 3770355 | 5.26E-08 | 1.5833YrCa | 5.26E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 618 ALL | 409385.4 | 3770355 | 5.08E-08 | 1.5833YrCa | 5.08E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 619 ALL | 409405.4 | 3770355 | 4.91E-08 | 1.5833YrCa | 4.91E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 620 ALL | 409425.4 | 3770355 | 4.75E-08 | 1.5833YrCa | 4.75E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 621 ALL | 409445.4 | 3770355 | 4.59E-08 | 1.5833YrCa | 4.59E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 622 ALL | 409465.4 | 3770355 | 4.45E-08 | 1.5833YrCa | 4.45E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 623 ALL | 409485.4 | 3770355 | 4.30E-08 | 1.5833YrCa | 4.30E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 624 ALL | 408905.4 | 3770375 | 9.46E-08 | 1.5833YrCa | 9.46E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 625 ALL | 408925.4 | 3770375 | 9.34E-08 | 1.5833YrCa | 9.34E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 626 ALL | 408945.4 | 3770375 | 9.21E-08 | 1.5833YrCa | 9.21E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 627 ALL | 408965.4 | 3770375 | 9.05E-08 | 1.5833YrCa | 9.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 628 ALL | 408985.4 | 3770375 | 8.88E-08 | 1.5833YrCa | 8.88E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 629 ALL | 409005.4 | 3770375 | 8.70E-08 | 1.5833YrCa | 8.70E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 630 ALL | 409025.4 | 3770375 | 8.50E-08 | 1.5833YrCa | 8.50E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 631 ALL | 409045.4 | 3770375 | 8.30E-08 | 1.5833YrCa | 8.30E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 632 ALL | 409065.4 | 3770375 | 8.09E-08 | 1.5833YrCa | 8.09E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 633 ALL | 409085.4 | 3770375 | 7.87E-08 | 1.5833YrCa | 7.87E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 634 ALL | 409105.4 | 3770375 | 7.66E-08 | 1.5833YrCa | 7.66E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 635 ALL | 409125.4 | 3770375 | 7.44E-08 | 1.5833YrCa | 7.44E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 636 ALL | 409145.4 | 3770375 | 7.22E-08 | 1.5833YrCa | 7.22E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 637 | ALL | 409165.4 | 3770375 | 7.01E-08 | 1.5833YrCa | 7.01E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 638 | ALL | 409185.4 | 3770375 | 6.79E-08 | 1.5833YrCa | 6.79E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 639 | ALL | 409205.4 | 3770375 | 6.58E-08 | 1.5833YrCa | 6.58E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 640 | ALL | 409225.4 | 3770375 | 6.37E-08 | 1.5833YrCa | 6.37E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 641 | ALL | 409245.4 | 3770375 | 6.17E-08 | 1.5833YrCa | 6.17E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 642 | ALL | 409265.4 | 3770375 | 5.97E-08 | 1.5833YrCa | 5.97E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 643 | ALL | 409285.4 | 3770375 | 5.78E-08 | 1.5833YrCa | 5.78E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 644 | ALL | 409305.4 | 3770375 | 5.60E-08 | 1.5833YrCa | 5.60E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 645 | ALL | 409325.4 | 3770375 | 5.41E-08 | 1.5833YrCa | 5.41E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 646 | ALL | 409345.4 | 3770375 | 5.24E-08 | 1.5833YrCa | 5.24E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 647 | ALL | 409365.4 | 3770375 | 5.07E-08 | 1.5833YrCa | 5.07E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 648 | ALL | 409385.4 | 3770375 | 4.91E-08 | 1.5833YrCa | 4.91E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 649 | ALL | 409405.4 | 3770375 | 4.75E-08 | 1.5833YrCa | 4.75E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 650 | ALL | 409425.4 | 3770375 | 4.60E-08 | 1.5833YrCa | 4.60E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 651 | ALL | 409445.4 | 3770375 | 4.46E-08 | 1.5833YrCa | 4.46E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 652 | ALL | 409465.4 | 3770375 | 4.32E-08 | 1.5833YrCa | 4.32E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 653 | ALL | 409485.4 | 3770375 | 4.18E-08 | 1.5833YrCa | 4.18E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 654 | ALL | 408925.4 | 3770395 | 8.73E-08 | 1.5833YrCa | 8.73E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 655 | ALL | 408945.4 | 3770395 | 8.61E-08 | 1.5833YrCa | 8.61E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 656 | ALL | 408965.4 | 3770395 | 8.48E-08 | 1.5833YrCa | 8.48E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 657 | ALL | 408985.4 | 3770395 | 8.33E-08 | 1.5833YrCa | 8.33E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 658 | ALL | 409005.4 | 3770395 | 8.17E-08 | 1.5833YrCa | 8.17E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 659 | ALL | 409025.4 | 3770395 | 8.00E-08 | 1.5833YrCa | 8.00E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 660 | ALL | 409045.4 | 3770395 | 7.82E-08 | 1.5833YrCa | 7.82E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 661 | ALL | 409065.4 | 3770395 | 7.63E-08 | 1.5833YrCa | 7.63E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 662 | ALL | 409085.4 | 3770395 | 7.44E-08 | 1.5833YrCa | 7.44E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 663 | ALL | 409105.4 | 3770395 | 7.25E-08 | 1.5833YrCa | 7.25E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 664 | ALL | 409125.4 | 3770395 | 7.05E-08 | 1.5833YrCa | 7.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 665 | ALL | 409165.4 | 3770395 | 6.66E-08 | 1.5833YrCa | 6.66E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 666 | ALL | 409185.4 | 3770395 | 6.47E-08 | 1.5833YrCa | 6.47E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 667 | ALL | 409205.4 | 3770395 | 6.28E-08 | 1.5833YrCa | 6.28E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 668 | ALL | 409225.4 | 3770395 | 6.09E-08 | 1.5833YrCa | 6.09E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 669 | ALL | 409245.4 | 3770395 | 5.91E-08 | 1.5833YrCa | 5.91E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 670 | ALL | 409265.4 | 3770395 | 5.73E-08 | 1.5833YrCa | 5.73E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 671 | ALL | 409285.4 | 3770395 | 5.55E-08 | 1.5833YrCa | 5.55E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 672 | ALL | 409305.4 | 3770395 | 5.38E-08 | 1.5833YrCa | 5.38E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 673 | ALL | 409325.4 | 3770395 | 5.21E-08 | 1.5833YrCa | 5.21E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 674 | ALL | 409345.4 | 3770395 | 5.05E-08 | 1.5833YrCa | 5.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 675 | ALL | 409365.4 | 3770395 | 4.90E-08 | 1.5833YrCa | 4.90E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 676 | ALL | 409385.4 | 3770395 | 4.74E-08 | 1.5833YrCa | 4.74E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 677 | ALL | 409405.4 | 3770395 | 4.60E-08 | 1.5833YrCa | 4.60E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 678 | ALL | 409425.4 | 3770395 | 4.46E-08 | 1.5833YrCa | 4.46E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 679 | ALL | 409445.4 | 3770395 | 4.32E-08 | 1.5833YrCa | 4.32E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 680 | ALL | 409465.4 | 3770395 | 4.19E-08 | 1.5833YrCa | 4.19E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 681 | ALL | 408945.4 | 3770415 | 8.08E-08 | 1.5833YrCa | 8.08E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 682 | ALL | 408965.4 | 3770415 | 7.96E-08 | 1.5833YrCa | 7.96E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 683 | ALL | 408985.4 | 3770415 | 7.83E-08 | 1.5833YrCa | 7.83E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 684 | ALL | 409005.4 | 3770415 | 7.69E-08 | 1.5833YrCa | 7.69E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 685 | ALL | 409025.4 | 3770415 | 7.54E-08 | 1.5833YrCa | 7.54E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 686 | ALL | 409045.4 | 3770415 | 7.38E-08 | 1.5833YrCa | 7.38E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 687 | ALL | 409065.4 | 3770415 | 7.21E-08 | 1.5833YrCa | 7.21E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 688 | ALL | 409085.4 | 3770415 | 7.05E-08 | 1.5833YrCa | 7.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 689 | ALL | 409105.4 | 3770415 | 6.87E-08 | 1.5833YrCa | 6.87E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 690 | ALL | 409185.4 | 3770415 | 6.17E-08 | 1.5833YrCa | 6.17E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 691 | ALL | 409205.4 | 3770415 | 6.00E-08 | 1.5833YrCa | 6.00E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 692 | ALL | 409225.4 | 3770415 | 5.83E-08 | 1.5833YrCa | 5.83E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 693 | ALL | 409245.4 | 3770415 | 5.66E-08 | 1.5833YrCa | 5.66E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 694 | ALL | 409265.4 | 3770415 | 5.49E-08 | 1.5833YrCa | 5.49E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 695 | ALL | 409285.4 | 3770415 | 5.33E-08 | 1.5833YrCa | 5.33E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 696 | ALL | 409305.4 | 3770415 | 5.17E-08 | 1.5833YrCa | 5.17E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 697 | ALL | 409325.4 | 3770415 | 5.02E-08 | 1.5833YrCa | 5.02E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 698 | ALL | 409345.4 | 3770415 | 4.87E-08 | 1.5833YrCa | 4.87E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 699 | ALL | 409365.4 | 3770415 | 4.73E-08 | 1.5833YrCa | 4.73E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 700 | ALL | 409385.4 | 3770415 | 4.59E-08 | 1.5833YrCa | 4.59E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 701 | ALL | 409405.4 | 3770415 | 4.45E-08 | 1.5833YrCa | 4.45E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 702 | ALL | 409425.4 | 3770415 | 4.32E-08 | 1.5833YrCa | 4.32E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 703 | ALL | 408965.4 | 3770435 | 7.49E-08 | 1.5833YrCa | 7.49E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 704 | ALL | 408985.4 | 3770435 | 7.37E-08 | 1.5833YrCa | 7.37E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 705 | ALL | 409005.4 | 3770435 | 7.25E-08 | 1.5833YrCa | 7.25E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 706 | ALL | 409025.4 | 3770435 | 7.11E-08 | 1.5833YrCa | 7.11E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 707 | ALL | 409045.4 | 3770435 | 6.97E-08 | 1.5833YrCa | 6.97E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 708 | ALL | 409065.4 | 3770435 | 6.83E-08 | 1.5833YrCa | 6.83E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 709 | ALL | 409205.4 | 3770435 | 5.73E-08 | 1.5833YrCa | 5.73E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 710 | ALL | 409225.4 | 3770435 | 5.58E-08 | 1.5833YrCa | 5.58E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 711 | ALL | 409245.4 | 3770435 | 5.42E-08 | 1.5833YrCa | 5.42E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 712 | ALL | 409265.4 | 3770435 | 5.27E-08 | 1.5833YrCa | 5.27E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 713 | ALL | 409285.4 | 3770435 | 5.12E-08 | 1.5833YrCa | 5.12E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 714 | ALL | 409305.4 | 3770435 | 4.98E-08 | 1.5833YrCa | 4.98E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 715 | ALL | 409325.4 | 3770435 | 4.83E-08 | 1.5833YrCa | 4.83E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 716 | ALL | 409345.4 | 3770435 | 4.70E-08 | 1.5833YrCa | 4.70E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 717 | ALL | 409365.4 | 3770435 | 4.56E-08 | 1.5833YrCa | 4.56E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 718 | ALL | 409385.4 | 3770435 | 4.43E-08 | 1.5833YrCa | 4.43E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 719 | ALL | 409405.4 | 3770435 | 4.31E-08 | 1.5833YrCa | 4.31E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 720 | ALL | 408985.4 | 3770455 | 6.96E-08 | 1.5833YrCa | 6.96E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 721 | ALL | 409005.4 | 3770455 | 6.85E-08 | 1.5833YrCa | 6.85E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 722 | ALL | 409025.4 | 3770455 | 6.73E-08 | 1.5833YrCa | 6.73E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 723 | ALL | 409045.4 | 3770455 | 6.60E-08 | 1.5833YrCa | 6.60E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 724 | ALL | 409225.4 | 3770455 | 5.34E-08 | 1.5833YrCa | 5.34E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 725 | ALL | 409245.4 | 3770455 | 5.20E-08 | 1.5833YrCa | 5.20E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 726 | ALL | 409265.4 | 3770455 | 5.06E-08 | 1.5833YrCa | 5.06E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 727 | ALL | 409285.4 | 3770455 | 4.93E-08 | 1.5833YrCa | 4.93E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 728 | ALL | 409305.4 | 3770455 | 4.79E-08 | 1.5833YrCa | 4.79E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 729 | ALL | 409325.4 | 3770455 | 4.66E-08 | 1.5833YrCa | 4.66E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 730 | ALL | 409345.4 | 3770455 | 4.53E-08 | 1.5833YrCa | 4.53E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 731 | ALL | 409365.4 | 3770455 | 4.41E-08 | 1.5833YrCa | 4.41E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 732 | ALL | 409385.4 | 3770455 | 4.29E-08 | 1.5833YrCa | 4.29E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 733 | ALL | 408985.4 | 3770475 | 6.58E-08 | 1.5833YrCa | 6.58E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 734 | ALL | 409005.4 | 3770475 | 6.48E-08 | 1.5833YrCa | 6.48E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 735 | ALL | 409025.4 | 3770475 | 6.38E-08 | 1.5833YrCa | 6.38E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 736 | ALL | 409245.4 | 3770475 | 4.99E-08 | 1.5833YrCa | 4.99E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 737 | ALL | 409265.4 | 3770475 | 4.86E-08 | 1.5833YrCa | 4.86E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 738 | ALL | 409285.4 | 3770475 | 4.74E-08 | 1.5833YrCa | 4.74E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 739 | ALL | 409305.4 | 3770475 | 4.61E-08 | 1.5833YrCa | 4.61E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 740 | ALL | 409325.4 | 3770475 | 4.49E-08 | 1.5833YrCa | 4.49E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 741 | ALL | 409345.4 | 3770475 | 4.37E-08 | 1.5833YrCa | 4.37E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 742 | ALL | 409365.4 | 3770475 | 4.26E-08 | 1.5833YrCa | 4.26E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 743 | ALL | 409005.4 | 3770495 | 6.14E-08 | 1.5833YrCa | 6.14E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 744 | ALL | 409265.4 | 3770495 | 4.67E-08 | 1.5833YrCa | 4.67E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 745 | ALL | 409285.4 | 3770495 | 4.56E-08 | 1.5833YrCa | 4.56E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 746 | ALL | 409305.4 | 3770495 | 4.45E-08 | 1.5833YrCa | 4.45E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 747 | ALL | 409325.4 | 3770495 | 4.33E-08 | 1.5833YrCa | 4.33E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 748 | ALL | 409285.4 | 3770515 | 4.39E-08 | 1.5833YrCa | 4.39E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 749 | ALL | 409305.4 | 3770515 | 4.29E-08 | 1.5833YrCa | 4.29E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 750 | ALL | 409620.3 | 3769917 | 4.36E-08 | 1.5833YrCa | 4.36E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 751 | ALL | 409594.5 | 3769938 | 4.63E-08 | 1.5833YrCa | 4.63E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 752 | ALL | 409641.7 | 3769936 | 4.18E-08 | 1.5833YrCa | 4.18E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 753 | ALL | 409617.3 | 3769956 | 4.42E-08 | 1.5833YrCa | 4.42E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 754 | ALL | 409558.1 | 3769968 | 5.05E-08 | 1.5833YrCa | 5.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 755 | ALL | 409518.3 | 3769997 | 5.56E-08 | 1.5833YrCa | 5.56E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 756 | ALL | 409513.4 | 3770012 | 5.61E-08 | 1.5833YrCa | 5.61E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 757 | ALL | 409533.8 | 3770024 | 5.33E-08 | 1.5833YrCa | 5.33E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 758 | ALL | 409551.7 | 3770011 | 5.12E-08 | 1.5833YrCa | 5.12E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 759 | ALL | 409573.1 | 3769996 | 4.88E-08 | 1.5833YrCa | 4.88E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 760 | ALL | 409557.6 | 3770023 | 5.04E-08 | 1.5833YrCa | 5.04E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 761 | ALL | 409573.1 | 3770033 | 4.85E-08 | 1.5833YrCa | 4.85E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 762 | ALL | 409598.4 | 3770016 | 4.60E-08 | 1.5833YrCa | 4.60E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 763 | ALL | 409609.9 | 3770032 | 4.48E-08 | 1.5833YrCa | 4.48E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 764 | ALL | 409595.9 | 3770038 | 4.61E-08 | 1.5833YrCa | 4.61E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 765 | ALL | 409585 | 3770047 | 4.71E-08 | 1.5833YrCa | 4.71E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 766 | ALL | 409619.3 | 3770049 | 4.37E-08 | 1.5833YrCa | 4.37E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 767 | ALL | 409656.6 | 3770027 | 4.06E-08 | 1.5833YrCa | 4.06E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 768 | ALL | 409680.5 | 3770017 | 3.87E-08 | 1.5833YrCa | 3.87E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 769 | ALL | 409693.9 | 3770014 | 3.77E-08 | 1.5833YrCa | 3.77E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 770 | ALL | 409708.9 | 3770012 | 3.67E-08 | 1.5833YrCa | 3.67E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 771 | ALL | 409607.9 | 3770068 | 4.50E-08 | 1.5833YrCa | 4.50E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 772 | ALL | 409589.5 | 3770066 | 4.64E-08 | 1.5833YrCa | 4.64E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 773 | ALL | 409579.5 | 3770066 | 4.74E-08 | 1.5833YrCa | 4.74E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 774 | ALL | 409552.2 | 3770058 | 5.05E-08 | 1.5833YrCa | 5.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 775 | ALL | 408953.3 | 3769648 | 2.36E-07 | 1.5833YrCa | 2.36E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 776 | ALL | 408703.2 | 3769849 | 9.96E-07 | 1.5833YrCa | 9.96E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 777 | ALL | 408758.2 | 3769919 | 3.83E-06 | 1.5833YrCa | 3.83E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 778 | ALL | 408757.3 | 3769928 | 3.29E-06 | 1.5833YrCa | 3.29E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 779 | ALL | 408629 | 3769906 | 4.71E-07 | 1.5833YrCa | 4.71E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 780 | ALL | 408597 | 3769864 | 3.51E-07 | 1.5833YrCa | 3.51E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 781 | ALL | 408548.4 | 3769905 | 2.53E-07 | 1.5833YrCa | 2.53E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 782 | ALL | 408501.7 | 3769896 | 1.92E-07 | 1.5833YrCa | 1.92E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 783 | ALL | 408462.3 | 3769855 | 1.55E-07 | 1.5833YrCa | 1.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 784 | ALL | 408378.1 | 3769883 | 1.09E-07 | 1.5833YrCa | 1.09E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 785 | ALL | 408352.4 | 3769867 | 9.84E-08 | 1.5833YrCa | 9.84E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 786 | ALL | 408352.4 | 3769829 | 9.70E-08 | 1.5833YrCa | 9.70E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 787 | ALL | 408378.3 | 3769791 | 1.04E-07 | 1.5833YrCa | 1.04E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 788 | ALL | 408664.6 | 3769570 | 1.55E-07 | 1.5833YrCa | 1.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 789 | ALL | 408755.6 | 3769594 | 2.01E-07 | 1.5833YrCa | 2.01E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 790 | ALL | 408812.3 | 3769570 | 1.83E-07 | 1.5833YrCa | 1.83E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 791 | ALL | 408871.9 | 3769585 | 1.94E-07 | 1.5833YrCa | 1.94E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 792 | ALL | 408658.5 | 3770080 | 3.06E-07 | 1.5833YrCa | 3.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 793 | ALL | 409005.2 | 3770500 | 6.07E-08 | 1.5833YrCa | 6.07E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 794 | ALL | 409148.5 | 3770383 | 7.05E-08 | 1.5833YrCa | 7.05E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 795 | ALL | 409289.4 | 3770535 | 4.22E-08 | 1.5833YrCa | 4.22E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 796 | ALL | 409506.5 | 3770367 | 4.09E-08 | 1.5833YrCa | 4.09E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 797 | ALL | 409379.3 | 3770230 | 6.34E-08 | 1.5833YrCa | 6.34E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 798 | ALL | 409302.4 | 3770295 | 6.61E-08 | 1.5833YrCa | 6.61E-08 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 799 | ALL | 409203.6 | 3770184 | 1.06E-07 | 1.5833YrCa | 1.06E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 800 | ALL | 409149.3 | 3770186 | 1.22E-07 | 1.5833YrCa | 1.22E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 801 | ALL | 409125 | 3770159 | 1.43E-07 | 1.5833YrCa | 1.43E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 802 | ALL | 409100.7 | 3770175 | 1.45E-07 | 1.5833YrCa | 1.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 803 | ALL | 409079.7 | 3770173 | 1.55E-07 | 1.5833YrCa | 1.55E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 804 | ALL | 409044.8 | 3770145 | 1.93E-07 | 1.5833YrCa | 1.93E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 805 | ALL | 409048.2 | 3770088 | 2.45E-07 | 1.5833YrCa | 2.45E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 806 | ALL | 408881.6 | 3770059 | 5.89E-07 | 1.5833YrCa | 5.89E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 807 | ALL | 408861.3 | 3770102 | 4.14E-07 | 1.5833YrCa | 4.14E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| 808 | ALL | 408675.3 | 3770074 | 3.44E-07 | 1.5833YrCa | 3.44E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

| REC | GRP | NETID | X | Y | SCENARIO | CV | CNS | IMMUN | KIDNEY | GILV | REPRO/DE\ | RESP | SKIN | EYE | BONE/TEET | ENDO | BLOOD | ODOR | GENERAL | MAXHI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ALL | | 408660.5 | 3769575 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 2 | ALL | | 408680.5 | 3769575 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 |
| 3 | ALL | | 408820.5 | 3769575 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 4 | ALL | | 408640.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 |
| 5 | ALL | | 408660.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 |
| 6 | ALL | | 408680.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 |
| 7 | ALL | | 408700.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 |
| 8 | ALL | | 408720.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 9 | ALL | | 408740.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 |
| 10 | ALL | | 408760.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.49E-04 |
| 11 | ALL | | 408780.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 |
| 12 | ALL | | 408800.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 |
| 13 | ALL | | 408820.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 |
| 14 | ALL | | 408840.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 |
| 15 | ALL | | 408860.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 |
| 16 | ALL | | 408880.5 | 3769595 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.48E-04 |
| 17 | ALL | | 408620.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 |
| 18 | ALL | | 408640.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.30E-04 |
| 19 | ALL | | 408660.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 20 | ALL | | 408680.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 |
| 21 | ALL | | 408700.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 |
| 22 | ALL | | 408720.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 23 | ALL | | 408740.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.62E-04 |
| 24 | ALL | | 408760.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 |
| 25 | ALL | | 408780.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 26 | ALL | | 408800.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 27 | ALL | | 408820.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.73E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.73E-04 |
| 28 | ALL | | 408840.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 29 | ALL | | 408860.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 30 | ALL | | 408880.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 |
| 31 | ALL | | 408900.5 | 3769615 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.61E-04 |
| 32 | ALL | | 408600.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 |
| 33 | ALL | | 408620.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 |
| 34 | ALL | | 408640.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 35 | ALL | | 408660.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 36 | ALL | | 408680.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |
| 37 | ALL | | 408700.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 38 | ALL | | 408720.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 |
| 39 | ALL | | 408740.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 40 | ALL | | 408760.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 |
| 41 | ALL | | 408780.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.93E-04 |
| 42 | ALL | | 408800.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 |
| 43 | ALL | | 408820.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 |
| 44 | ALL | | 408840.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 |
| 45 | ALL | | 408860.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 |
| 46 | ALL | | 408880.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 47 | ALL | | 408900.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 |
| 48 | ALL | | 408920.5 | 3769635 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 |
| 49 | ALL | | 408560.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.17E-04 |
| 50 | ALL | | 408580.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 |
| 51 | ALL | | 408600.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 |
| 52 | ALL | | 408620.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 |
| 53 | ALL | | 408640.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 54 | ALL | | 408660.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 55 | ALL | 408680.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 56 | ALL | 408700.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 57 | ALL | 408720.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 |
| 58 | ALL | 408740.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-04 |
| 59 | ALL | 408760.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.15E-04 |
| 60 | ALL | 408780.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 61 | ALL | 408800.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 |
| 62 | ALL | 408820.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 |
| 63 | ALL | 408840.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 |
| 64 | ALL | 408860.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.20E-04 |
| 65 | ALL | 408880.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.14E-04 |
| 66 | ALL | 408900.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 67 | ALL | 408920.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.96E-04 |
| 68 | ALL | 408940.5 | 3769655 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.86E-04 |
| 69 | ALL | 408540.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 |
| 70 | ALL | 408560.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 |
| 71 | ALL | 408580.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 |
| 72 | ALL | 408600.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 |
| 73 | ALL | 408620.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 74 | ALL | 408640.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 75 | ALL | 408660.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 76 | ALL | 408680.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 |
| 77 | ALL | 408700.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.11E-04 |
| 78 | ALL | 408720.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 |
| 79 | ALL | 408740.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 |
| 80 | ALL | 408760.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.47E-04 |
| 81 | ALL | 408780.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.55E-04 |
| 82 | ALL | 408800.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 |
| 83 | ALL | 408820.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 |
| 84 | ALL | 408840.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 |
| 85 | ALL | 408860.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.54E-04 |
| 86 | ALL | 408880.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.46E-04 |
| 87 | ALL | 408900.5 | 3769675 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 |
| 88 | ALL | 408520.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 |
| 89 | ALL | 408540.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 |
| 90 | ALL | 408560.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 |
| 91 | ALL | 408580.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 |
| 92 | ALL | 408600.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 93 | ALL | 408620.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.71E-04 |
| 94 | ALL | 408640.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 95 | ALL | 408660.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.03E-04 |
| 96 | ALL | 408680.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 97 | ALL | 408700.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.39E-04 |
| 98 | ALL | 408720.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.57E-04 |
| 99 | ALL | 408740.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.73E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.73E-04 |
| 100 | ALL | 408760.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.88E-04 |
| 101 | ALL | 408780.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.99E-04 |
| 102 | ALL | 408800.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-04 |
| 103 | ALL | 408820.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.09E-04 |
| 104 | ALL | 408840.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-04 |
| 105 | ALL | 408860.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.99E-04 |
| 106 | ALL | 408880.5 | 3769695 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.87E-04 |
| 107 | ALL | 408480.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.01E-04 |
| 108 | ALL | 408500.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 |
| 109 | ALL | 408520.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110 | ALL | 408540.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.29E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.29E-04 |
| 111 | ALL | 408560.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 112 | ALL | 408580.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 113 | ALL | 408600.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 114 | ALL | 408620.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.87E-04 |
| 115 | ALL | 408640.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 116 | ALL | 408660.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 117 | ALL | 408680.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 |
| 118 | ALL | 408700.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.72E-04 |
| 119 | ALL | 408720.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.96E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.96E-04 |
| 120 | ALL | 408740.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-04 |
| 121 | ALL | 408760.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.40E-04 |
| 122 | ALL | 408780.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-04 |
| 123 | ALL | 408800.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.67E-04 |
| 124 | ALL | 408820.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-04 |
| 125 | ALL | 408840.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.67E-04 |
| 126 | ALL | 408860.5 | 3769715 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.55E-04 |
| 127 | ALL | 408460.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.67E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.67E-05 |
| 128 | ALL | 408480.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 |
| 129 | ALL | 408500.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 130 | ALL | 408520.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 |
| 131 | ALL | 408540.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 132 | ALL | 408560.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 133 | ALL | 408580.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.66E-04 |
| 134 | ALL | 408600.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 135 | ALL | 408620.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.04E-04 |
| 136 | ALL | 408640.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 137 | ALL | 408660.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.52E-04 |
| 138 | ALL | 408680.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.81E-04 |
| 139 | ALL | 408700.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.12E-04 |
| 140 | ALL | 408720.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.45E-04 |
| 141 | ALL | 408740.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.78E-04 |
| 142 | ALL | 408760.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.09E-04 |
| 143 | ALL | 408780.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.33E-04 |
| 144 | ALL | 408800.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.50E-04 |
| 145 | ALL | 408820.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.55E-04 |
| 146 | ALL | 408840.5 | 3769735 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.49E-04 |
| 147 | ALL | 408440.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.22E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.22E-05 |
| 148 | ALL | 408460.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.00E-04 |
| 149 | ALL | 408480.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 |
| 150 | ALL | 408500.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 |
| 151 | ALL | 408520.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 |
| 152 | ALL | 408540.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.44E-04 |
| 153 | ALL | 408560.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |
| 154 | ALL | 408580.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 155 | ALL | 408600.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 |
| 156 | ALL | 408620.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 157 | ALL | 408640.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 |
| 158 | ALL | 408660.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.82E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.82E-04 |
| 159 | ALL | 408680.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-04 |
| 160 | ALL | 408700.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.60E-04 |
| 161 | ALL | 408720.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.06E-04 |
| 162 | ALL | 408740.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.54E-04 |
| 163 | ALL | 408760.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.00E-04 |
| 164 | ALL | 408780.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 165 | ALL | 408800.5 | 3769755 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.66E-04 |
| 166 | ALL | 408400.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.10E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.10E-05 |
| 167 | ALL | 408420.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.75E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.75E-05 |
| 168 | ALL | 408440.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.48E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.48E-05 |
| 169 | ALL | 408460.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.03E-04 |
| 170 | ALL | 408480.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 |
| 171 | ALL | 408500.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 |
| 172 | ALL | 408520.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 |
| 173 | ALL | 408540.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 |
| 174 | ALL | 408560.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 175 | ALL | 408580.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-04 |
| 176 | ALL | 408600.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 |
| 177 | ALL | 408620.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 |
| 178 | ALL | 408640.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.74E-04 |
| 179 | ALL | 408660.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.14E-04 |
| 180 | ALL | 408680.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.62E-04 |
| 181 | ALL | 408700.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.18E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.18E-04 |
| 182 | ALL | 408720.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.83E-04 |
| 183 | ALL | 408740.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.54E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.54E-04 |
| 184 | ALL | 408760.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.25E-04 |
| 185 | ALL | 408780.5 | 3769775 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.91E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.91E-04 |
| 186 | ALL | 408380.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.67E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.67E-05 |
| 187 | ALL | 408400.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.27E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.27E-05 |
| 188 | ALL | 408420.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.95E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.95E-05 |
| 189 | ALL | 408440.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.72E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.72E-05 |
| 190 | ALL | 408460.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 |
| 191 | ALL | 408480.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-04 |
| 192 | ALL | 408500.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 |
| 193 | ALL | 408520.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 194 | ALL | 408540.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 195 | ALL | 408560.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 |
| 196 | ALL | 408580.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 |
| 197 | ALL | 408600.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 198 | ALL | 408620.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.59E-04 |
| 199 | ALL | 408640.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.99E-04 |
| 200 | ALL | 408660.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.48E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.48E-04 |
| 201 | ALL | 408680.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.10E-04 |
| 202 | ALL | 408700.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.86E-04 |
| 203 | ALL | 408720.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.78E-04 |
| 204 | ALL | 408740.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.86E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.86E-04 |
| 205 | ALL | 408760.5 | 3769795 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.03E-04 |
| 206 | ALL | 408380.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.79E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.79E-05 |
| 207 | ALL | 408400.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.41E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.41E-05 |
| 208 | ALL | 408420.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.12E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.12E-05 |
| 209 | ALL | 408440.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.92E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.92E-05 |
| 210 | ALL | 408460.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.08E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.08E-04 |
| 211 | ALL | 408480.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.19E-04 |
| 212 | ALL | 408500.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.32E-04 |
| 213 | ALL | 408520.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.46E-04 |
| 214 | ALL | 408540.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.63E-04 |
| 215 | ALL | 408560.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.84E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.84E-04 |
| 216 | ALL | 408580.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.09E-04 |
| 217 | ALL | 408600.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.39E-04 |
| 218 | ALL | 408620.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.77E-04 |
| 219 | ALL | 408640.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.24E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 220 | ALL | 408660.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.84E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.84E-04 |
| 221 | ALL | 408680.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.61E-04 |
| 222 | ALL | 408700.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.63E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.63E-04 |
| 223 | ALL | 408720.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.95E-04 |
| 224 | ALL | 408740.5 | 3769815 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.64E-04 |
| 225 | ALL | 408360.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.32E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.32E-05 |
| 226 | ALL | 408380.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.89E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.89E-05 |
| 227 | ALL | 408400.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.53E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.53E-05 |
| 228 | ALL | 408420.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.26E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.26E-05 |
| 229 | ALL | 408440.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.01E-04 |
| 230 | ALL | 408460.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.11E-04 |
| 231 | ALL | 408480.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.22E-04 |
| 232 | ALL | 408500.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 |
| 233 | ALL | 408520.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.50E-04 |
| 234 | ALL | 408540.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.68E-04 |
| 235 | ALL | 408560.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 |
| 236 | ALL | 408580.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.17E-04 |
| 237 | ALL | 408600.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 |
| 238 | ALL | 408620.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.93E-04 |
| 239 | ALL | 408640.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-04 |
| 240 | ALL | 408660.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.18E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.18E-04 |
| 241 | ALL | 408680.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.14E-04 |
| 242 | ALL | 408700.5 | 3769835 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.46E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.46E-04 |
| 243 | ALL | 408360.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.38E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.38E-05 |
| 244 | ALL | 408380.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.96E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.96E-05 |
| 245 | ALL | 408400.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.62E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.62E-05 |
| 246 | ALL | 408420.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.36E-05 |
| 247 | ALL | 408440.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.02E-04 |
| 248 | ALL | 408460.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.12E-04 |
| 249 | ALL | 408480.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 |
| 250 | ALL | 408500.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 251 | ALL | 408520.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.53E-04 |
| 252 | ALL | 408540.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 253 | ALL | 408560.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 |
| 254 | ALL | 408580.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 |
| 255 | ALL | 408600.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 |
| 256 | ALL | 408620.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-04 |
| 257 | ALL | 408640.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.66E-04 |
| 258 | ALL | 408660.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.47E-04 |
| 259 | ALL | 408680.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.61E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.61E-04 |
| 260 | ALL | 408700.5 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.26E-04 |
| 261 | ALL | 408380.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.00E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.00E-05 |
| 262 | ALL | 408400.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.67E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.67E-05 |
| 263 | ALL | 408500.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 |
| 264 | ALL | 408520.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 265 | ALL | 408540.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 |
| 266 | ALL | 408560.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 |
| 267 | ALL | 408580.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.29E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.29E-04 |
| 268 | ALL | 408620.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.15E-04 |
| 269 | ALL | 408640.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.79E-04 |
| 270 | ALL | 408660.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.68E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.68E-04 |
| 271 | ALL | 408680.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.95E-04 |
| 272 | ALL | 408700.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.88E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.88E-04 |
| 273 | ALL | 408720.5 | 3769875 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-03 |
| 274 | ALL | 408500.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 275 | ALL | 408520.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.56E-04 |
| 276 | ALL | 408540.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.76E-04 |
| 277 | ALL | 408560.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.00E-04 |
| 278 | ALL | 408620.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-04 |
| 279 | ALL | 408640.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.85E-04 |
| 280 | ALL | 408660.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.77E-04 |
| 281 | ALL | 408680.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.10E-04 |
| 282 | ALL | 408700.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.16E-04 |
| 283 | ALL | 408720.5 | 3769895 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-03 |
| 284 | ALL | 408680.5 | 3769915 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.02E-04 |
| 285 | ALL | 408700.5 | 3769915 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.01E-04 |
| 286 | ALL | 408720.5 | 3769915 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-03 |
| 287 | ALL | 408740.5 | 3769915 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-03 |
| 288 | ALL | 408885.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.66E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.66E-04 |
| 289 | ALL | 408905.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.45E-04 |
| 290 | ALL | 408925.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.21E-04 |
| 291 | ALL | 408945.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.97E-04 |
| 292 | ALL | 408965.4 | 3770075 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.73E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.73E-04 |
| 293 | ALL | 408685.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 294 | ALL | 408705.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 |
| 295 | ALL | 408725.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 |
| 296 | ALL | 408745.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.89E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.89E-04 |
| 297 | ALL | 408765.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.05E-04 |
| 298 | ALL | 408785.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.17E-04 |
| 299 | ALL | 408805.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-04 |
| 300 | ALL | 408865.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-04 |
| 301 | ALL | 408885.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.07E-04 |
| 302 | ALL | 408905.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.93E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.93E-04 |
| 303 | ALL | 408925.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.76E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.76E-04 |
| 304 | ALL | 408945.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.58E-04 |
| 305 | ALL | 408965.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-04 |
| 306 | ALL | 408985.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.22E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.22E-04 |
| 307 | ALL | 409005.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 308 | ALL | 409025.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 |
| 309 | ALL | 409045.4 | 3770095 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.75E-04 |
| 310 | ALL | 408705.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.21E-04 |
| 311 | ALL | 408725.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.35E-04 |
| 312 | ALL | 408745.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.49E-04 |
| 313 | ALL | 408765.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.60E-04 |
| 314 | ALL | 408785.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.69E-04 |
| 315 | ALL | 408805.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.75E-04 |
| 316 | ALL | 408825.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.77E-04 |
| 317 | ALL | 408845.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.75E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.75E-04 |
| 318 | ALL | 408865.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.70E-04 |
| 319 | ALL | 408885.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.62E-04 |
| 320 | ALL | 408905.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 |
| 321 | ALL | 408925.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.39E-04 |
| 322 | ALL | 408945.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 323 | ALL | 408965.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.12E-04 |
| 324 | ALL | 408985.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 |
| 325 | ALL | 409005.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.85E-04 |
| 326 | ALL | 409025.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.72E-04 |
| 327 | ALL | 409045.4 | 3770115 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 |
| 328 | ALL | 408705.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.95E-04 |
| 329 | ALL | 408725.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 330 | ALL | 408745.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.16E-04 |
| 331 | ALL | 408765.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.25E-04 |
| 332 | ALL | 408785.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 333 | ALL | 408805.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 |
| 334 | ALL | 408825.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.37E-04 |
| 335 | ALL | 408845.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.36E-04 |
| 336 | ALL | 408865.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.32E-04 |
| 337 | ALL | 408885.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.26E-04 |
| 338 | ALL | 408905.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.19E-04 |
| 339 | ALL | 408925.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.09E-04 |
| 340 | ALL | 408945.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.99E-04 |
| 341 | ALL | 408965.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.89E-04 |
| 342 | ALL | 408985.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 343 | ALL | 409005.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.67E-04 |
| 344 | ALL | 409025.4 | 3770135 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 345 | ALL | 408725.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.83E-04 |
| 346 | ALL | 408745.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.90E-04 |
| 347 | ALL | 408765.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.97E-04 |
| 348 | ALL | 408785.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 |
| 349 | ALL | 408805.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 |
| 350 | ALL | 408825.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.06E-04 |
| 351 | ALL | 408845.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.05E-04 |
| 352 | ALL | 408865.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-04 |
| 353 | ALL | 408885.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.98E-04 |
| 354 | ALL | 408905.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.92E-04 |
| 355 | ALL | 408925.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.85E-04 |
| 356 | ALL | 408945.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 357 | ALL | 408965.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 |
| 358 | ALL | 408985.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 |
| 359 | ALL | 409005.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.51E-04 |
| 360 | ALL | 409025.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 |
| 361 | ALL | 409045.4 | 3770155 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.35E-04 |
| 362 | ALL | 408745.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.69E-04 |
| 363 | ALL | 408765.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 |
| 364 | ALL | 408785.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.77E-04 |
| 365 | ALL | 408805.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 |
| 366 | ALL | 408825.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.81E-04 |
| 367 | ALL | 408845.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.80E-04 |
| 368 | ALL | 408865.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.78E-04 |
| 369 | ALL | 408885.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.74E-04 |
| 370 | ALL | 408905.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-04 |
| 371 | ALL | 408925.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.64E-04 |
| 372 | ALL | 408945.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 373 | ALL | 408965.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 |
| 374 | ALL | 408985.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.45E-04 |
| 375 | ALL | 409005.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.38E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.38E-04 |
| 376 | ALL | 409025.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 |
| 377 | ALL | 409045.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.24E-04 |
| 378 | ALL | 409065.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.17E-04 |
| 379 | ALL | 409085.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.11E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.11E-04 |
| 380 | ALL | 409105.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 |
| 381 | ALL | 409125.4 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.90E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.90E-05 |
| 382 | ALL | 408765.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 383 | ALL | 408785.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.57E-04 |
| 384 | ALL | 408805.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.59E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 385 | ALL | 408825.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 |
| 386 | ALL | 408845.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.60E-04 |
| 387 | ALL | 408865.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.58E-04 |
| 388 | ALL | 408885.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.55E-04 |
| 389 | ALL | 408905.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.52E-04 |
| 390 | ALL | 408925.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 |
| 391 | ALL | 408945.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 |
| 392 | ALL | 408965.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.37E-04 |
| 393 | ALL | 408985.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.31E-04 |
| 394 | ALL | 409005.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.26E-04 |
| 395 | ALL | 409025.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |
| 396 | ALL | 409045.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 397 | ALL | 409065.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.09E-04 |
| 398 | ALL | 409085.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.03E-04 |
| 399 | ALL | 409105.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.78E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.78E-05 |
| 400 | ALL | 409125.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.28E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.28E-05 |
| 401 | ALL | 409145.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.80E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.80E-05 |
| 402 | ALL | 409165.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.35E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.35E-05 |
| 403 | ALL | 409185.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.92E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.92E-05 |
| 404 | ALL | 409205.4 | 3770195 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.52E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.52E-05 |
| 405 | ALL | 408785.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 406 | ALL | 408805.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 |
| 407 | ALL | 408825.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.43E-04 |
| 408 | ALL | 408845.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 |
| 409 | ALL | 408865.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 410 | ALL | 408885.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.39E-04 |
| 411 | ALL | 408905.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.36E-04 |
| 412 | ALL | 408925.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.33E-04 |
| 413 | ALL | 408945.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.29E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.29E-04 |
| 414 | ALL | 408965.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 |
| 415 | ALL | 408985.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |
| 416 | ALL | 409005.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 |
| 417 | ALL | 409025.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-04 |
| 418 | ALL | 409045.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 |
| 419 | ALL | 409065.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.01E-04 |
| 420 | ALL | 409085.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.60E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.60E-05 |
| 421 | ALL | 409105.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.15E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.15E-05 |
| 422 | ALL | 409125.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.71E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.71E-05 |
| 423 | ALL | 409145.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.29E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.29E-05 |
| 424 | ALL | 409165.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.89E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.89E-05 |
| 425 | ALL | 409185.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.51E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.51E-05 |
| 426 | ALL | 409205.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.15E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.15E-05 |
| 427 | ALL | 409225.4 | 3770215 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.81E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.81E-05 |
| 428 | ALL | 408805.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 |
| 429 | ALL | 408825.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 |
| 430 | ALL | 408845.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.28E-04 |
| 431 | ALL | 408865.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.27E-04 |
| 432 | ALL | 408885.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E-04 |
| 433 | ALL | 408905.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.23E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.23E-04 |
| 434 | ALL | 408925.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.20E-04 |
| 435 | ALL | 408945.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.17E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.17E-04 |
| 436 | ALL | 408965.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 437 | ALL | 408985.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-04 |
| 438 | ALL | 409005.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 |
| 439 | ALL | 409025.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.02E-04 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 440 | ALL | 409045.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.76E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.76E-05 |
| 441 | ALL | 409065.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.35E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.35E-05 |
| 442 | ALL | 409085.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.95E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.95E-05 |
| 443 | ALL | 409105.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.56E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.56E-05 |
| 444 | ALL | 409125.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.18E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.18E-05 |
| 445 | ALL | 409145.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.81E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.81E-05 |
| 446 | ALL | 409165.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.45E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.45E-05 |
| 447 | ALL | 409185.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.12E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.12E-05 |
| 448 | ALL | 409205.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.79E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.79E-05 |
| 449 | ALL | 409225.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.49E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.49E-05 |
| 450 | ALL | 409245.4 | 3770235 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.19E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.19E-05 |
| 451 | ALL | 408805.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-04 |
| 452 | ALL | 408825.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-04 |
| 453 | ALL | 408845.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.16E-04 |
| 454 | ALL | 408865.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-04 |
| 455 | ALL | 408885.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 456 | ALL | 408905.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.12E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.12E-04 |
| 457 | ALL | 408925.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.10E-04 |
| 458 | ALL | 408945.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.07E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.07E-04 |
| 459 | ALL | 408965.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 |
| 460 | ALL | 408985.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.01E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.01E-04 |
| 461 | ALL | 409005.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.75E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.75E-05 |
| 462 | ALL | 409025.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.41E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.41E-05 |
| 463 | ALL | 409045.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.06E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.06E-05 |
| 464 | ALL | 409065.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.71E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.71E-05 |
| 465 | ALL | 409085.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.36E-05 |
| 466 | ALL | 409105.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.02E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.02E-05 |
| 467 | ALL | 409125.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.69E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.69E-05 |
| 468 | ALL | 409145.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.36E-05 |
| 469 | ALL | 409165.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.05E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.05E-05 |
| 470 | ALL | 409185.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.75E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.75E-05 |
| 471 | ALL | 409205.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.46E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.46E-05 |
| 472 | ALL | 409225.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.18E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.18E-05 |
| 473 | ALL | 409245.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.91E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.91E-05 |
| 474 | ALL | 409265.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.66E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.66E-05 |
| 475 | ALL | 409365.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.58E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.58E-05 |
| 476 | ALL | 409385.4 | 3770255 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.39E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.39E-05 |
| 477 | ALL | 408825.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 |
| 478 | ALL | 408845.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 |
| 479 | ALL | 408865.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 |
| 480 | ALL | 408885.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.04E-04 |
| 481 | ALL | 408905.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.02E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.02E-04 |
| 482 | ALL | 408925.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.00E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.00E-04 |
| 483 | ALL | 408945.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.82E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.82E-05 |
| 484 | ALL | 408965.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.57E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.57E-05 |
| 485 | ALL | 408985.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.30E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.30E-05 |
| 486 | ALL | 409005.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.02E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.02E-05 |
| 487 | ALL | 409025.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.73E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.73E-05 |
| 488 | ALL | 409045.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.43E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.43E-05 |
| 489 | ALL | 409065.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.13E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.13E-05 |
| 490 | ALL | 409085.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.82E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.82E-05 |
| 491 | ALL | 409105.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.53E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.53E-05 |
| 492 | ALL | 409125.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.23E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.23E-05 |
| 493 | ALL | 409145.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.95E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.95E-05 |
| 494 | ALL | 409165.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.67E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.67E-05 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 495 | ALL | 409185.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.40E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.40E-05 |
| 496 | ALL | 409205.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.14E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.14E-05 |
| 497 | ALL | 409225.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.89E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.89E-05 |
| 498 | ALL | 409245.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.65E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.65E-05 |
| 499 | ALL | 409265.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.42E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.42E-05 |
| 500 | ALL | 409345.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.60E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.60E-05 |
| 501 | ALL | 409365.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.42E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.42E-05 |
| 502 | ALL | 409385.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.25E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.25E-05 |
| 503 | ALL | 409405.4 | 3770275 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.09E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.09E-05 |
| 504 | ALL | 408845.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.66E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.66E-05 |
| 505 | ALL | 408865.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.60E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.60E-05 |
| 506 | ALL | 408885.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.51E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.51E-05 |
| 507 | ALL | 408905.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.38E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.38E-05 |
| 508 | ALL | 408925.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.23E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.23E-05 |
| 509 | ALL | 408945.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.04E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.04E-05 |
| 510 | ALL | 408965.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.83E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.83E-05 |
| 511 | ALL | 408985.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.61E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.61E-05 |
| 512 | ALL | 409005.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.37E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.37E-05 |
| 513 | ALL | 409025.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.12E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.12E-05 |
| 514 | ALL | 409045.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.86E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.86E-05 |
| 515 | ALL | 409065.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.60E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.60E-05 |
| 516 | ALL | 409085.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.33E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.33E-05 |
| 517 | ALL | 409105.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.07E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.07E-05 |
| 518 | ALL | 409125.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.81E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.81E-05 |
| 519 | ALL | 409145.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.56E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.56E-05 |
| 520 | ALL | 409165.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.31E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.31E-05 |
| 521 | ALL | 409185.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.07E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.07E-05 |
| 522 | ALL | 409205.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.84E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.84E-05 |
| 523 | ALL | 409225.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.61E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.61E-05 |
| 524 | ALL | 409245.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-05 |
| 525 | ALL | 409265.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.19E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.19E-05 |
| 526 | ALL | 409285.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.99E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.99E-05 |
| 527 | ALL | 409305.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.80E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.80E-05 |
| 528 | ALL | 409325.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.61E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.61E-05 |
| 529 | ALL | 409345.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.44E-05 |
| 530 | ALL | 409365.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.27E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.27E-05 |
| 531 | ALL | 409385.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.11E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.11E-05 |
| 532 | ALL | 409405.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.96E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.96E-05 |
| 533 | ALL | 409425.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.81E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.81E-05 |
| 534 | ALL | 408865.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.83E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.83E-05 |
| 535 | ALL | 408885.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.75E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.75E-05 |
| 536 | ALL | 408905.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.65E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.65E-05 |
| 537 | ALL | 408925.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.52E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.52E-05 |
| 538 | ALL | 408945.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.36E-05 |
| 539 | ALL | 408965.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.18E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.18E-05 |
| 540 | ALL | 408985.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.99E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.99E-05 |
| 541 | ALL | 409005.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.78E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.78E-05 |
| 542 | ALL | 409025.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.57E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.57E-05 |
| 543 | ALL | 409045.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.34E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.34E-05 |
| 544 | ALL | 409065.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.11E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.11E-05 |
| 545 | ALL | 409085.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.88E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.88E-05 |
| 546 | ALL | 409105.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.65E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.65E-05 |
| 547 | ALL | 409125.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.43E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.43E-05 |
| 548 | ALL | 409145.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.20E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.20E-05 |
| 549 | ALL | 409165.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.98E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.98E-05 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 550 | ALL | 409185.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.77E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.77E-05 |
| 551 | ALL | 409205.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.56E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.56E-05 |
| 552 | ALL | 409225.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.35E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.35E-05 |
| 553 | ALL | 409245.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.15E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.15E-05 |
| 554 | ALL | 409265.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.97E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.97E-05 |
| 555 | ALL | 409285.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.78E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.78E-05 |
| 556 | ALL | 409305.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.61E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.61E-05 |
| 557 | ALL | 409325.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.44E-05 |
| 558 | ALL | 409345.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.28E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.28E-05 |
| 559 | ALL | 409365.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.12E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.12E-05 |
| 560 | ALL | 409385.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.98E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.98E-05 |
| 561 | ALL | 409405.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.83E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.83E-05 |
| 562 | ALL | 409425.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.70E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.70E-05 |
| 563 | ALL | 409445.4 | 3770315 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-05 |
| 564 | ALL | 408885.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.09E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.09E-05 |
| 565 | ALL | 408905.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.00E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.00E-05 |
| 566 | ALL | 408925.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.89E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.89E-05 |
| 567 | ALL | 408945.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.75E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.75E-05 |
| 568 | ALL | 408965.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.60E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.60E-05 |
| 569 | ALL | 408985.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.44E-05 |
| 570 | ALL | 409005.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.26E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.26E-05 |
| 571 | ALL | 409025.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.07E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.07E-05 |
| 572 | ALL | 409045.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.87E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.87E-05 |
| 573 | ALL | 409065.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.67E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.67E-05 |
| 574 | ALL | 409085.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.47E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.47E-05 |
| 575 | ALL | 409105.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.27E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.27E-05 |
| 576 | ALL | 409125.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.07E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.07E-05 |
| 577 | ALL | 409145.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.87E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.87E-05 |
| 578 | ALL | 409165.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.67E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.67E-05 |
| 579 | ALL | 409185.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.48E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.48E-05 |
| 580 | ALL | 409205.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.29E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.29E-05 |
| 581 | ALL | 409225.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.11E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.11E-05 |
| 582 | ALL | 409245.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.93E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.93E-05 |
| 583 | ALL | 409265.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.76E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.76E-05 |
| 584 | ALL | 409285.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.59E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.59E-05 |
| 585 | ALL | 409305.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.43E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.43E-05 |
| 586 | ALL | 409325.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.27E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.27E-05 |
| 587 | ALL | 409345.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.12E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.12E-05 |
| 588 | ALL | 409365.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.98E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.98E-05 |
| 589 | ALL | 409385.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.84E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.84E-05 |
| 590 | ALL | 409405.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-05 |
| 591 | ALL | 409425.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.58E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.58E-05 |
| 592 | ALL | 409445.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-05 |
| 593 | ALL | 409465.4 | 3770335 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.35E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.35E-05 |
| 594 | ALL | 408905.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.42E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.42E-05 |
| 595 | ALL | 408925.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.33E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.33E-05 |
| 596 | ALL | 408945.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.21E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.21E-05 |
| 597 | ALL | 408965.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.08E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.08E-05 |
| 598 | ALL | 408985.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.94E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.94E-05 |
| 599 | ALL | 409005.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.79E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.79E-05 |
| 600 | ALL | 409025.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.62E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.62E-05 |
| 601 | ALL | 409045.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.45E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.45E-05 |
| 602 | ALL | 409065.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.27E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.27E-05 |
| 603 | ALL | 409085.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.10E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.10E-05 |
| 604 | ALL | 409105.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.92E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.92E-05 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 605 | ALL | 409125.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.74E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.74E-05 |
| 606 | ALL | 409145.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.56E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.56E-05 |
| 607 | ALL | 409165.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-05 |
| 608 | ALL | 409185.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.21E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.21E-05 |
| 609 | ALL | 409205.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.04E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.04E-05 |
| 610 | ALL | 409225.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.88E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.88E-05 |
| 611 | ALL | 409245.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.71E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.71E-05 |
| 612 | ALL | 409265.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.56E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.56E-05 |
| 613 | ALL | 409285.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.40E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.40E-05 |
| 614 | ALL | 409305.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.25E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.25E-05 |
| 615 | ALL | 409325.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.11E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.11E-05 |
| 616 | ALL | 409345.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.97E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.97E-05 |
| 617 | ALL | 409365.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.84E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.84E-05 |
| 618 | ALL | 409385.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-05 |
| 619 | ALL | 409405.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.59E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.59E-05 |
| 620 | ALL | 409425.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-05 |
| 621 | ALL | 409445.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-05 |
| 622 | ALL | 409465.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.25E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.25E-05 |
| 623 | ALL | 409485.4 | 3770355 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.15E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.15E-05 |
| 624 | ALL | 408905.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.91E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.91E-05 |
| 625 | ALL | 408925.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.83E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.83E-05 |
| 626 | ALL | 408945.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.73E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.73E-05 |
| 627 | ALL | 408965.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.62E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.62E-05 |
| 628 | ALL | 408985.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.49E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.49E-05 |
| 629 | ALL | 409005.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.36E-05 |
| 630 | ALL | 409025.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.21E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.21E-05 |
| 631 | ALL | 409045.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.07E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.07E-05 |
| 632 | ALL | 409065.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.91E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.91E-05 |
| 633 | ALL | 409085.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.75E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.75E-05 |
| 634 | ALL | 409105.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.60E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.60E-05 |
| 635 | ALL | 409125.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.44E-05 |
| 636 | ALL | 409145.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.28E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.28E-05 |
| 637 | ALL | 409165.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.12E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.12E-05 |
| 638 | ALL | 409185.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.96E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.96E-05 |
| 639 | ALL | 409205.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.81E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.81E-05 |
| 640 | ALL | 409225.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.66E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.66E-05 |
| 641 | ALL | 409245.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.51E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.51E-05 |
| 642 | ALL | 409265.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.36E-05 |
| 643 | ALL | 409285.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.22E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.22E-05 |
| 644 | ALL | 409305.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.09E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.09E-05 |
| 645 | ALL | 409325.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.96E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.96E-05 |
| 646 | ALL | 409345.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.83E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.83E-05 |
| 647 | ALL | 409365.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.71E-05 |
| 648 | ALL | 409385.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.59E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.59E-05 |
| 649 | ALL | 409405.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-05 |
| 650 | ALL | 409425.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-05 |
| 651 | ALL | 409445.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-05 |
| 652 | ALL | 409465.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-05 |
| 653 | ALL | 409485.4 | 3770375 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-05 |
| 654 | ALL | 408925.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.38E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.38E-05 |
| 655 | ALL | 408945.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.29E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.29E-05 |
| 656 | ALL | 408965.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.20E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.20E-05 |
| 657 | ALL | 408985.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.09E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 6.09E-05 |
| 658 | ALL | 409005.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.97E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.97E-05 |
| 659 | ALL | 409025.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.85E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.85E-05 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 660 | ALL | 409045.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.71E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.71E-05 |
| 661 | ALL | 409065.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.58E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.58E-05 |
| 662 | ALL | 409085.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.44E-05 |
| 663 | ALL | 409105.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.30E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.30E-05 |
| 664 | ALL | 409125.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.16E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.16E-05 |
| 665 | ALL | 409165.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.87E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.87E-05 |
| 666 | ALL | 409185.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.73E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.73E-05 |
| 667 | ALL | 409205.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.59E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.59E-05 |
| 668 | ALL | 409225.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.45E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.45E-05 |
| 669 | ALL | 409245.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.32E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.32E-05 |
| 670 | ALL | 409265.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.19E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.19E-05 |
| 671 | ALL | 409285.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.06E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.06E-05 |
| 672 | ALL | 409305.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.93E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.93E-05 |
| 673 | ALL | 409325.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.81E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.81E-05 |
| 674 | ALL | 409345.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-05 |
| 675 | ALL | 409365.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.58E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.58E-05 |
| 676 | ALL | 409385.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.47E-05 |
| 677 | ALL | 409405.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-05 |
| 678 | ALL | 409425.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.26E-05 |
| 679 | ALL | 409445.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-05 |
| 680 | ALL | 409465.4 | 3770395 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-05 |
| 681 | ALL | 408945.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.90E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.90E-05 |
| 682 | ALL | 408965.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.82E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.82E-05 |
| 683 | ALL | 408985.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.72E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.72E-05 |
| 684 | ALL | 409005.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.62E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.62E-05 |
| 685 | ALL | 409025.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.51E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.51E-05 |
| 686 | ALL | 409045.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-05 |
| 687 | ALL | 409065.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.27E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.27E-05 |
| 688 | ALL | 409085.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.15E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.15E-05 |
| 689 | ALL | 409105.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.02E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.02E-05 |
| 690 | ALL | 409185.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.51E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.51E-05 |
| 691 | ALL | 409205.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.38E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.38E-05 |
| 692 | ALL | 409225.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.26E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.26E-05 |
| 693 | ALL | 409245.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.14E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.14E-05 |
| 694 | ALL | 409265.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.01E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.01E-05 |
| 695 | ALL | 409285.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.90E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.90E-05 |
| 696 | ALL | 409305.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.78E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.78E-05 |
| 697 | ALL | 409325.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.67E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.67E-05 |
| 698 | ALL | 409345.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.56E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.56E-05 |
| 699 | ALL | 409365.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.45E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.45E-05 |
| 700 | ALL | 409385.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.35E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.35E-05 |
| 701 | ALL | 409405.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.25E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.25E-05 |
| 702 | ALL | 409425.4 | 3770415 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.16E-05 |
| 703 | ALL | 408965.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.47E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.47E-05 |
| 704 | ALL | 408985.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.39E-05 |
| 705 | ALL | 409005.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.30E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.30E-05 |
| 706 | ALL | 409025.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.20E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.20E-05 |
| 707 | ALL | 409045.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.10E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.10E-05 |
| 708 | ALL | 409065.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.99E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.99E-05 |
| 709 | ALL | 409205.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.19E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.19E-05 |
| 710 | ALL | 409225.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.08E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.08E-05 |
| 711 | ALL | 409245.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.96E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.96E-05 |
| 712 | ALL | 409265.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.85E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.85E-05 |
| 713 | ALL | 409285.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.74E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.74E-05 |
| 714 | ALL | 409305.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.64E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.64E-05 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 715 | ALL | 409325.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.53E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.53E-05 |
| 716 | ALL | 409345.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.43E-05 |
| 717 | ALL | 409365.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.33E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.33E-05 |
| 718 | ALL | 409385.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.24E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.24E-05 |
| 719 | ALL | 409405.4 | 3770435 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.15E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.15E-05 |
| 720 | ALL | 408985.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.09E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.09E-05 |
| 721 | ALL | 409005.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.00E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.00E-05 |
| 722 | ALL | 409025.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.92E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.92E-05 |
| 723 | ALL | 409045.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.83E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.83E-05 |
| 724 | ALL | 409225.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.90E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.90E-05 |
| 725 | ALL | 409245.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.80E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.80E-05 |
| 726 | ALL | 409265.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.70E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.70E-05 |
| 727 | ALL | 409285.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.60E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.60E-05 |
| 728 | ALL | 409305.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.50E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.50E-05 |
| 729 | ALL | 409325.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.40E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.40E-05 |
| 730 | ALL | 409345.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.31E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.31E-05 |
| 731 | ALL | 409365.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.22E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.22E-05 |
| 732 | ALL | 409385.4 | 3770455 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-05 |
| 733 | ALL | 408985.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.81E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.81E-05 |
| 734 | ALL | 409005.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.74E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.74E-05 |
| 735 | ALL | 409025.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.66E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.66E-05 |
| 736 | ALL | 409245.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.65E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.65E-05 |
| 737 | ALL | 409265.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.55E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.55E-05 |
| 738 | ALL | 409285.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-05 |
| 739 | ALL | 409305.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-05 |
| 740 | ALL | 409325.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.28E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.28E-05 |
| 741 | ALL | 409345.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.20E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.20E-05 |
| 742 | ALL | 409365.4 | 3770475 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.11E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.11E-05 |
| 743 | ALL | 409005.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.49E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.49E-05 |
| 744 | ALL | 409265.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.42E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.42E-05 |
| 745 | ALL | 409285.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.33E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.33E-05 |
| 746 | ALL | 409305.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.25E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.25E-05 |
| 747 | ALL | 409325.4 | 3770495 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.17E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.17E-05 |
| 748 | ALL | 409285.4 | 3770515 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.21E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.21E-05 |
| 749 | ALL | 409305.4 | 3770515 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.13E-05 |
| 750 | ALL | 409620.3 | 3769917 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.19E-05 |
| 751 | ALL | 409594.5 | 3769938 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.39E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.39E-05 |
| 752 | ALL | 409641.7 | 3769936 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.06E-05 |
| 753 | ALL | 409617.3 | 3769956 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.23E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.23E-05 |
| 754 | ALL | 409558.1 | 3769968 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-05 |
| 755 | ALL | 409518.3 | 3769997 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.06E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.06E-05 |
| 756 | ALL | 409513.4 | 3770012 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.10E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.10E-05 |
| 757 | ALL | 409533.8 | 3770024 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.89E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.89E-05 |
| 758 | ALL | 409551.7 | 3770011 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.74E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.74E-05 |
| 759 | ALL | 409573.1 | 3769996 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.57E-05 |
| 760 | ALL | 409557.6 | 3770023 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.68E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.68E-05 |
| 761 | ALL | 409573.1 | 3770033 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.55E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.55E-05 |
| 762 | ALL | 409598.4 | 3770016 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.36E-05 |
| 763 | ALL | 409609.9 | 3770032 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.27E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.27E-05 |
| 764 | ALL | 409595.9 | 3770038 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.37E-05 |
| 765 | ALL | 409585 | 3770047 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.44E-05 |
| 766 | ALL | 409619.3 | 3770049 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.20E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.20E-05 |
| 767 | ALL | 409656.6 | 3770027 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.97E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.97E-05 |
| 768 | ALL | 409680.5 | 3770017 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.83E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.83E-05 |
| 769 | ALL | 409693.9 | 3770014 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.76E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.76E-05 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 770 | ALL | 409708.9 | 3770012 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.68E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.68E-05 |
| 771 | ALL | 409607.9 | 3770068 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.29E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.29E-05 |
| 772 | ALL | 409589.5 | 3770066 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.39E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.39E-05 |
| 773 | ALL | 409579.5 | 3770066 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.46E-05 |
| 774 | ALL | 409552.2 | 3770058 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.69E-05 |
| 775 | ALL | 408953.3 | 3769648 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.73E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.73E-04 |
| 776 | ALL | 408703.2 | 3769849 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.28E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.28E-04 |
| 777 | ALL | 408758.2 | 3769919 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.80E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.80E-03 |
| 778 | ALL | 408757.3 | 3769928 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.40E-03 |
| 779 | ALL | 408629 | 3769906 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.44E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.44E-04 |
| 780 | ALL | 408597 | 3769864 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.56E-04 |
| 781 | ALL | 408548.4 | 3769905 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.85E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.85E-04 |
| 782 | ALL | 408501.7 | 3769896 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.40E-04 |
| 783 | ALL | 408462.3 | 3769855 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 |
| 784 | ALL | 408378.1 | 3769883 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.94E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.94E-05 |
| 785 | ALL | 408352.4 | 3769867 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.19E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.19E-05 |
| 786 | ALL | 408352.4 | 3769829 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.09E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.09E-05 |
| 787 | ALL | 408378.3 | 3769791 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.58E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.58E-05 |
| 788 | ALL | 408664.6 | 3769570 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.13E-04 |
| 789 | ALL | 408755.6 | 3769594 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.47E-04 |
| 790 | ALL | 408812.3 | 3769570 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.34E-04 |
| 791 | ALL | 408871.9 | 3769585 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.42E-04 |
| 792 | ALL | 408658.5 | 3770080 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.24E-04 |
| 793 | ALL | 409005.2 | 3770500 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.44E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.44E-05 |
| 794 | ALL | 409148.5 | 3770383 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.15E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.15E-05 |
| 795 | ALL | 409289.4 | 3770535 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.08E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.08E-05 |
| 796 | ALL | 409506.5 | 3770367 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.99E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.99E-05 |
| 797 | ALL | 409379.3 | 3770230 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.64E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.64E-05 |
| 798 | ALL | 409302.4 | 3770295 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.83E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.83E-05 |
| 799 | ALL | 409203.6 | 3770184 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.78E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.78E-05 |
| 800 | ALL | 409149.3 | 3770186 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.95E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 8.95E-05 |
| 801 | ALL | 409125 | 3770159 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-04 |
| 802 | ALL | 409100.7 | 3770175 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-04 |
| 803 | ALL | 409079.7 | 3770173 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.14E-04 |
| 804 | ALL | 409044.8 | 3770145 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.41E-04 |
| 805 | ALL | 409048.2 | 3770088 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.79E-04 |
| 806 | ALL | 408881.6 | 3770059 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.31E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.31E-04 |
| 807 | ALL | 408861.3 | 3770102 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.03E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.03E-04 |
| 808 | ALL | 408675.3 | 3770074 | NonCancer | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.51E-04 |

| REC | X | Y | RISK_SUM |
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| 185 | 408780.5 | 3769774.73 | 1.45E-06 |
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| 192 | 408500.5 | 3769794.73 | 3.80E-07 |
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| 194 | 408540.5 | 3769794.73 | 4.43E-07 |
| 195 | 408560.5 | 3769794.73 | 4.81E-07 |
| 196 | 408580.5 | 3769794.73 | 5.26E-07 |
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| 206 | 408380.5 | 3769814.73 | 2.62E-07 |
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| 209 | 408440.5 | 3769814.73 | 3.14E-07 |
| 210 | 408460.5 | 3769814.73 | 3.35E-07 |
| 211 | 408480.5 | 3769814.73 | 3.59E-07 |
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| 216 | 408580.5 | 3769814.73 | 5.41E-07 |
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| 226 | 408380.5 | 3769834.73 | 2.64E-07 |
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| 229 | 408440.5 | 3769834.73 | 3.16E-07 |
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| 273 | 408720.5 | 3769874.73 | 1.92E-06 |
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| 275 | 408520.5 | 3769894.73 | 4.29E-07 |
| 276 | 408540.5 | 3769894.73 | 4.69E-07 |
| 277 | 408560.5 | 3769894.73 | 5.15E-07 |
| 278 | 408620.5 | 3769894.73 | 7.23E-07 |
| 279 | 408640.5 | 3769894.73 | 8.33E-07 |
| 280 | 408660.5 | 3769894.73 | 9.79E-07 |
| 281 | 408680.5 | 3769894.73 | 1.18E-06 |

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| 284 | 408680.5 | 3769914.73 | 1.17E-06 |
| 285 | 408700.5 | 3769914.73 | 1.47E-06 |
| 286 | 408720.5 | 3769914.73 | 1.95E-06 |
| 287 | 408740.5 | 3769914.73 | 2.83E-06 |
| 288 | 408885.4 | 3770075.32 | 1.09E-06 |
| 289 | 408905.4 | 3770075.32 | 1.10E-06 |
| 290 | 408925.4 | 3770075.32 | 1.12E-06 |
| 291 | 408945.4 | 3770075.32 | 1.14E-06 |
| 292 | 408965.4 | 3770075.32 | 1.17E-06 |
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| 294 | 408705.4 | 3770095.32 | 6.55E-07 |
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| 297 | 408765.4 | 3770095.32 | 7.90E-07 |
| 298 | 408785.4 | 3770095.32 | 8.31E-07 |
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| 304 | 408945.4 | 3770095.32 | 1.03E-06 |
| 305 | 408965.4 | 3770095.32 | 1.06E-06 |
| 306 | 408985.4 | 3770095.32 | 1.09E-06 |
| 307 | 409005.4 | 3770095.32 | 1.12E-06 |
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| 314 | 408785.4 | 3770115.32 | 7.49E-07 |
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| 316 | 408825.4 | 3770115.32 | 8.10E-07 |
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| 318 | 408865.4 | 3770115.32 | 8.58E-07 |
| 319 | 408885.4 | 3770115.32 | 8.79E-07 |
| 320 | 408905.4 | 3770115.32 | 9.00E-07 |
| 321 | 408925.4 | 3770115.32 | 9.20E-07 |
| 322 | 408945.4 | 3770115.32 | 9.40E-07 |
| 323 | 408965.4 | 3770115.32 | 9.63E-07 |
| 324 | 408985.4 | 3770115.32 | 9.87E-07 |
| 325 | 409005.4 | 3770115.32 | 1.01E-06 |
| 326 | 409025.4 | 3770115.32 | 1.04E-06 |
| 327 | 409045.4 | 3770115.32 | 1.07E-06 |
| 328 | 408705.4 | 3770135.32 | 5.59E-07 |

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| 353 | 408885.4 | 3770155.32 | 7.32E-07 |
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| 414 | 408965.4 | 3770215.32 | 6.30E-07 |
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| 421 | 409105.4 | 3770215.32 | 6.93E-07 |
| 422 | 409125.4 | 3770215.32 | 6.96E-07 |

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| 431 | 408865.4 | 3770235.32 | 5.23E-07 |
| 432 | 408885.4 | 3770235.32 | 5.36E-07 |
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| 458 | 408945.4 | 3770255.32 | 5.33E-07 |
| 459 | 408965.4 | 3770255.32 | 5.42E-07 |
| 460 | 408985.4 | 3770255.32 | 5.52E-07 |
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| 463 | 409045.4 | 3770255.32 | 5.74E-07 |
| 464 | 409065.4 | 3770255.32 | 5.80E-07 |
| 465 | 409085.4 | 3770255.32 | 5.84E-07 |
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| 467 | 409125.4 | 3770255.32 | 5.88E-07 |
| 468 | 409145.4 | 3770255.32 | 5.88E-07 |
| 469 | 409165.4 | 3770255.32 | 5.86E-07 |

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| 474 | 409265.4 | 3770255.32 | 5.49E-07 |
| 475 | 409365.4 | 3770255.32 | 4.80E-07 |
| 476 | 409385.4 | 3770255.32 | 4.65E-07 |
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| 478 | 408845.4 | 3770275.32 | 4.46E-07 |
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| 499 | 409265.4 | 3770275.32 | 5.09E-07 |
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| 508 | 408925.4 | 3770295.32 | 4.56E-07 |
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| 510 | 408965.4 | 3770295.32 | 4.72E-07 |
| 511 | 408985.4 | 3770295.32 | 4.79E-07 |
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| 515 | 409065.4 | 3770295.32 | 5.00E-07 |
| 516 | 409085.4 | 3770295.32 | 5.03E-07 |

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| 518 | 409125.4 | 3770295.32 | 5.05E-07 |
| 519 | 409145.4 | 3770295.32 | 5.04E-07 |
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| 525 | 409265.4 | 3770295.32 | 4.74E-07 |
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| 530 | 409365.4 | 3770295.32 | 4.22E-07 |
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| 533 | 409425.4 | 3770295.32 | 3.87E-07 |
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| 535 | 408885.4 | 3770315.32 | 4.12E-07 |
| 536 | 408905.4 | 3770315.32 | 4.20E-07 |
| 537 | 408925.4 | 3770315.32 | 4.28E-07 |
| 538 | 408945.4 | 3770315.32 | 4.35E-07 |
| 539 | 408965.4 | 3770315.32 | 4.42E-07 |
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| 543 | 409045.4 | 3770315.32 | 4.63E-07 |
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| 559 | 409365.4 | 3770315.32 | 3.97E-07 |
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| 631 | 409045.4 | 3770375.32 | 3.81E-07 |
| 632 | 409065.4 | 3770375.32 | 3.83E-07 |
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| 774 | 409552.2 | 3770058.26 | 5.37E-07 |
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| 38 | 408720.5 | 3769635 | 3.76E-04 |
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| 90 | 408560.5 | 3769695 | 2.67E-04 |
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| 93 | 408620.5 | 3769695 | 3.30E-04 |

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| 199 | 408640.5 | 3769795 | 4.77E-04 |
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| 201 | 408680.5 | 3769795 | 6.13E-04 |
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| 204 | 408740.5 | 3769795 | 9.40E-04 |
| 205 | 408760.5 | 3769795 | 1.08E-03 |
| 206 | 408380.5 | 3769815 | 1.69E-04 |
| 207 | 408400.5 | 3769815 | 1.79E-04 |
| 208 | 408420.5 | 3769815 | 1.91E-04 |
| 209 | 408440.5 | 3769815 | 2.03E-04 |
| 210 | 408460.5 | 3769815 | 2.18E-04 |
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| 212 | 408500.5 | 3769815 | 2.52E-04 |
| 213 | 408520.5 | 3769815 | 2.73E-04 |
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| 215 | 408560.5 | 3769815 | 3.25E-04 |
| 216 | 408580.5 | 3769815 | 3.58E-04 |
| 217 | 408600.5 | 3769815 | 3.97E-04 |
| 218 | 408620.5 | 3769815 | 4.45E-04 |
| 219 | 408640.5 | 3769815 | 5.03E-04 |
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| 221 | 408680.5 | 3769815 | 6.66E-04 |
| 222 | 408700.5 | 3769815 | 7.83E-04 |
| 223 | 408720.5 | 3769815 | 9.32E-04 |
| 224 | 408740.5 | 3769815 | 1.12E-03 |
| 225 | 408360.5 | 3769835 | 1.61E-04 |
| 226 | 408380.5 | 3769835 | 1.70E-04 |
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| 229 | 408440.5 | 3769835 | 2.05E-04 |
| 230 | 408460.5 | 3769835 | 2.20E-04 |
| 231 | 408480.5 | 3769835 | 2.36E-04 |
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| 234 | 408540.5 | 3769835 | 3.02E-04 |

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| 236 | 408580.5 | 3769835 | 3.67E-04 |
| 237 | 408600.5 | 3769835 | 4.09E-04 |
| 238 | 408620.5 | 3769835 | 4.61E-04 |
| 239 | 408640.5 | 3769835 | 5.27E-04 |
| 240 | 408660.5 | 3769835 | 6.10E-04 |
| 241 | 408680.5 | 3769835 | 7.19E-04 |
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| 243 | 408360.5 | 3769855 | 1.61E-04 |
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| 249 | 408480.5 | 3769855 | 2.38E-04 |
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| 252 | 408540.5 | 3769855 | 3.06E-04 |
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| 254 | 408580.5 | 3769855 | 3.74E-04 |
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| 265 | 408540.5 | 3769875 | 3.08E-04 |
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| 267 | 408580.5 | 3769875 | 3.78E-04 |
| 268 | 408620.5 | 3769875 | 4.83E-04 |
| 269 | 408640.5 | 3769875 | 5.59E-04 |
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| 281 | 408680.5 | 3769895 | 8.15E-04 |

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| 289 | 408905.4 | 3770075 | 7.15E-04 |
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| 291 | 408945.4 | 3770075 | 7.27E-04 |
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| 315 | 408805.4 | 3770115 | 5.11E-04 |
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| 318 | 408865.4 | 3770115 | 5.56E-04 |
| 319 | 408885.4 | 3770115 | 5.66E-04 |
| 320 | 408905.4 | 3770115 | 5.76E-04 |
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| 330 | 408745.4 | 3770135 | 4.07E-04 |
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| 375 | 409005.4 | 3770175 | 4.78E-04 |

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| 377 | 409045.4 | 3770175 | 4.93E-04 |
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| 404 | 409205.4 | 3770195 | 4.51E-04 |
| 405 | 408785.4 | 3770215 | 3.20E-04 |
| 406 | 408805.4 | 3770215 | 3.30E-04 |
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| 408 | 408845.4 | 3770215 | 3.49E-04 |
| 409 | 408865.4 | 3770215 | 3.57E-04 |
| 410 | 408885.4 | 3770215 | 3.65E-04 |
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| 413 | 408945.4 | 3770215 | 3.87E-04 |
| 414 | 408965.4 | 3770215 | 3.93E-04 |
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| 416 | 409005.4 | 3770215 | 4.05E-04 |
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| 420 | 409085.4 | 3770215 | 4.22E-04 |
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| 422 | 409125.4 | 3770215 | 4.24E-04 |

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| 424 | 409165.4 | 3770215 | 4.21E-04 |
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| 427 | 409225.4 | 3770215 | 4.06E-04 |
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| 453 | 408845.4 | 3770255 | 3.02E-04 |
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| 455 | 408885.4 | 3770255 | 3.15E-04 |
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| 469 | 409165.4 | 3770255 | 3.57E-04 |

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| 471 | 409205.4 | 3770255 | 3.50E-04 |
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| 473 | 409245.4 | 3770255 | 3.39E-04 |
| 474 | 409265.4 | 3770255 | 3.32E-04 |
| 475 | 409365.4 | 3770255 | 2.90E-04 |
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| 498 | 409245.4 | 3770275 | 3.15E-04 |
| 499 | 409265.4 | 3770275 | 3.09E-04 |
| 500 | 409345.4 | 3770275 | 2.80E-04 |
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| 516 | 409085.4 | 3770295 | 3.09E-04 |

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| 540 | 408985.4 | 3770315 | 2.78E-04 |
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| 559 | 409365.4 | 3770315 | 2.41E-04 |
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| 563 | 409445.4 | 3770315 | 2.15E-04 |

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| 565 | 408905.4 | 3770335 | 2.47E-04 |
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| 567 | 408945.4 | 3770335 | 2.54E-04 |
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# Appendix D

Phases I and II Environmental Site Assessment

# Phase I Environmental Site Assessment

**SBPK 2021 MFL 1022-1026 Leorita Street Broken Horn Land**

**1022-1026 Leorita Street**

**Baldwin Park, Los Angeles County, California**

**March 22, 2021**

Terracon Project No. CB21P020

**Prepared for:**
Kaiser Permanente
Pasadena, California

**Prepared by:**
Terracon Consultants, Inc.
Colton, California

terracon.com

Terracon

Environmental • Facilities • Geotechnical • Materials

March 22, 2021

Kaiser Permanente
393 East Walnut Street, 4th Floor
Pasadena, California 91188-0001

Attn: Mr. Jason Gancarczyk
P: (626) 714-8450
E: jason.e.gancarczyk@kp.org

Re: Phase I Environmental Site Assessment
SBPK 2021 MFL 1022-1026 Leorita Street Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706
Terracon Project No. CB21P020

Dear Mr. Gancarczyk:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Environmental Site Assessment (ESA) report for the above-referenced property. This assessment was performed in accordance with Terracon's Master Services Agreement, dated June 3, 2016, and Work Authorization No. SCAL-BP_0160 (CCAP-1), dated February 19, 2021.

We appreciate the opportunity to be of service to you on this project. In addition to Phase I services, our professionals provide geotechnical, environmental, construction materials, and facilities services on a wide variety of projects locally, regionally and nationally. For more detailed information on all of Terracon's services please visit our website at www.terracon.com. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
**Terracon Consultants, Inc.**

for
Laura S. Hedman
Staff Geologist

Carl A. Parten
Senior Principal / Office Manager III

Todd G. McFarland, PG #7685, CHG #979
Senior Geologist / Department Manager I

Attachments

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# EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment (ESA) was performed in accordance with Terracon's Master Services Agreement, dated June 3, 2016, and Work Authorization No. SCAL-BP_0160 (CCAP-1), dated February 19, 2021, and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and Client Scope of Work. The ESA was conducted under the supervision or responsible charge of Carl A. Parten, Environmental Professional. Laura S. Hedman performed the Property reconnaissance on March 3, 2021. The purpose of this Phase I ESA is to assist Kaiser Permanente in the identification of Recognized Environmental Conditions (RECs) associated with the Property, and the evaluation of Business Environmental Risks (BER) potentially associated with purchasing the Property. We understand the future use of this Property is currently unknown.

## Findings and Opinions

A summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Property Description and Use

The subject site (the Property) is located at 1022-1026 Leorita Street, in Baldwin Park, Los Angeles County, California 91706, and consists of two contiguous parcels of land, totaling approximately 1.54-acres, and identified by Los Angeles County Assessor Identification Numbers (AINs): 8559-008-005 and -011. The Property is improved with two commercial buildings: one approximately 9,600-square-foot, and the other approximately 13,440-square-foot, with a mezzanine level. The Property is further improved with asphalt-paved parking lot, landscaped areas, and utilities. During the visual reconnaissance, the Property was observed to be occupied by Broken Horn Saddlery, a western apparel and supply retailer.

Historical Information

Based on a review of historical information, the Property consisted of generally undeveloped or vacant land, from as early as 1894, with an apparent dwelling or homestead and associated structures visible by 1938. By 1952, apparent structures or construction trailers were visible on the Property, and by 1977 an apparent commercial building (1022 Leorita Street) appeared to have been developed on the northeastern portion of the Property. By 1983, the dwelling appeared to have been removed, and by 1989, a second commercial building (1026 Leorita Street) had been developed along the eastern boundary of the Property, and has remained consistent through the present. City directory listings for the Property included Broken Horn Saddlery, Mario Silver shop, and similar businesses from the early 1980s through the present. Indication of RECs were not identified in connection with the Property.

The surrounding parcels consisted of undeveloped or vacant land, from as early as 1894, with a creek (Walnut Creek) depicted on the adjacent southeast and a road depicted on the adjacent southwest, by 1926. By 1938, a road (Garvey Avenue) was visible further north, a small structure was visible on the southwest, and the land to the northwest appeared to have been parceled. By 1948, the land on the adjacent northeast appeared parceled with paths and apparent commercial structures, several trails were visible on the southeast (south of the creek), and two apparent dwellings and a road were visible on the adjacent northwest. By 1952, an apparent dwelling or structure was visible on the adjacent southwest, and additional dwellings were visible on the northwest. By 1964, the structures (on the adjacent northeast), appeared to have been removed, and the road appeared expanded into a freeway (I-10-San Bernardino Freeway), the creek on the southeast, appeared to be channelized and redirected further south, and the land appeared developed with a drive-in theater (Edgewood Drive-in theatre at 13159 Bess Avenue), and additional structures were visible on the southwest. The land (on the adjacent southeast), appeared graded and vacant, by 1989, and commercial development of the hospital commenced by 1990 into the existing hospital (Kaiser Permanente at 1011 Baldwin Boulevard) seen through the present. By 1994, the structures appeared to have been removed, from the adjacent southwest, and the land appeared to have been graded and vacant by 2002, and developed as an asphalt-paved parking lot, by 2009. The land to the northeast, appeared redeveloped as the current storm water basin. As of the time of the visual reconnaissance, the parking lot on the adjacent southwest, had been redeveloped into the present day parking garage, associated with the Kaiser Permanente Medical Center.

Records Review

Selected federal and state environmental regulatory databases as well as responses from state and local regulatory agencies were reviewed. The Property was not identified in the current regulatory databases; however, the Property was identified within the boundaries of the San Gabriel Valley Area 2 Superfund Site, an area-wide contaminated groundwater plume, and was identified in the National Priorities List (NPL), Comprehensive Environmental Response, Compensation, & Liability Information System/Superfund Enterprise Management System (CERCLIS/SEMS), US Engineering Control (EC), Records of Decision (ROD), Non Generator / No Longer Regulated (RCRA- NonGen/NLR), and Area of Concern (AOCONCERN) regulatory databases. The databases indicated the Property is encompassed by an underlying chlorinated solvent groundwater plume (San Gabriel Valley Area 2 Superfund Site), which is also known as the Baldwin Park Operable Unit (OU).

The primary contaminants detected in groundwater for the Baldwin Park OU are trichloroethene (TCE), tetrachloroethene (PCE), carbon tetrachloride, perchlorate, n-nitrosodimethylamine (NDMA), and 1,4-dioxane, which have been mapped beneath the Property at concentrations that exceed Maximum Contaminant Levels (MCLs) and/or other regulatory levels. The depth to groundwater was measured at 129.08 feet below ground surface (July 28, 2020) in a piezometer, PZ3-1BD, identified approximately 390 feet to the west of the Property. The nearest municipal water wells are identified as well Nos. B25A and B25B, located approximately 550 feet to the west

of the Property. Water quality data from well No. B25A indicates the following recent (December 1, 2020) concentrations in groundwater, measured in micrograms per liter (µg/L).

- 1,4-Dioxane - 2.8 µg/L
- Carbon Tetrachloride - 2.3 µg/L
- NDMA - 0.069 µg/L
- PCE - 35 µg/L
- Perchlorate - 53 µg/L
- TCE - 81 µg/L

The current concentrations exceed the Maximum Contaminant Level (MCL) and/or the groundwater vapor intrusion Environmental Screening Level (ESL), except for NDMA and 1,4-dioxane, which do not have established MCLs. Based on our review of the regulatory data and historical information, the impacted groundwater represents a REC to the Property. See Section 7.16 and additional services below regarding potential Vapor Encroachment Condition (VEC) related to the REC.

Property Reconnaissance

During the visual reconnaissance, the Property was observed to be occupied by Broken Horn Saddlery, a western apparel and supply retailer. Terracon observed a propane-fueled forklift and associated propane canisters, two storm water drains, solid waste disposal bins, and a pad-mounted transformer. Indication of RECs were not identified in connection with the Property on the day of the Property reconnaissance.

Adjoining Properties

The parcels located on the adjacent north consisted of a storm water basin, followed by Dalewood Street, and then by the Interstate 10 Freeway (I-10). The parcels located on the adjacent east and south consisted of Kaiser Permanente parking garage at 1102 Baldwin Park Boulevard. Leorita Street abuts the Property to the west, followed by single-family residences. Indication of RECs were not observed with the adjoining parcels.

Additional Services

As requested by Kaiser Permanente, Terracon assessed non-scope services which can be business environmental risk (BER) considerations for the Property. The following BERs were identified in connection with the Property.

- Evidence of water-stained/damaged surfaces were apparent at 1022 Leorita Street in ceiling tiles observed on the first floor (in the harness room), within two of the office spaces (on the first floor), and on the second floor/mezzanine level above the north stairs, above the south open area, and within the retail center area. Evidence of water-stained/damaged surfaces were apparent at 1026 Leorita Street in water stained ceiling tiles observed within the main floor area (on the northern and eastern sections), and on the acoustical ceiling spray. Delaminating acoustical ceiling spray, was also observed on the upper floor, within

the open areas. Additionally, water damaged surfaces were observed on at the base of the walls (delaminating paint) within the main floor open area, the upper floor area, and the lower floor area.

- Based on the results of the Limited Hazardous Materials Survey, conducted concurrently with the Phase I ESA, asbestos was detected in at least ten (10) homogeneous areas, and consisted of roof mastic, roof paint, roof coating on pipes, HVAC duct mastic, wallboard and joint compound, carpet glue, vinyl tile and tile mastic, and restroom sink undercoating.
- Based on the results of the Limited Hazardous Materials Survey, conducted concurrently with the Phase I ESA, lead was detected in four samples collected and analyzed.
- Based on a review of the regulatory database listings, the San Gabriel Valley Area 2 Superfund Site / Baldwin Park OU, a chlorinated solvent groundwater plume is mapped beneath the Property. The primary volatile constituents of concern include TCE, PCE, carbon tetrachloride, and 1,4-dioxane, which are classified as carcinogens or possible carcinogens. These constituents are considered sufficiently volatile to enter the vapor phase from groundwater, which represents a VEC and a REC.

## Significant Data Gaps

Significant data gaps were not identified.

## Conclusions

We have performed a Phase I ESA consistent with the procedures included in ASTM Practice E 1527-13, of the SBPK 2021 MFL 1022-1026 Leorita Street Broken Horn Land, located at 1022-1026 Leorita Street, Baldwin Park, Los Angeles County, California 91706, the Property. Recognized Environmental Conditions (RECs), Controlled RECs (CRECs), or business environmental risks (BERs) were not identified in connection with the Property, except for the following REC.

- San Gabriel Valley Area 2 Superfund Site / Baldwin Park OU, a chlorinated solvent groundwater plume is mapped beneath the Property. The primary constituents of concern include TCE, PCE, carbon tetrachloride, perchlorate, NDMA and 1,4-dioxane, which have been detected in nearby wells at concentrations that exceed MCLs and/or other regulatory levels, which represents a REC to the Property.

## Recommendations

Terracon recommends conducting additional investigation to evaluate subsurface conditions associated with the identified REC and VEC.

# 1.0 INTRODUCTION

## 1.1 Property Description

| | |
|---|---|
| **Property Name** | SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land |
| **Property Location/Address** | The Property is located at 1022-1026 Leorita Street, Baldwin Park, Los Angeles County, California 91706. |
| **Land Area** | The Property consists of an approximately 1.54-acre tract of land, and is further identified by Los Angeles County Identification Numbers (AINs): 8559-008-005 and -011. |
| **Property Improvements** | The Property is improved with an approximately 9,600-square-foot commercial building and an approximately 13,440-square-foot (with a mezzanine level) commercial buildings. The Property is further improved with asphalt-paved parking lot, landscaped areas, and utilities. |
| **Anticipated Future Property Use** | Future use is unknown |
| **Purpose of the ESA** | Purchase of the Property |
| **Report Issuance Date** | March 22, 2021 |
| **Date of Earliest Research** | February 25, 2021 |
| **Report Validity Date (180 days)** | September 24, 2021 |

The location of the Property is depicted on Exhibit 1 of Appendix A, which was reproduced from a portion of the Baldwin Park, California and El Monte, California, USGS 7.5-minute series topographic maps (2012). The Property and adjoining parcels are depicted on the Property Diagram, which is included as Exhibit 2 of Appendix A. Acronyms and terms used in this report are described in Appendix F.

## 1.2 Scope of Services

This Phase I ESA was performed in accordance with Terracon's Master Services Agreement, dated June 3, 2016, and Work Authorization No. SCAL-BP_0160 (CCAP-1), dated February 19, 2021, and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and Client Scope of Work. The purpose of this ESA was to assist the client in developing information to identify RECs in connection with the Property as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, and a visual noninvasive reconnaissance of the Property and adjoining properties. Limitations, ASTM deviations, and significant data gaps (if identified) are noted in the applicable sections of the report.

ASTM E1527-13 contains a new definition of "migrate/migration," which refers to “the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface.” By including this explicit reference to migration in ASTM E1527-13, the Standard clarifies that the potential for vapor migration should be addressed as part of a Phase I ESA. This Phase I ESA has considered vapor migration in evaluation of RECs associated with the Property.

## 1.3 Standard of Care

This ESA was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during performance, a client-driven scope of work, or inability to review information not received by the report date. Where appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

Phase I ESAs, such as the one performed at this Property, are of limited scope, are noninvasive, and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or have been released at the Property beyond what is identified by the limited scope of this ESA. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. It should be recognized that environmental concerns may be documented in public records that were not reviewed. No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a Property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs. No warranties, express or implied, are intended or made. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the Property or otherwise uses the report for any other purpose. These risks may be further evaluated – but not eliminated – through additional research or assessment. We will, upon request, advise you of additional research or assessment options that may be available and associated costs.

## 1.4 Additional Scope Limitations, ASTM Deviations and Data Gaps

Based upon the agreed-on scope of services, this ESA did not include subsurface or other invasive assessments, vapor intrusion assessments or indoor air quality assessments (i.e. evaluation of the presence of vapors within a building structure), business environmental risk evaluations, or other services not particularly identified and discussed herein. Credentials of the company (Statement of Qualifications) have not been included in this report but are available upon request. Pertinent documents are referred to in the text of this report, and a separate reference section has not been included. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Information obtained for this ESA was received from several sources that we believe to be reliable;

nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder. This ESA was further limited by the following:

- Reasonable attempts were made to contact the local and state regulatory agencies; however, at the issuance of this report, a response from the Los Angeles County Sanitation District (LACSD) and the Los Angeles County Fire Department (for 1026 Leorita Street) remains pending. Based on a review of historical information and the regulatory database, the absence of this response does not represent a significant data gap or REC.

An evaluation of the significance of limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an evaluation of information received after the report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the Property's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently become observable (such as after Property renovation or development). Further, these services are not to be construed as legal interpretation or advice.

## 1.5 Reliance

This ESA report is prepared for the exclusive use and reliance of Kaiser Permanente. Use or reliance by any other party is prohibited without the written authorization of Kaiser Permanente and Terracon Consultants, Inc. (Terracon).

Reliance on the ESA by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, ESA report, and Terracon's Master Services Agreement. The limitation of liability defined in the Master Services Agreement is the aggregate limit of Terracon's liability to the client and all relying parties.

Continued viability of this report is subject to ASTM E1527-13 Sections 4.6 and 4.8. If the ESA will be used by a different user (third party) than the user for whom the ESA was originally

prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E1527-13.

## 1.6 Client Provided Information

Prior to the Property visit, Mr. Jason Gancarczyk, client's representative, was asked to provide the following user questionnaire information as described in ASTM E1527-13 Section 6.

**Client Questionnaire Responses**

| Client Questionnaire Item | Client Did Not Respond | Client's Response | |
|---|---|---|---|
| | | Yes | No |
| Specialized Knowledge or Experience that is material to a REC in connection with the Property *. | | X | |
| Actual Knowledge of Environmental Liens or Activity Use Limitations (AULs) that may encumber the Property. | | | X |
| Actual Knowledge of a Lower Purchase Price because contamination is known or believed to be present at the Property. | | | X |
| Commonly Known or Reasonably Ascertainable Information that is material to a REC in connection with the Property. | | | X |
| Obvious Indicators of Contamination at the Property. | | | X |

*Mr. Gancarczyk responded positively to question # 3, of the User Questionnaire, stating that he had specialized knowledge to the site or nearby properties, due to Kaiser Permanente being directly adjacent to the Property, and has specialized knowledge of the chemical and processes of that type of business. Terracon's consideration of the client provided information did not identify RECs. A copy of the questionnaire is included in Appendix C .

## 2.0 PHYSICAL SETTING

| Physical Setting Information | | Source |
|---|---|---|
| **Topography** | | |
| Property Elevation | Approximately 310 feet above National Geodetic Vertical Datum (NGVD). | See Exhibit 1 in Appendix A – Baldwin Park and El Monte, California (2012) USGS Topographic Map Google Map Data (2021), www.google.com/maps) |
| Topographic Gradient | Gently sloping toward the southwest. | |
| Closest Surface Water | Walnut Creek (channelized) is approximately 950 feet south of the Property. | |
| **Soil Characteristics** | | |
| Soil Type | Urban Land | Soil Survey of Los Angeles County, California, Southeastern Part (CA696); United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS); issued 2020 https://websoilsurvey.sc.egov.usda.gov |
| Description | Urban Land-Tujunga-Typic Xerothents, sandy substratum complex; 0 to 2 percent slope. | |
| **Geology/Hydrogeology** | | |
| Formation | Surficial sediments (Qg) | Geologic map of El Monte and Baldwin Park quadrangles, Los Angeles County, California (Dibblee, T.W., and Ehrenspeck, H.E., Dibblee Geological Foundation) Dated 1999 |
| Description | Undissected alluvial deposits; gravel and sand of major stream, alluvial fan detritus from San Gabriel Mountain, grades southward into alluvium (Qa) as sizes of clasts decrease (Holocene). | |
| Estimated Depth to First Occurrence of Groundwater | Property: No data readily available. Vicinity: Approximately 130 feet below ground surface (bgs) measured in a piezometer, located approximately 390 feet west of the Property (last measured in July 2020). | California Department of Water Resources Water Data Library PZ3-1BD 304659N1179899W001; https://wdl.water.ca.gov |
| *Hydrogeologic Gradient | Property: No data readily available. Vicinity/Regional: Toward the southwest. | |

* The groundwater flow direction and the depth to shallow, unconfined groundwater, if present, would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-property groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the property cannot be directly ascertained.

# 3.0 HISTORICAL USE INFORMATION

Terracon reviewed the following historical sources to develop a history of the previous uses of the Property and surrounding area, in order to help identify RECs associated with past uses. Copies of selected historical documents are included in Appendix C.

## 3.1 Historical Topographic Maps, Aerial Photographs, Sanborn Maps

Readily available historical USGS topographic maps, selected historical aerial photographs (at approximately 10 to 15 year intervals) and historical fire insurance maps produced by the Sanborn Map Company were reviewed to evaluate land development and obtain information concerning the history of development on and near the Property. Reviewed historical topographic maps, aerial photographs and Sanborn maps are summarized below.

Historical fire insurance maps produced by the Sanborn Map Company were requested from Environmental Data Resources, Inc. (EDR) to evaluate past uses and relevant characteristics of the Property and surrounding parcels. Based upon inquiries to the above-listed Sanborn provider, Sanborn maps were not available for the Property.

- Topographic map:
  - Pomona, California, published in **1894**, **1897**, **1898**, and **1904** (1:62,500)
  - Los Angeles, California, published in **1894**, and **1900** (1:62,500)
  - Pasadena, California, published in **1896**, and **1900** (1:62,500
  - El Monte, California, published in **1926**, photo revised in 1953 from **1952** aerial photographs; photo revised in 1966 from **1964** aerial photographs; photo revised in 1972 from **1972** aerial photographs; photo revised in 1981 from **1978** aerial photographs; published in **2012** (1: 24,000)
  - Puente, California, published in **1927** (1:24,000)
  - Baldwin Park, California, photo revised in 1953 from **1952** aerial photographs; photo revised in 1966 from **1964** aerial photographs; photo revised in 1972 from **1972** aerial photographs; photo revised in 1981 from **1978** aerial photographs; published in **2012** (1: 24,000)

- Aerial photograph:
  - USDA, **1938**, **1989**, **1990**, and **2002**, 1”=500’
  - USGS, **1948**, **1952**, and **1964**, 1”=500’
  - EDR Proprietary Brewster Pacific, **1970**, **1977**, and **1983**, 1”=500’
  - USGS/DOQQ, **1994**, 1”=500’
  - USDA/NAIP, **2005**, **2009**, **2012**, and **2016,** 1”=500’

**Historical Maps and Aerial Photographs**

| Direction | Description |
|---|---|
| Property | Undeveloped land or vacant land (1894-1904); an apparent dwelling or homestead with associated structures were visible (1938-1948); apparent structures or construction trailers were visible (1952-1970); a commercial building appeared developed on the northeastern portion of the Property (Broken Horn Saddlery Inc., Mario Silver shop) (1977); the dwelling appeared to have been removed (1983); a second commercial building appeared developed along the eastern boundary of the Property (1989-2016). |
| Northeast | Undeveloped land or vacant land (1894-1927); a road (Garvey Avenue) was visible further north (1938); the land appeared parceled with paths and apparent commercial structures (1948-1952); the structures appeared to have been removed, and the road appeared expanded into a freeway (I-10-San Bernardino Freeway) (1964-2012); redeveloped as a storm water basin (2016). |
| Southeast | Undeveloped land or vacant land (1894-1904); a creek (Walnut Creek) was depicted (1926-1938); several trails were visible south of the creek (1948-1952); the creek appeared to be channelized and redirected further south, and the land appeared developed with a drive-in theater (Edgewood Drive-in theatre at 13159 Bess Avenue) (1964-1983); the land appeared graded and vacant (1989); commercial development of hospital commenced (1990); developed with existing hospital (*Kaiser Permanente at 1011 Baldwin Boulevard*). |
| Southwest | Undeveloped land or vacant land (1894-1904); a road was depicted (1926-1927); a small structure was visible (1938-1948); an apparent dwelling or structure was visible (1952); additional structures were visible (1964-1990); the structures appeared to have been removed (1994); the land appeared graded and vacant (2002-2005); developed as an asphalt-paved parking lot (2009-2016). |
| Northwest | Undeveloped land or vacant land (1894-1927); the land appeared to have been parceled (1938); a road and two apparent dwellings were visible (1948); additional dwellings were visible (1952-2016). |

The above underlined and italicized facilities were identified in the regulatory database and are further discussed in Section 4.1.

## 3.2 Historical City Directories

The Los Angeles Directory Co. Publishers, R.L. Polk & Co Publishers, Pacific Telephone, Pacific Bell telephone, Pacific Bell White Pages, Cole Information Services, Haines & Company, and GTE city directories used in this study were made available through EDR (selected years reviewed: 1920 through 2014) and were reviewed at approximate five-year intervals, if readily available. Leorita Street listings were not available prior to 1980. The current street address for the Property was identified as 1022-1026 Leorita Street.

**Historical City Directories**

| Direction | Description |
|---|---|
| Property | **1022 Leorita Street**: No listing (1920-1975); Caplener Laura B, Mc Donald Kathy (1980); Broken Horn Saddlery Inc., Mario Silver shop, Saddle Repair Shop (1994-2014).<br>**1022 Leorita Street**: No listing (1920-2002); listed as "XXXX" (2003); No listing 2005-2014).<br>**1026 Leorita Street**: No listing (1920-1975); Broken Horn Saddlery Inc. (1980-1985); Trevors Leather Shop (1994-1999); listed as "XXXX" (2003); Charles Nuzzo, Marios Silver Shop, Superior Saddlery (2004); Sals Custom Saddles (2014). |
| Northeast | No listing (1920-2014) |
| Southeast | ***1011 Baldwin Park Boulevard***: No listing (1920 ) James Garrow (1957-1960); James Garrow, Walker Forest R (1966-1975); Baldwin Park Medical Offices and associated medical office listings (1995); listed as "XXXX" (2003); *Kaiser Foundation Hospital/Kaiser Permanente Baldwin Park*, and associated hospital listings (1999-2014).<br>**13159 Bess Avenue**: No listing (1920-1975); Edgewood Drive-in theatre (1980-1985); listed as "XXXX" (2003); No listing (2005-2014). |
| Southwest | ***1011 Baldwin Park Boulevard***: See Above (East)<br>**1012 Leorita Street**: No listing (1920-1982); Hilado Thos (1985); No listing (1990-2014). |
| Northwest | **1011 Leorita Street**: No listing (1920-1970); Residential listings (1975-2014).<br>**1013 Leorita Street**: No listing (1920-1970); Residential listings (1975-2014).<br>**1019 Leorita Street**: No listing (1920-1965); Residential listings (1966-2014). |

The above underlined and italicized facilities were identified in the regulatory database and are further discussed in Section 4.1.

## 3.3 Property Ownership

Based on information obtained from Environmental Data Resources (EDR), and Local Agency files, the Property, located at 1022-1026 Leorita Street, Baldwin Park, Los Angeles County, California 91706 is an approximately 1.54-acre tract of land, identified by Los Angeles Assessor ID Numbers (AINs): 8559-008-005 and -011; and is currently owned by Jerry Nuzzo/Nuzzo Family Limited Partnership.

## 3.4 Title Search

A title search was not included as part of the scope of services. Terracon understands that Kaiser Permanente has ordered a chain of title search for this Property. Terracon reviewed the Commitment for Title Insurance, prepared by First American Title Insurance Company, revision No. 3, dated March 16, 2021, and provided by Kaiser Permanente. Schedule B, Part II,

Exceptions, of the document states that, "We find no outstanding voluntary liens of record affecting subject property".

## 3.5 Environmental Liens and Activity and Use Limitations

The EDR regulatory database report included a review of both Federal and State Engineering Control (EC) and Institutional Control (IC) databases. Based on a review of the database report, the Property was not listed on the EC or IC databases. Please note that in addition to these federal and state listings, AULs can be recorded at the county and municipal level that may not be listed in the regulatory database report. Environmental lien and activity and use limitation records recorded against the Property were not provided by the client. Performance of a review of these records was not included as part of the scope of services.

## 3.6 Interviews Regarding Current and Historical Property Uses

The following individuals were interviewed regarding the current and historical use of the Property.

**Interviews**

| Interviewer | Name / Phone # | Title | Date/Time |
|---|---|---|---|
| Ms. Laura Hedman | Mr. David O'Keefe / (424) 405-3844 | Property Broker; First Vice President Investments, National Multi Housing Group | March 3, 2021 / During the Property visit |
| | Mr. Jerry Nuzzo / (714) 931-2123 | Property Owner | March 3, 2021 / During the Property visit |

Terracon interviewed Mr. David O'Keefe, Property Broker; First Vice President Investments, National Multi Housing Group, during the Property visit. Mr. O'Keefe stated that he has been familiar with the Property, for the past few months, due to the pending real estate transaction of the Property. Mr. O'Keefe stated that he wasn't aware of the Property's past use. Mr. O'Keefe indicated that he was not aware of any pending, threatened or past environmental litigation, proceedings or notices of possible violations of environmental laws or liability or potential environmental concerns in connection with the Property. Mr. O'Keefe was not aware of any USTs, ASTs, or wells associated with the Property.

Terracon interviewed Mr. Jerry Nuzzo, Property owner, at the time of the Property visit. Mr. Nuzzo stated that he and his family have owned the Property since the 1970's, and during that time, the Property has been utilized as a western apparel and supply retailer and is known as the largest western supply retailer west of the Mississippi River. Mr. Nuzzo stated that there was a small on-site silver shop, but that no chemicals were stored on the Property in connection with the silver shop. At the time of the visual reconnaissance, Terracon did not observe stored chemicals in connection with the silver shop (identified in the City Directories as Mario Silver Shop).

Additionally, Mr. Nuzzo stated that the Property had a history of manufacturing saddles, and had glue storage on the Property in the past, but that the glue was water-based, and that they stopped making saddles approximately 7 years ago. Terracon did not observe indication of glue storage at the time of the visual reconnaissance. Mr. Nuzzo, further stated that there were no USTs, ASTs, wells, or hazardous chemical storage on the Property. Mr. Nuzzo indicated that he was not aware of any pending, threatened or past environmental litigation, proceedings or notices of possible violations of environmental laws or liability or potential environmental concerns in connection with the Property.

### 3.7 Prior Report Review

Terracon requested the client provide any previous environmental reports they are aware of for the Property. Previous reports were not provided by the client to Terracon for review. However, Terracon conducted additional file reviews for this Phase I ESA for the San Gabriel Valley Area 2 Superfund Site through online databases, which are summarized in Section 4.1 below.

## 4.0 RECORDS REVIEW

Regulatory database information was provided by EDR, a contract information services company. The purpose of the records review was to identify RECs in connection with the Property. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated. The scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases.

In some of the following subsections, the words up-gradient, cross-gradient and down-gradient refer to the topographic gradient in relation to the Property. As stated previously, the groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the Property cannot be directly ascertained.

### 4.1 Federal and State/Tribal Databases

Listed below are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate Property boundaries. Database definition, descriptions, and the database search report are included in Appendix D.

**Federal Databases**

| Database | Description | Distance (miles) | Listings |
|---|---|---|---|
| CERCLIS | Comprehensive Environmental Response, Compensation, & Liability Information System | 0.5 | 0 |

| Database | Description | Distance (miles) | Listings |
|---|---|---|---|
| CERCLIS / NFRAP | Comprehensive Environmental Response, Compensation, & Liability Information System/No Further Remedial Action Planned | 0.5 | 0 |
| ERNS | Emergency Response Notification System | Property | 0 |
| IC / EC | Institutional Control/Engineering Control | Property | 0 |
| NPL | National Priorities List | 1.0 | 1 |
| NPL (Delisted) | National Priorities Delisted List | 0.5 | 0 |
| SEMS | Superfund Enterprise Management System | 0.5 | 1 |
| SEMS ARCHIVE | Superfund Enterprise Management System Archive | 0.5 | 0 |
| RCRA CORRACTS/ TSD | RCRA Corrective Action Activity | 1.0 | 2 |
| RCRA Generators | Resource Conservation and Recovery Act | Property and adjoining parcels | 4 |
| RCRA NonGen / NLR | RCRA – Non-Generators / No Longer Regulated | 0.25 | 12 |
| RCRA Non-CORRACTS/ TSD | RCRA Non-Corrective Action Activity | 0.5 | 0 |
| ROD | Records Of Decision | 1.0 | 1 |
| UXO | Unexploded Ordnance Site | 1.0 | 0 |

## State/Tribal Databases

| Database | Description | Distance (miles) | Listings |
|---|---|---|---|
| AOCONCERN | Area of Concern | 1.0 | 1 |
| AST | Aboveground Storage Tank Facilities | Property and adjoining parcels | 0 |
| Brownfields | Brownfields Sites | 0.5 | 0 |
| CA BOND EXP PLAN | Bond Expenditure Plan | 1.0 | 0 |
| CALSITES | CalSites Database | 1.0 | 0 |
| HIST CALSITES | Historical CalSites Database | 1.0 | 0 |
| CALSITES (AWP) | Active Annual Workplan Sites | 1.0 | 0 |
| Cortese | "Cortese" Hazardous Waste & Substances Sites List | 0.5 | 9 |

| Database | Description | Distance (miles) | Listings |
|---|---|---|---|
| CA FID UST | Facility Inventory Database | 0.25 | 3 |
| CA RESPONSE | State Response Site | 1.0 | 0 |
| CERS | California Environmental Reporting System (CERS) | Property | 0 |
| CERS TANKS | CERS Tanks | 0.25 | 3 |
| CERS HAZ WASTE | CERS HAZ Waste | 0.25 | 5 |
| CHMIRS | California Hazardous Material Incident Report System | Property | 0 |
| CIWQS | California Integrated Water Quality System | Property | 0 |
| CPS-SLIC | Statewide SLIC Cases (GEOTRACKER) | 0.5 | 0 |
| DRYCLEANERS | Cleaner Facilities | 0.25 | 0 |
| ECHO | Enforcement and Compliance History Information | Property | 0 |
| EDR Hist Auto | Environmental Data Resources Inc., Exclusive Historical Auto | 0.125 | 1 |
| EDR Hist Cleaner | Environmental Data Resources Inc., Exclusive Historical Cleaners | 0.125 | 0 |
| EMI | Emissions Inventory Data | Property | 0 |
| ENVIROSTOR | EnviroStor Database | 1.0 | 8 |
| FINDS | Facility Index System/Facility Registry System | Property | 0 |
| HIST CORTESE | Hazardous Waste & Substance Site List | 0.5 | 6 |
| HIST UST | Hazardous Substance Storage Container Database | 0.25 | 8 |
| HWP | EnviroStor Permitted Facilities Listing | 1.0 | 2 |
| IC/EC | Institutional and/or Engineering Controls Site | Property | 0 |
| LUST | Leaking Underground Storage Tanks | 0.5 | 10 |
| MANIFEST | Manifest information | 0.25 | 0 |
| NPDES | National Pollutant Discharge Elimination System (EPA) | Property | 0 |
| SLIC | Spills, Leaks, Investigation & Cleanup Cost Recovery Listing | 0.5 | 21 |
| SWEEPS UST | Statewide Environmental Evaluation and Planning System UST Listing | 0.25 | 4 |
| SWF/LF | Solid Waste Facilities/Landfills | 0.5 | 0 |
| UST | Underground Storage Tanks | Property and adjoining parcels | 5 |
| VCP | Voluntary Cleanup Program Sites | 0.5 | 0 |
| WIP | Well Investigation Program Case List | 0.25 | 7 |

In addition to the above ASTM-required listings, Terracon reviewed other federal, state, local, and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in Appendix D.

The Property was not listed in the environmental regulatory database report.

The following table summarizes the Property-specific information provided by the database and/or gathered by this office for identified facilities. Facilities within 500 feet of the Property are listed in order of proximity to the Property. Additional discussion for selected facilities follows the summary table.

**Listed Facilities**

| Facility Name and Location | Estimated Distance / Direction/Gradient | Database Listings | Is a REC, CREC, or HREC to the Property |
|---|---|---|---|
| San Gabriel Valley (Area 2) Sunset & San Bernardino Freeway | *Encompassed the Property* | NPL, SEMS, US ENG CONTROLS, ROD, RCRA NonGen/NLR, AOCONCERN | REC, discussed below |
| Kaiser Permanente (Baldwin Park) 1011 Baldwin Park Boulevard | Adjacent / East and South / Down- to cross-gradient | UST, RCRA-LQG, RCRA NonGen/NLR CERS HAZ WASTE, CERS TANKS, EMI, CERS | No, discussed further below. |
| Baldwin Park (City Yard) 13135 Garvey Avenue | 430 feet / Northeast / Up-gradient | UST, HIST UST, LUST, CERS HAZ WASTE, RCRA-SQG | No, based on file review, and distance to the Property |
| Katherine and Jean Ku | 450 feet / Southwest / Down-gradient | RCRA NonGen/NLR | No, based on file review, distance, and topographic gradient relative to the Property |
| R & M Service | 470 feet / Northwest / Cross-gradient | CERS HAZ WASTE, HIST UST, UST, EDR HIST AUTO, SWEEPS UST, CA FID UST | No, based on file review, distance, and topographic gradient relative to the Property |
| Ali's Service | | | |
| Sell H A Texaco | | | |
| Tek N Sav, Inc 3026 North Frazier Street | | | |

San Gabriel Valley-Area 2 / Baldwin Park Operable Unit Superfund Site (Sunset & San Bernardino Freeway)

The San Gabriel Valley-Area 2 (also known and identified as: San Gabriel Valley Area 2 Superfund Site and Baldwin Park OU) was identified as encompassing the Property and surrounding areas, was identified in the National Priorities List (NPL), Comprehensive

Environmental Response, Compensation, & Liability Information System/Superfund Enterprise Management System (CERCLIS/SEMS), US Engineering Control (EC), Records of Decision (ROD), Non Generator / No Longer Regulated (RCRA- NonGen/NLR), and Area of Concern (AOCONCERN) regulatory databases. The databases indicated the Property is encompassed by an underlying chlorinated solvent groundwater plume (San Gabriel Valley-Area 2), which is also known as the Baldwin Park Operable Unit (OU). The primary contaminants in groundwater are trichloroethene (TCE), tetrachloroethene (PCE), carbon tetrachloride, perchlorate, n-nitrosodimethylamine (NDMA), and 1,4-dioxane, which have been mapped beneath the Property at concentrations that exceed Maximum Contaminant Levels (MCLs) and/or other regulatory levels.

The Baldwin Park OU is one of eight OUs identified by USEPA for the San Gabriel Valley Superfund Sites. Contaminates were first discovered in 1979 for the groundwater basin. In March 1994, the USEPA issued the Interim Record of Decision (IROD) for the Baldwin Park OU which included pumping and treating impacted groundwater. USEPA issued an Explanation of Significant Differences (ESD) to the IROD in May 1999 which amended the interim remedy to include treatment for perchlorate, NDMA, and 1,4-dioxane. The objective of the IROD and ESD is to prevent future increases in, and begin to reduce, concentrations of groundwater contaminants by limiting further migration of contaminated groundwater into clean or less contaminated areas. The IROD specifies extraction of contaminated groundwater at the downgradient end of two broad areas of the plume, at locations and rates sufficient to limit the movement of contaminated groundwater through each subarea during all anticipated groundwater flow conditions. In February 2002, the USEPA issued a Unilateral Administrative Order for Remedial Design/Remediation Action to 20 respondents. The primary contributors, as determined and identified by the USEPA are:

- Aerojet General Corporation, 1100 W. Hollyvale Street in Azusa, CA
- Huffy Corporation, 1120 W. Foothill Boulevard, Azusa, CA
- Oil &Solvent Process Co. (Waste Management), 1704 W. First Street Azusa, CA
- Wynn Oil Company, 1151 W. 5th Street in Azusa, California

In March 2002, eight PRPs (Aerojet-General Corporation, Azusa Land Reclamation Co., Inc., Fairchild Holding Corporation, Hartwell Corporation, Huffy Corporation, Oil & Solvent Process Company, Reichhold, Inc., and Wynn Oil Company) and seven local water agencies reached a third-party agreement (BPOU project agreement) that provided a means of implementing the remedy and commits the parties to implement a joint cleanup and water supply project.

The Baldwin Park OU remedy is a large-scale groundwater extraction and treatment system, consisting of four pump and treat "subprojects" (each ranging in capacity from 2,500 to 7,800 gallons per minute [gpm]) with a combined treatment capacity of 26,000 gpm. The subprojects were built between 2000 and 2006, and are operated by local water utilities, supplying treated water to local homes and businesses. The systems consist of groundwater extraction wells, monitoring wells, pipelines, and multiple water treatment processes for removal of contaminants.

The closest extraction well to the Property is identified as wells SGVWC B25A/B, located approximately 550 west of the site. From 2002 to 2012, more than 69 billion gallons of groundwater were treated and 59,000 pounds of contaminate mass was removed from the water. As of 2019, as reported in Geosyntec Consultants' 2019 Annual Performance Evaluation Report – Volume 1, dated April 30, 2020 (2019 Annual Report) the remedial efforts treated over 37 million gallons of water per day and removed over 5,000 pounds of contamination in 2019. Since 2004, the cumulative mass removed is reported to be more than 94,000 pounds. Previously identified potential responsible parties (PRPs) are funding a majority of the work in compliance with a June 2000 EPA Order.

Based on documents reviewed from the California Department of Water Resources, and the visual reconnaissance conducted on March 3, 2021, the closet groundwater monitoring (piezometer) well (Water Data Library ID No. PZ3-1BD; 304659N1179899W001, was observed approximately 390 feet west of the Property (field verified as near the curbside gutter along the eastern side of Bess Avenue at Dalewood Street), and depth to groundwater was measured at 129.08 feet below ground surface (bgs) on July 28, 2020. Additionally, two municipal productions wells (also extraction wells) identified as well Nos. SGVWC B25A and B25B, located approximately 550 feet to the west of the site were observed on the southwestern corner of Bess Avenue and Frazier Street (Dalewood Street), within a gated San Gabriel Valley Water District facility. Water extracted from these wells is piped to a water treatment facility to remove COCs. Water quality data obtained from the State Water Resources Control Board's online GeoTracker Database for well No. SGVWC B25A indicates the following current (December 1, 2020) maximum concentrations in groundwater, measured in micrograms per liter (µg/L), as summarized in the table below.

| Constituent | CAS No. | Current Groundwater Concentration (µg/L) | Groundwater Screening Levels * (µg/L) | | Groundwater Vapor Intrusion ESL (µg/L) | | Concentration Trend |
|---|---|---|---|---|---|---|---|
| | | | MCL | Tapwater | Residential ESL | Commercial ESL | |
| 1,4-Dioxane | 123-91-1 | **2.8** | -- | *0.38* | *1800* | *8000* | Increasing |
| Carbon Tetrachloride | 56-23-5 | **2.3** | *0.5* | *0.1* | *0.4* | *1.9* | Decreasing |
| NDMA | 62-75-9 | **0.069** | -- | -- | -- | -- | Decreasing |
| PCE | 127-18-4 | **35** | *5.0* | *0.06* | *0.64* | *2.8* | Increasing |
| Perchlorate | 7790-98-9 | **53** | *6.0* | -- | -- | -- | Increasing |
| TCE | 79-01-6 | **81** | *5.0* | *0.49* | *1.2* | *7.5* | Increasing |

*MCL – Federal Maximum Contaminant Level, USEPA online cited March 9, 2021.
*Tapwater – San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), Environmental Screening Levels (ESLs), 2019 (Rev.2), Tapwater Cancer Risk, Direct Exposure Human Health Risk Levels, (Table GW-1).
Groundwater Vapor Intrusion ESL – SFBRWQCB, ESLs 2019 (Rev.2), Groundwater Vapor Intrusion Human Health Risk Levels, (Table GW-3).

Trend – Based on graphs produced by the GeoTracker database and 2019 Annual Performance Evaluation Report – Volume 1 Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites. Los Angeles County, California Prepared by Geosyntec consultants and ERM, dated April 30, 2020.

The current concentrations exceed the Maximum Contaminant Level (MCL) and/or the groundwater vapor intrusion Environmental Screening Level (ESL), except for NDMA and 1,4-dioxane, which do not have established MCLs. The concentration of four of the primary COCs are increasing. The 2019 Annual Report concluded that the concentration trends are consistent with plume migration. Vapor assessment data were not identified in the readily available documents. Based on our review of the regulatory data and historical information, the impacted groundwater represents a REC to the Property. See Section 7.16 regarding potential Vapor Encroachment Condition (VEC) related to the REC.

Kaiser Permanente Baldwin Park (1101 Baldwin Park Boulevard))

Kaiser Permanente, identified on the adjacent east and south of the Property, and in a topographic down- to cross-gradient position relative to the Property, was listed in the California Environmental Reporting System (CERS), CERS Hazardous Waste (CERS HAZ WASTE), CERS Tanks, Underground Storage Tank (UST), Resource Conservation and Recovery Act-Large Quantity Generator (RCRA-LQG), RCRA- NonGen/NLR, and Emissions Inventory Data (EMI) regulatory databases.

Based on a review of the database listing, the facility is identified as a hospital facility/medical center, and permitted by the Los Angeles County/Los Angeles County Fire Department to operate an UST. The facility is identified with Los Angeles County Facility ID No. 20803, and Los Angeles County Fire department Facility ID No. LACoFA0004865. The facility is further identified with EPA ID No. CAL000356334, as a large quantity generator of waste streams characterized as ignitable waste; corrosive waste; reactive waste; waste containing arsenic, barium, chromium, mercury, silver, lindane, and chloroform; and nonhalogenated solvents. Based on the facility's use as a hospital, the diesel UST is used to fuel the facility's emergency generator equipment. Based on documents obtained and the visual reconnaissance, the UST equipment is located on the northeastern portion of the medical center complex (beyond the parking structure), greater than 800 feet east of the Property boundary. Based on the facility's topographic cross-gradient position and distance (800 feet) relative to the Property, the Kaiser Permanente hospital facility listings do not represent a REC to the Property.

The remaining facilities listed in the database report do not represent RECs to the Property at this time based upon regulatory status, apparent topographic gradient, and/or distance from the Property.

Unmapped facilities are those that do not contain sufficient address or location information to evaluate the facility listing locations relative to the Property. The report listed two facilities in the unmapped section. Determining the location of unmapped facilities is beyond the scope of this assessment; however, none of these facilities were identified as the Property or adjacent properties. These facilities are listed in the database report in Appendix D.

## 4.2 Local Agency Inquiries

| Agency Contacted/ Contact Method | Response |
|---|---|
| Los Angeles County of Public Works<br>Online search https://dpw.lacounty.gov/bsd/bpv/<br>https://dpw.lacounty.gov/epd/CleanLA/OpenFileReview.aspx | Based on the LAC Public Works records search, no records were found for the Property. |
| Los Angeles County Sanitation District (LACSD) /<br>by E-mail: records_administrator@lacsd.org<br>Online Form:<br>https://www.lacsd.org/civicax/filebank | At the issuance of this report, a response had not been received from the LACSD, for the Property. |
| LA County Fire Department<br>Online Form:<br>https://fire.lacounty.gov/public-records-requests | Based on the LA County Fire Dept records search, no records were found associated with the Property address at 1022 Leorita Street.<br>At the issuance of this report, a response had not been received from the LACFD on 1026 Leorita Street. |
| South Coast Air Quality Management District (SCAQMD) / Online portal: http://www.aqmd.gov/nav/online-services/public-records | According to Mr. Andrew Sabino, no records were found for the Property. |
| Los Angeles Regional Water Quality Control Board /<br>by e-mail rb4-publicrecords@waterboards.ca.gov | According to Ms. Youna Choi, no records were found for the Property. |
| State Water Resources Control Board; GeoTracker online portal:<br>http://geotracker.waterboards.ca.gov/ | An online records search of GeoTracker found no records associated with the Property. |
| Department of Toxic Substances Control (DTSC) / Email: pubreqact@dtsc.ca.gov<br>Chatsworth DTSC Local Office / Email: ChatsworthFileRoom@dtsc.ca.gov<br>DTSC online EnviroStor Database, www.envirostor.dtsc.ca.gov<br>DTSC online Hazardous Waste Tracking System (HWTS): https://hwts.dtsc.ca.gov/search | According to the DTSC, no records were found associated with the Property.<br>Based on a review of the DTSC online EnviroStor and HWTS Databases, no records were found associated with the Property. |
| Baldwin Park City Clerk / Baldwin Park Building & Safety Division; City Fire Department<br>Email at www.baldwinpark.com | At the issuance of this report, a response had not been received from the City of Baldwin Park. |
| CalEPA Regulated Site Portal<br>https://siteportal.calepa.ca.gov/nsite/map/help | Based on the CalEPA Regulated Site Portal search, no records were found associated with the Property. |

Indications of RECs were not identified in the Local Agency Records for the Property. However, the review of DTSC's EnviroStor Database identified the Baldwin Park OU groundwater plume (identified as San Gabriel Valley-Area 2 in regulatory database), which is a REC to the Property as detailed above in Section 4.1, and is also identified as a potential Vapor Encroachment Condition (VEC) as detailed below in Section 7.16.

### 4.3 Local Area Knowledge

Based on a review of the California Geologic Energy Management Division (CalGEM), https://www.conservation.ca.gov/calgem (formerly the California Department of Conservation Division of Oil, Gas, and Geothermal Resource Well Finder (DOGGR), there are no active or plugged oil production wells located at the Property or adjoining properties.

## 5.0 SITE RECONNAISSANCE

### 5.1 General Property Information

Information contained in this section is based on a visual reconnaissance conducted while walking through the Property and the accessible interior areas of structures, if any, located on the Property. The Property and adjoining properties are depicted on the Property Diagram, which is included in Exhibit 2 of Appendix A. Photo documentation of the Property at the time of the visual reconnaissance is provided in Appendix B. Credentials of the individuals planning and conducting the Property visit are included in Appendix E.

**General Site Information**

| **Site Reconnaissance** | | | | |
|---|---|---|---|---|
| Field Personnel | Ms. Laura S. Hedman | | | |
| Reconnaissance Date | March 3, 2021 | | | |
| Weather Conditions | Cloudy and rainy, 55° F | | | |
| Site Contact/Title | Mr. David O'Keefe / Property Broker | | | |
| **Building Description** | | | | |
| **Building Identification** | **Building Use** | **Approx. Construction Date** | **Number of Stories** | **Approx. Size (ft²)** |
| 1022 Leorita Street | Western apparel and supply retailer | 1986 | 1 with mezzanine | 13,440 |
| 1026 Leorita Street | Western apparel and supply storage | 1976 | 1 | 9,600 |
| **Site Utilities** | | | | |
| Drinking Water | San Gabriel Valley Water Company | | | |

| Site Reconnaissance | |
|---|---|
| Wastewater | San Gabriel Valley Water Company |
| Electric | Southern California Electric (SCE) |
| Natural Gas | Southern California Gas Company |

## 5.2 Overview of Current Site Occupants and Operations

The Property is located at 1022-1026 Leorita Street, in Baldwin Park, Los Angeles County, California 91706, and consists of two contiguous parcels of land, totaling approximately 1.54-acres, and identified by Los Angeles County Assessor Identification Numbers (AINs): 8559-008-005 and -011. The Property is improved with two commercial buildings: one approximately 9,600-square-foot, and the other approximately 13,440-square-foot, with a mezzanine level. The Property is further improved with asphalt-paved parking lot, landscaped areas, and utilities. During the visual reconnaissance, the Property was observed to be occupied by Broken Horn Saddlery, a western apparel and supply retailer.

## 5.3 Property Observations

The following table summarizes Property observations and interviews. Affirmative responses (designated by an "X") are discussed in more detail following the table.

**Property Characteristics**

| Category | Item or Feature | Observed or Identified |
|---|---|---|
| Property Operations, Processes, and Equipment | Emergency generators | |
| | Elevators | |
| | Air compressors | |
| | Hydraulic lifts | |
| | Dry cleaning | |
| | Photo processing | |
| | Ventilation hoods and/or incinerators | |
| | Waste treatment systems and/or water treatment systems | |
| | Heating and/or cooling systems | X |
| | Paint booths | |
| | Sub-grade mechanic pits | |
| | Wash-down areas or carwashes | |
| | Pesticide/herbicide production or storage | |
| | Printing operations | |

| Category | Item or Feature | Observed or Identified |
|---|---|---|
| | Metal finishing (e.g., electroplating, chrome plating, galvanizing, etc.) | |
| | Salvage operations | |
| | Oil, gas or mineral production | |
| | Other processes or equipment | X |
| Aboveground Chemical or Waste Storage | Aboveground storage tanks | |
| | Drums, barrels and/or containers ≥ 5 gallons | X |
| | MSDS or SDS | |
| Underground Chemical or Waste Storage, Drainage or Collection Systems | Underground storage tanks or ancillary UST equipment | |
| | Sumps, cisterns, French drains, catch basins and/or dry wells | X |
| | Grease traps | |
| | Septic tanks and/or leach fields | |
| | Oil/water separators, clarifiers, sand traps, triple traps, interceptors | |
| | Pipeline markers | |
| | Interior floor drains | |
| Electrical Transformers/ PCBs | Transformers and/or capacitors | X |
| | Other equipment | |
| Releases or Potential Releases | Stressed vegetation | |
| | Stained soil | |
| | Stained pavement or similar surface | |
| | Leachate and/or waste seeps | |
| | Trash, debris and/or other waste materials | |
| | Dumping or disposal areas | X |
| | Construction/demolition debris and/or dumped fill dirt | |
| | Surface water discoloration, odor, sheen, and/or free floating product | |
| | Strong, pungent or noxious odors | |
| | Exterior pipe discharges and/or other effluent discharges | |
| Other Notable Property Features | Surface water bodies | |
| | Quarries or pits | |
| | Wastewater lagoons | |
| | Wells | |

## Site Operations, Processes, and Equipment

Heating and/or cooling systems
Terracon observed roof-mounted HVAC systems, on the building; 6 associated with 1026 Leorita Street and 9 associated with 1022 Leorita Street. Based on the location of HVAC units and visual observations of the HVAC systems, indications of RECs were not observed.

Other processes or equipment
Terracon observed a propane-powered forklift, located in the storage shed, on the central portion of the property (1022 Leorita Street). Based on visual observations, the forklift does not appear to represent a REC to the Property.

### Aboveground Chemical or Waste Storage

Drums, barrels, and/or containers ≥ 5 gallons
During the visual reconnaissance, Terracon observed four propane canisters for forklift use, located on the central portion of the Property. Based on visual observations, the propane canisters do not constitute a REC to the Property.

## Underground Chemical or Waste Storage, Drainage or Collection Systems

Sumps, cisterns, French drains, catch basins and/or dry wells
During the visual reconnaissance, Terracon observed two storm drains; one located near the Property entrance, at 1026 Leorita Street, and the other located on the southwestern perimeter of the Property. No evidence of chemical waste disposal, noxious odors, or other indications of releases were observed near the vicinity of the drains. Based on visual observations, the drain do not constitute a REC to the Property.

## Electrical Transformers/ PCBs

During Terracon's Property visit, one pad-mounted transformers, owned and serviced by Southern California Edison (SCE), was observed on the central portion of the Property; however, no information with regard to PCB content of the transformer fluids was observed on the transformer. Transformers contain mineral oil which may contain minor amounts of PCB and could be considered "PCB contaminated" (PCB content of 50-500 ppm).

Southern California Edison (SCE) maintains responsibility for the transformer, and if the transformer was "PCB contaminated," the utility company is not required to replace the transformer fluids until a release is identified. However, no evidence of current or prior release was observed in the vicinity of the electrical equipment during the visual reconnaissance. Based on visual observations, the pad-mounted transformer does not constitute a REC in connection with the Property at this time.

### Releases or Potential Releases

Dumping or disposal areas

Two solid waste disposal bins were observed on the central portion of the Property. No evidence of chemical waste disposal, noxious odors, or other indications of releases were observed near the vicinity of the solid waste disposal bins. Based on visual observations, the solid waste disposal bins do not constitute a REC to the Property.

## 6.0 ADJOINING PROPERTY RECONNAISSANCE

Visual observations of adjoining properties (from property boundaries) are summarized below.

**Adjoining Properties**

| Direction | Description |
|---|---|
| Northeast | The parcels located on the adjacent north consisted of a storm water basin, followed by Dalewood Street, and then by the Interstate 10 Freeway (I-10). |
| Southeast | The parcels located on the adjacent east consisted of Kaiser Permanente parking garage at 1102 Baldwin Park Boulevard. |
| Southwest | The parcels located on the adjacent east consisted of Kaiser Permanente parking garage at 1102 Baldwin Park Boulevard. |
| Northwest | Leorita Street abuts the Property to the west, followed by single-family residences. |

RECs were not observed with the adjoining parcels.

## 7.0 ADDITIONAL SERVICES

Although not required by the ASTM 1527-13 standard, based on Kaiser Permanente's Phase I ESA Requirements, Terracon has evaluated non-scope services and business environmental risk considerations (BER) for the Property. Kaiser Permanente has developed real estate environmental risk ratings for discussion and evaluation of environmental risks associated with real estate property transactions (BPP RE.04.002 Real Estate Environmental Risk Rating Details). Terracon has applied these risk ratings where possible, to provide conclusions/opinions on the additional services we performed. It is our understanding that the opinions provided in the below table will serve as guidelines to Kaiser Permanente to assess and evaluate environmental risks associated with the real estate transaction. The risk ratings are defined as follows and are referenced in our assessment.

- Catastrophic: Environmental Risk poses immediate danger to human health or the environment and/or the Environmental Risk cannot be adequately mitigated and will likely subject Kaiser Permanente to potentially significant enforcement action or litigation.

- Significant: Environmental impact will require extended remediation of contamination and/or there is a risk of exposure.
- Moderate: Identified environmental risks that can be mitigated with the addition of engineering controls and/or limited remediation of contamination will be required on the Property.
- Limited: Identified environmental risks that can be managed. Asbestos, lead or hazardous materials can be abated prior to occupancy. Asbestos, lead or hazardous materials to be managed in place.
- Minimal: Did not identify environmental risks that require further assessment or action.
- Unknown: Environmental risks identified that require additional assessment as part of due diligence.

## 7.1 Asbestos-Containing Building Materials (ACM)

Based on the results of the Limited Hazardous Materials Survey, conducted concurrently with the Phase I ESA, asbestos was detected in at least ten (10) homogeneous areas, and consisted of roof mastic, roof paint, roof coating on pipes, HVAC duct mastic, wallboard and joint compound, carpet glue, vinyl tile and tile mastic, and restroom sink undercoating. ACM is further discussed in the Limited Hazardous Materials Survey Report, which will be presented under a separate cover (Terracon Project No. 6021P020). Based on the presence of ACM, this is considered a limited risk.

## 7.2 Radon

Terracon reviewed regional data published by the EPA (http://www.epa.gov/radon/zonemap.html) on average indoor radon concentrations in the vicinity of the Property. The Property is located in Zone 2, which has an EPA-defined moderate potential for radon and is considered to have radon in concentrations between 2 and 4 (pCi/L). To determine property-specific radon levels a radon survey would have to be conducted. Based on this information, the risk associated with radon is considered a minimal risk.

## 7.3 Lead-Based Paint (LBP)

Based on the results of the Limited Hazardous Materials Survey, conducted concurrently with the Phase I ESA, lead was not detected in the samples collected and analyzed, with the exception of elevated concentrations detected in lead samples PB-01, PB-03, PB-04, and PB-10. LBP is further discussed in the Limited Hazardous Materials Survey Report, which will be presented under a separate cover (Terracon Project No. 6021P020). Based on this information, the risk associated with lead-based paint is considered limited.

## 7.4 Polychlorinated Biphenyls (PCBs)

Based on the results of the Limited Hazardous Materials Survey, conducted concurrently with the Phase I ESA, Suspect PCB-containing materials were not observed for the building addressed as

1026 Leorita Street. Based on the known construction date of 1026 Leorita Street (1976), it is possible that that original fluorescent light fixtures throughout the sampled area may contain PCBs in the associated ballasts. PCB sampling was not conducted for the building at 1022 Leorita Street based on the construction date of 1986.

PCB-containing materials are further discussed in the Limited Hazardous Materials Survey Report, which will be presented under a separate cover (Terracon Project No. 6021P020). Based on this information, the risk associated with PCBs is considered minimal.

## 7.5 Lead in Drinking Water

Our review of the Valley County Water District 2019 Consume Confidence Report, at https://www.vcwd.org/ArchiveCenter/ViewFile/Item/76, indicated that in 2019, 90% of residences were sampled and lead was not detected above the regulatory action level of 0.015 parts per million. Based on the results of the 2019 Water Quality Report, the risk for lead in drinking water is considered a minimal risk.

## 7.6 Wetlands and Surface Waters

Based on review of the US Fish and Wildlife Service National Wetland Inventory maps (https://www.fws.gov/wetlands/data/Mapper.html), registered wetlands are not present at the Property, and the risk associated with wetlands and surface waters appears to be a minimal risk.

Our review of the above resources did not identify mapped wetlands or jurisdictional waters of the U.S. on the Property. Please note this Limited Wetland Review does not constitute a formal determination and/or delineation of a potentially jurisdictional wetland, which is based on three criteria, wetland hydrology, hydrophytic vegetation, and hydric soils, as set forth in 1987 Corps of Engineers Wetland Delineation Manual and further supported by the applicable Regional Supplements to the Corps of Engineers Wetland Delineation Manual.

To determine whether regulated wetlands may be present on the Property, a wetland delineation must be performed and submitted to the U.S. Army Corps of Engineers for a jurisdictional determination, as required by Section 404 of the Clean Water Act.

## 7.7 Environmental Regulatory Compliance

The Property is not identified in the regulatory database. Based on observations made during the Property reconnaissance and reviewed regulatory records, the risk associated with environmental regulatory compliance associated with current Property operations appears minimal.

## 7.8 Cultural and Historic Resources

A limited literature and agency file review was conducted to identify the potential occurrence of cultural resources on the Property. Cultural resources are comprised of historic properties and archaeological artifacts. Terracon reviewed the National Register of Historic Places for the

Property address. Cultural resources or structures of historical significance were not documented for the Property on the National Register of Historic Places. Reported or readily apparent cultural and historic resource issues affecting Kaiser Permanente's proposed occupancy were not identified and is considered a minimal risk.

## 7.9 Industrial Hygiene

During the Property visit, industrial hygiene-related conditions, such as readily obvious dust and additional noxious odors, were not identified. Based on observations made during the Property reconnaissance, the risk appears minimal.

## 7.10 Health and Safety

Issues regarding Health and Safety were not reported during the Property inspection, therefore issues regarding the risk appears minimal.

## 7.11 Ecological Resources

Since the Property has been developed (building and paved parking) since 1986 and the commercial nature of the surrounding land use, Ecological Resources risks are a minimal concern for continued occupancy of the Property.

## 7.12 Threatened, Endangered and Other Protected Species

Terracon reviewed the threatened and engendered species identified in the United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) database. Various threatened and endangered (T&E) species were identified in the area of Baldwin Park in which the Property is located. Reported or readily apparent T&E species issues affecting Kaiser Permanente's proposed occupancy were not identified.

However, since the Property has been developed (building and paved parking) since the 1986, and the commercial nature of the surrounding land use, threatened and endangered species are a minimal concern for continued occupancy of the Property.

## 7.13 Indoor Air Quality

During the Property visit, issues regarding Indoor Air Quality, such as dust or noxious odors associated with the current use of the Property, were not noted or reported; however, based on the historical and regulatory records review and EDR Database search radii, the San Gabriel Valley-Area 2 Superfund site, contaminated groundwater area-wide plume, represents a REC and VEC to the Property.

## 7.14 Biological Agents

Biological agents are defined herein as bloodborne pathogens and biomedical waste. At the time of the Property reconnaissance, the Property consisted of a western apparel and supply retailer. Biomedical waste and materials containing blood borne pathogens were not observed on the Property during the Property reconnaissance. Therefore, the risk associated with biological agents appears minimal.

## 7.15 Mold/Water Intrusion

Based on observations during the Property visit, several areas of water-stained surfaces were observed in the following locations:

- 1022 Leorita Street: water stained ceiling tiles were observed on the first floor of the harness room, within two of the office spaces (on the first floor), and on the second floor/mezzanine level above the north stairs, above the south open area, and within the retail center area.
- 1026 Leorita Street: water stained ceiling tiles were observed within the main floor area (on the northern and eastern sections), and on the acoustical ceiling spray. Delaminating acoustical ceiling spray, was observed on the upper floor, within the open areas. Additionally, water damaged surfaces were observed on at the base of the walls (delaminating paint) within the main floor open area, the upper floor area, and the lower floor area.

Based on visual observations at the time of the assessment, an active water intrusion event was not observed, and the potential for mold/water intrusion issues appears to be a limited risk.

## 7.16 Limited Vapor Intrusion Assessment

Pursuant to the client's request, and in conjunction with the ESA, Terracon conducted a limited Tier I Vapor Encroachment Screening. This assessment was conducted in accordance with ASTM E 2600-15. This assessment was based on information collected in conjunction with the ESA, including existing/planned use of the Property, type of structures located on the Property, surrounding property description, user information, regulatory file reviews, historical and physical records review, regulatory database review, manmade or natural conduits, as applicable, and a visual noninvasive reconnaissance of the Property and adjoining properties, and did not include subsurface investigations to evaluate soil, soil gas, or groundwater quality beyond the data collected for the ESA.

Based on a review of the regulatory database listings, the Property is encompassed by an underlying chlorinated solvent groundwater plume (San Gabriel Valley-Area 2, Baldwin Park OU), identified in the NPL, CERCLIS/SEMS, EC, ROD, and Area of Concern (AOCONCERN) regulatory databases. The plume, also known as the Baldwin Park Operable Unit (OU), contains trichloroethene (TCE), tetrachloroethene (PCE), carbon tetrachloride, perchlorate, n-

nitrosodimethylamine (NDMA), and 1,4-dioxane impacted groundwater, which have been mapped beneath the Property at concentrations that exceed Maximum Contaminant Levels (MCLs) and/or other regulatory levels as detailed in Section 4.1. Other than NDMA and perchlorate, the remaining constituents are considered sufficiently volatile to enter the vapor phase from groundwater and are listed in Table X6.1 Chemicals of Potential Concern for ASTM E 2600-15.

The primary volatile constituents of concern include TCE, PCE, carbon tetrachloride, and 1,4-dioxane, which are classified as carcinogens or possible carcinogens. These constituents are considered sufficiently volatile to enter the vapor phase from groundwater, which represents a potential Vapor Encroachment Condition (VEC) and REC. Based on this information and lack of on-site data, the risk associated with VEC is considered unknown.

## 7.17 Limited Sea Level Rise Assessment

Based on a review of the Office for Coastal Management's Sea Level Rise and Coastal Flooding Impacts Map (https://coast.noaa.gov/slr/), the Property is located in an area with no sea level rise predicted or high tide areas using the National Oceanic and Atmospheric (NOAA) mapping tool and risk is considered minimal.

## 7.18 FEMA Flood Map Review

Terracon reviewed the Federal Emergency Management Agency (FEMA) Flood Map Service Center website regarding potential flooding issues. According to the FEMA Flood Map Service Center, the Property is located within an area of minimal flood hazard (Zone X, outside the 500-year flood plain). Additionally, Terracon reviewed the Los Angeles County Comprehensive Floodplain Management Plan Flood Zone Maps, and based on the Los Angeles County map, the Property is outside the 0.2% annual chance of flood zone. Based on the reviewed information, the risk associated with historical flooding appears to be minimal.

## 7.19 Historical Agricultural Activities

During the review of historical information and Property reconnaissance, Terracon did not identify information that would indicate historical agricultural activities on the Property. Additionally, the Property and surrounding area have been redeveloped, with no database recorded indication of historical agricultural uses. Therefore, the risk associated with historical agriculture activities appears minimal.

## 7.20 Environmental Risk Summary

The following summarizes Terracon's findings and conclusions for the Property with regard the above additional non-scope services. We have provided conclusions and risk ratings in accordance with Kaiser Permanente's definitions and guidelines.

| Additional Services | Conclusion | Risk Rating |
|---|---|---|
| Asbestos-containing building materials | Refer to the Limited Hazardous Materials Survey Report* presented under separate cover. | Limited* |
| Radon | EPA Zone 2. | Minimal |
| Lead-based Paint | Refer to the Limited Hazardous Materials Survey Report* presented under separate cover. | Minimal* |
| Polychlorinated Biphenyl's (PCBs) | Refer to the Limited Hazardous Materials Survey Report* presented under separate cover. | Minimal* |
| Lead in drinking water | Document review of lead concentrations in municipal drinking water were below the lead action level in the collected samples. | Minimal |
| Wetlands and surface waters | Document review did not identify mapped wetlands or jurisdictional waters of the U.S. on the Property. | Minimal |
| Environmental regulatory compliance | Outstanding violations were not noted in records provided by the regulatory agencies. | Minimal |
| Cultural and historical resources | Building constructed in 1986; registry review did not indicate historic structures for the address. Property is leased for office use. | Minimal |
| Industrial hygiene | Issues not noted or reported. | Minimal |
| Health and safety | Issues not noted or reported. | Minimal |
| Ecological resources | Building constructed in 1986; reported or readily apparent ecological resource issues affecting proposed Property occupancy were not identified. | Minimal |
| Threatened, endangered and other protected Species | Building constructed in 1986; reported or readily apparent T&E issues affecting proposed Property occupancy were not identified. | Minimal |
| Indoor air quality | Issues not noted or reported | Minimal |
| Biological agents | Biomedical waste and materials containing blood borne pathogens were not observed stored on property. Property was used for retail western apparel and supplies. | Minimal |
| Mold/Water Intrusion | Based on observations during the Property visit, several areas of water-stained/damaged surfaces were apparent (refer to the Limited Hazardous Materials Survey Report* presented under separate cover). An active water intrusion event was not observed. | Limited |
| Limited Vapor Intrusion Assessment | Database and Property setting review identified vapor intrusion issues. | Unknown |
| Limited Sea Level Rise Assessment | According to NOAA database, Property is outside the highest estimated sea level rise of 10 feet above mean sea level. | Minimal |

| Additional Services | Conclusion | Risk Rating |
|---|---|---|
| FEMA Flood Map Review | Property is located within a designated minimal flood zone, and outside a 0.2% flood zone area. | Minimal |
| Historical Agricultural Use | Terracon did not identify information that would indicate the extensive use, storage, or manufacturing of pesticides or herbicides on the Property. | Minimal |

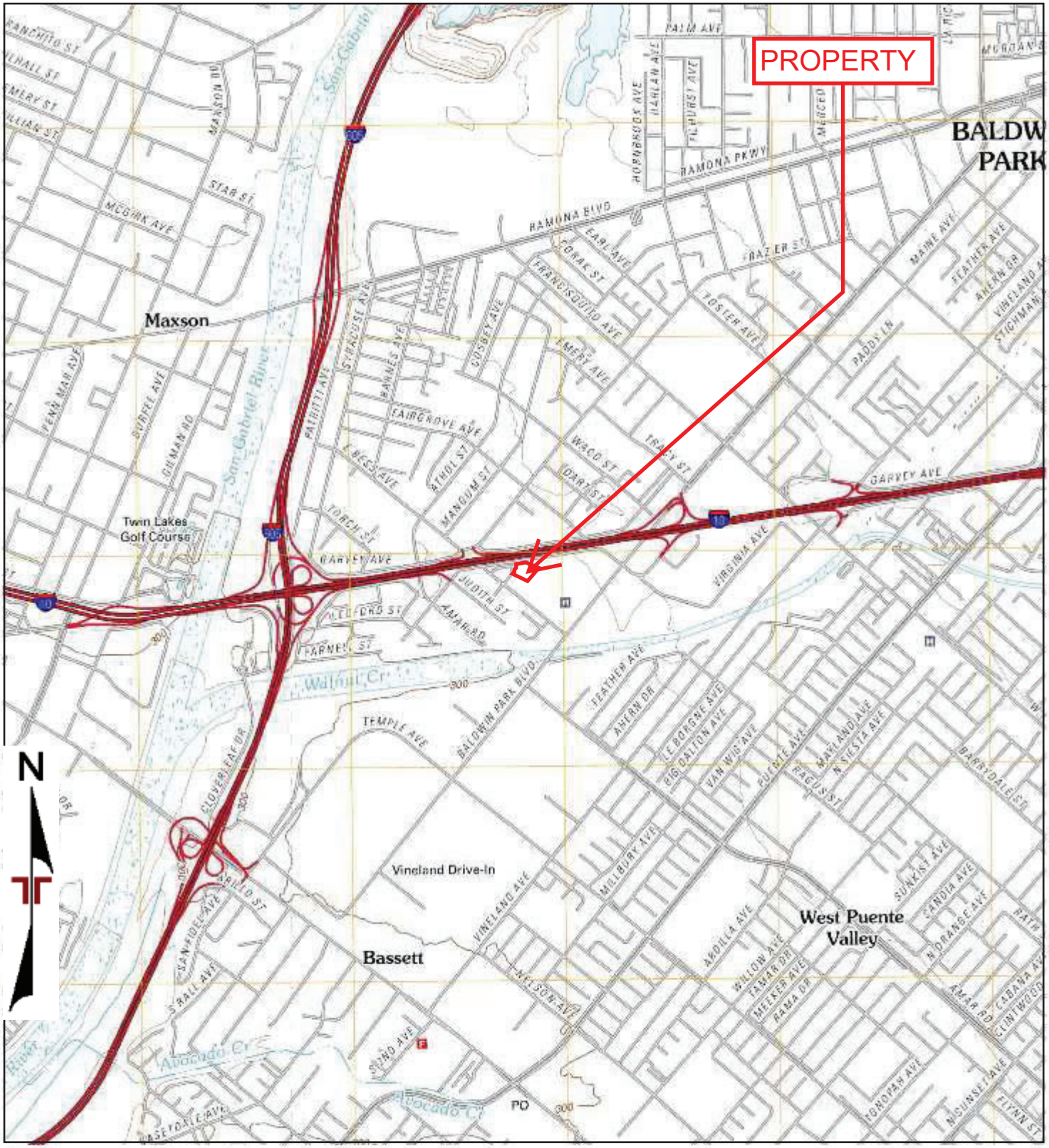
*Refer to Limited Hazardous Materials Survey Report presented under separate cover (Terracon Project No. 6021P020).

## 8.0 DECLARATION

I, Carl A. Parten, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the property. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Carl A. Parten
Senior Principal / Office Manager III

# APPENDIX A
# EXHIBIT 1 – TOPOGRAPHIC MAP
# EXHIBIT 2 – PROPERTY DIAGRAM




TP, Baldwin Park, 2012, 7.5-minute
W, El Monte, 2012, 7.5-minute

0 Miles 0.25 0.5 1 1.5

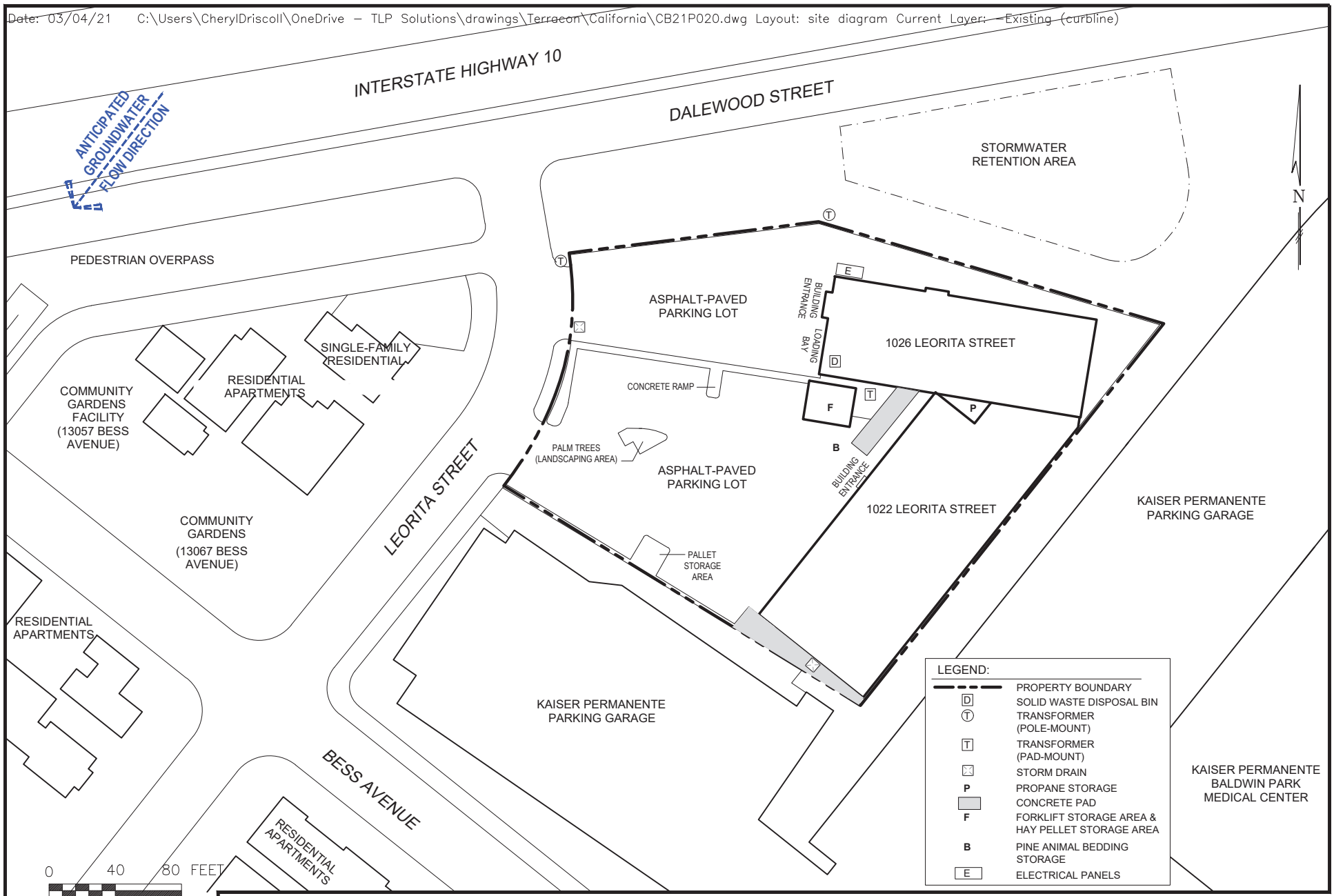
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 2012 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

# 2012 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Exhibit 1




*THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.*

| | |
|---|---|
| Project Mngr: | TGM |
| Drawn By: | CDD |
| Checked By: | TGM |
| Approved By: | CAP |

| | |
|---|---|
| Project No. | CB21P020 |
| Scale: | AS SHOWN |
| Date: | 03/04/21 |


Terracon
Consulting Engineers and Scientists
1355 East Cooley Drive, Suite. C
Colton, CA 92324-3954


# PROPERTY DIAGRAM

SBPK 2021 MLF 1022-1026 LEORITA STREET BROKEN HORN LAND
1022-1026 LEORITA STREET
BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA 91706

EXHIBIT 2

# APPENDIX B
# PROPERTY PHOTOGRAPHS

**Photo #1** View of the Property, facing east, from the northwestern portion of the Property (1026 Leorita Street).

**Photo #2** View inside the facility (1026 Leorita Street), near the front entrance.

**Photo #3** View of electrical panels, located inside the facility (1026 Leorita Street), near the front entrance.

**Photo #4** View of feed (alfalfa hay pallets) storage area, located inside the facility (1026 Leorita Street).

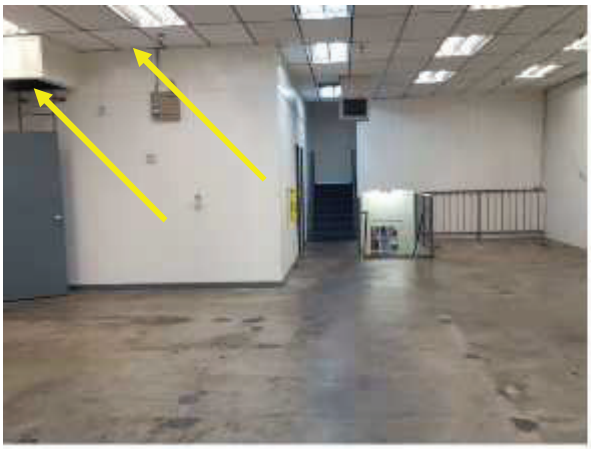


**Photo #5** View inside facility (1026 Leorita Street), near roof access and water-stained ceiling tile.

**Photo #6** View inside the facility (1026 Leorita Street).

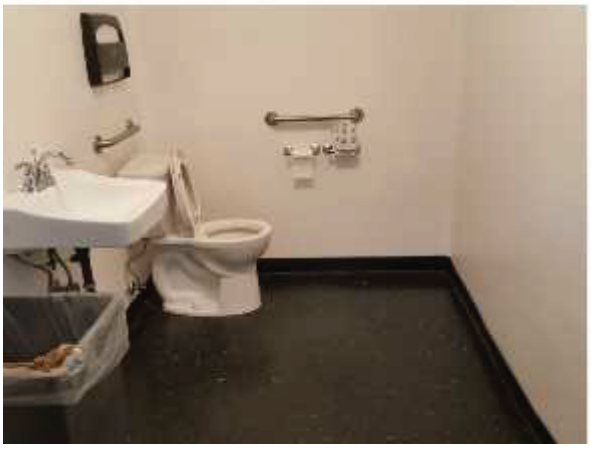


**Photo #7** Typical view inside restroom.

**Photo #8** View of facility entrance (1022 Leorita Street).

**Photo #9** View of office space, inside the facility (1022 Leorita Street).

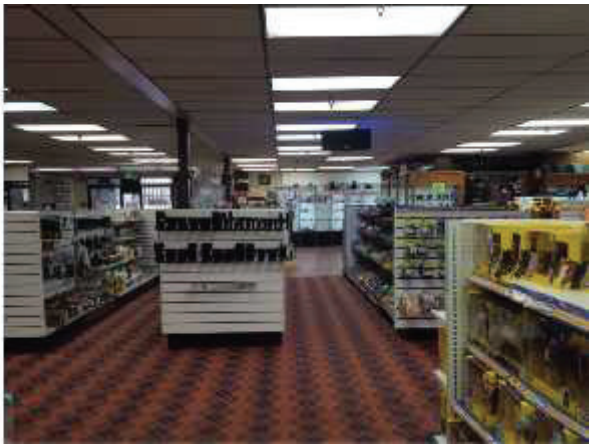


**Photo #10** View sales floor, inside the facility (1022 Leorita Street).

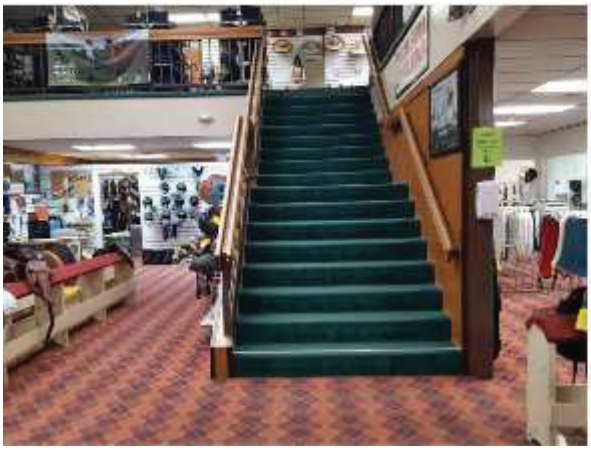


**Photo #11** View of the stairs to the mezzanine level sales floor (1022 Leorita Street).

**Photo #12** View of water-stained ceiling tiles, near stairs to the mezzanine level (1022 Leorita Street).

**Photo #13** View of the mezzanine level sales floor (1022 Leorita Street).

**Photo #14** View of the facility, from the mezzanine level sales floor (1022 Leorita Street).

**Photo #15** View of the storm water drainage path (1026 Leorita Street).

**Photo #16** View of the storm water drain (1026 Leorita Street), near Property entrance.

**Photo #17** View of the storm water drainage path (1022 Leorita Street), located on the southwestern perimeter of the Property.

**Photo #18** View of the storm water drain (1022 Leorita Street), located on the southwestern perimeter of the Property.

**Photo #19** View of the solid waste disposal bin area (1026 Leorita Street).

**Photo #20** View of the solid waste disposal bin (1026 Leorita Street).

**Photo #21** View of pallet storage area (1022 Leorita Street).

**Photo #22** View of propane-fueled forklift storage shed (1022 Leorita Street).

**Photo #23** View of propane-fueled forklift storage area (1022 Leorita Street).

**Photo #24** View of propane storage area (1022 Leorita Street).

**Photo #25** View of the pad-mounted transformer, located on the central portion of the Property (1022 Leorita Street).

**Photo #26** View of the Property, facing east-northeast, from the southwestern portion of the Property (1022 Leorita Street).

**Photo #27** View of the adjoining parcel, located north-northeast of the Property (storm water basin, followed by Dalewood Street, and then by the I-10 Freeway).

**Photo #28** View of the adjoining parcel, located east of the Property (Kaiser Permanente parking garage at 1102 Baldwin Park Boulevard).

**Photo #29** View of the adjoining parcel, located south of the Property (Kaiser Permanente parking garage at 1102 Baldwin Park Boulevard).

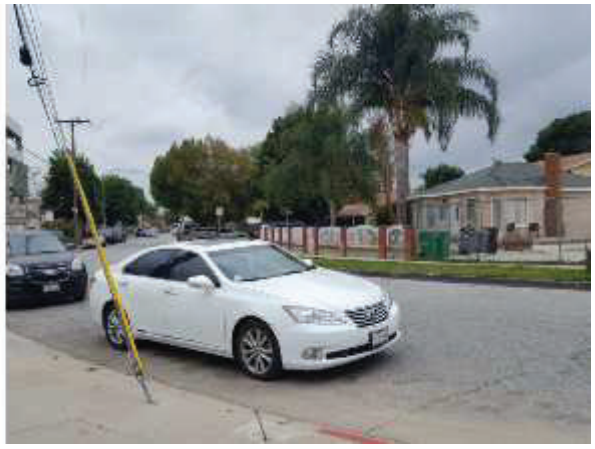


**Photo #30** View of the adjoining parcel, located west of the Property (Leorita Street, followed by residential houses).

# APPENDIX C
# HISTORICAL DOCUMENTATION AND USER QUESTIONNAIRE

**SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land**
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Inquiry Number: 6381562.4

February 25, 2021

# EDR Historical Topo Map Report

## with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Historical Topo Map Report

02/25/21

| Site Name: | Client Name: |
|---|---|
| Kaiser- Leorita Street Broken H | Terracon |
| 1022-1026 Leorita Street | 1355 East Cooley Drive |
| Baldwin Park, CA 91706 | Colton, CA 92324 |
| EDR Inquiry # 6381562.4 | Contact: Laura Hedman |

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Terracon were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

| *Search Results:* | | *Coordinates:* | |
|---|---|---|---|
| **P.O.#** | 13 | **Latitude:** | 34.06585 34° 3' 57" North |
| **Project:** | CB21P020 | **Longitude:** | -117.988105 -117° 59' 17" West |
| | | **UTM Zone:** | Zone 11 North |
| | | **UTM X Meters:** | 408819.42 |
| | | **UTM Y Meters:** | 3769897.77 |
| | | **Elevation:** | 312.62' above sea level |

**Maps Provided:**

| | |
|---|---|
| 2012 | 1896, 1897 |
| 1981 | 1894 |
| 1972 | |
| 1966 | |
| 1953 | |
| 1926, 1927 | |
| 1900, 1904 | |
| 1898 | |

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## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2012 Source Sheets

El Monte
2012
7.5-minute, 24000

Baldwin Park
2012
7.5-minute, 24000

### 1981 Source Sheets

El Monte
1981
7.5-minute, 24000
Aerial Photo Revised 1978

Baldwin Park
1981
7.5-minute, 24000
Aerial Photo Revised 1978

### 1972 Source Sheets

El Monte
1972
7.5-minute, 24000
Aerial Photo Revised 1972

Baldwin Park
1972
7.5-minute, 24000
Aerial Photo Revised 1972

### 1966 Source Sheets

Baldwin Park
1966
7.5-minute, 24000
Aerial Photo Revised 1964

El Monte
1966
7.5-minute, 24000
Aerial Photo Revised 1964

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1953 Source Sheets

Baldwin Park
1953
7.5-minute, 24000
Aerial Photo Revised 1952

El Monte
1953
7.5-minute, 24000
Aerial Photo Revised 1952

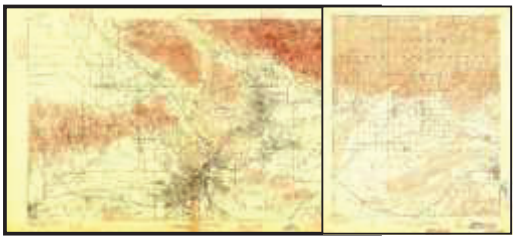
### 1926, 1927 Source Sheets

El Monte
1926
7.5-minute, 24000

Puente
1927
7.5-minute, 24000

### 1900, 1904 Source Sheets

Pasadena
1900
15-minute, 62500



Los Angeles
1900
15-minute, 62500

Pomona
1904
15-minute, 62500

### 1898 Source Sheets

Pomona
1898
15-minute, 62500

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

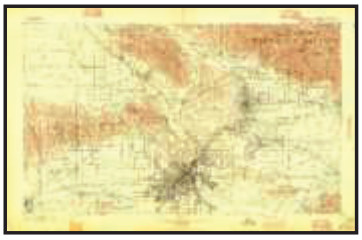
### 1896, 1897 Source Sheets

Pasadena
1896
15-minute, 62500

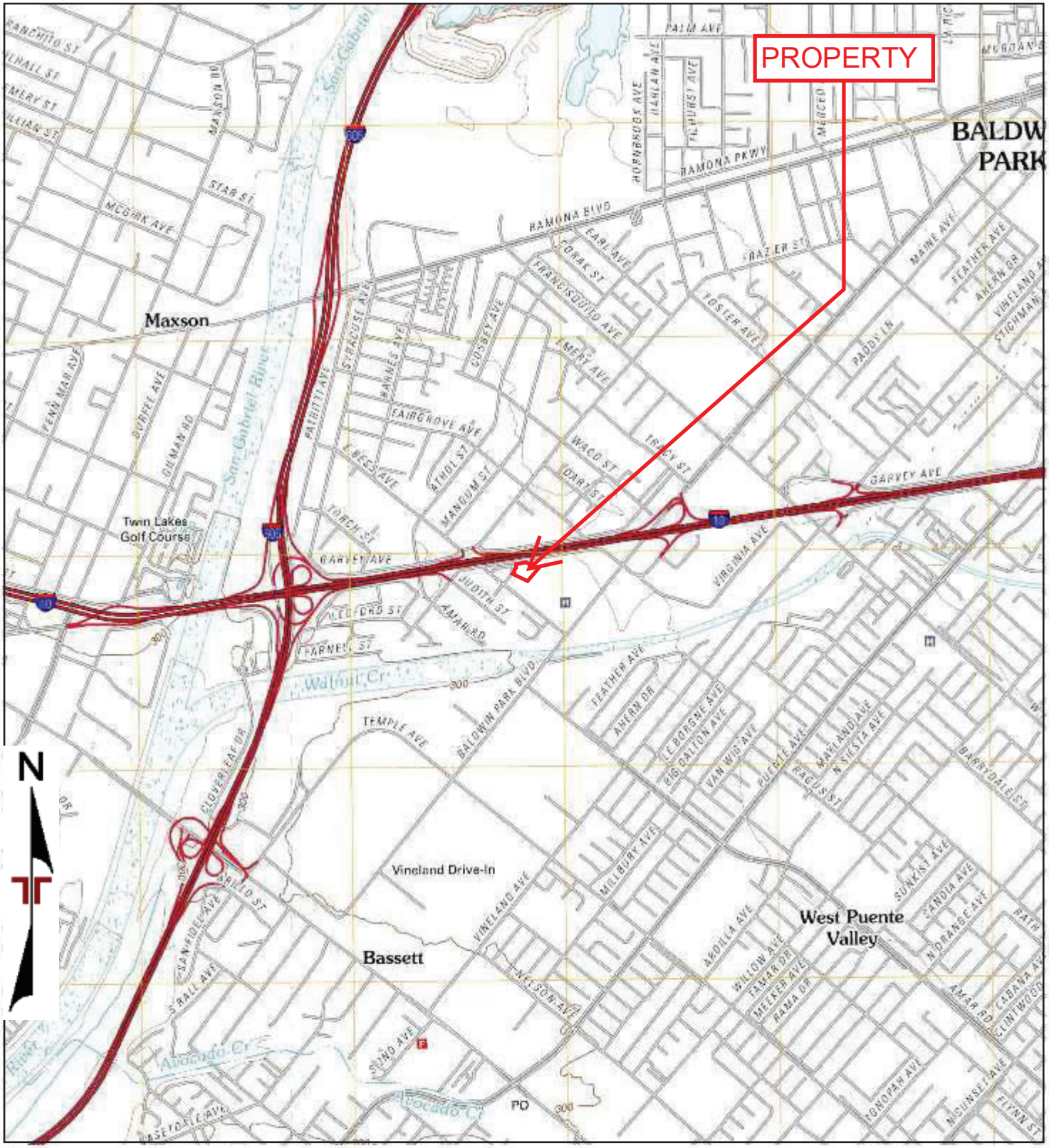
Pomona
1897
15-minute, 62500

### 1894 Source Sheets

Pomona
1894
15-minute, 62500



Los Angeles
1894
15-minute, 62500




TP, Baldwin Park, 2012, 7.5-minute
W, El Monte, 2012, 7.5-minute

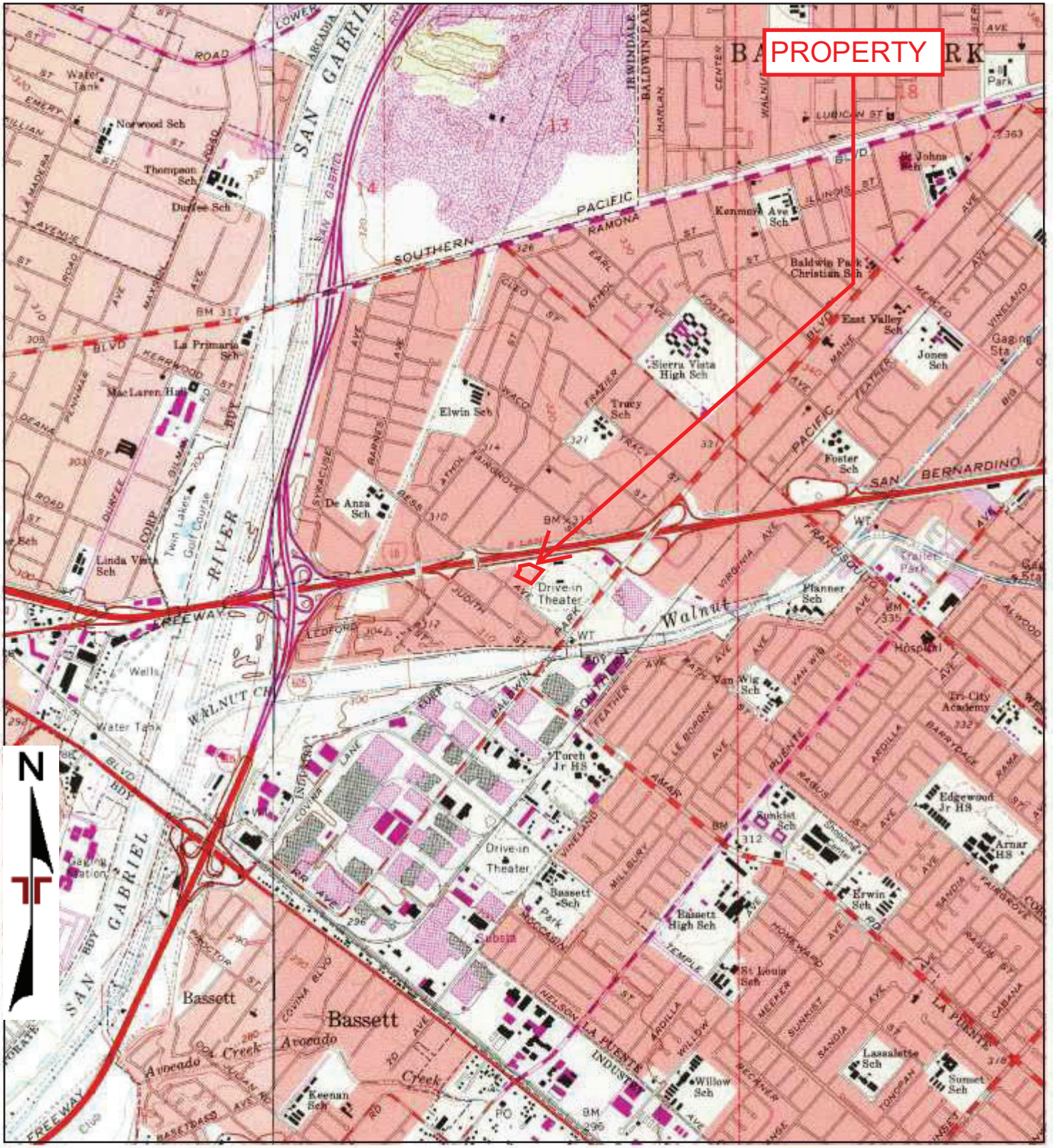
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 2012 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

## 2012 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C




TP, Baldwin Park, 1981, 7.5-minute
W, El Monte, 1981, 7.5-minute

0 Miles 0.25 0.5 1 1.5

| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1981 |

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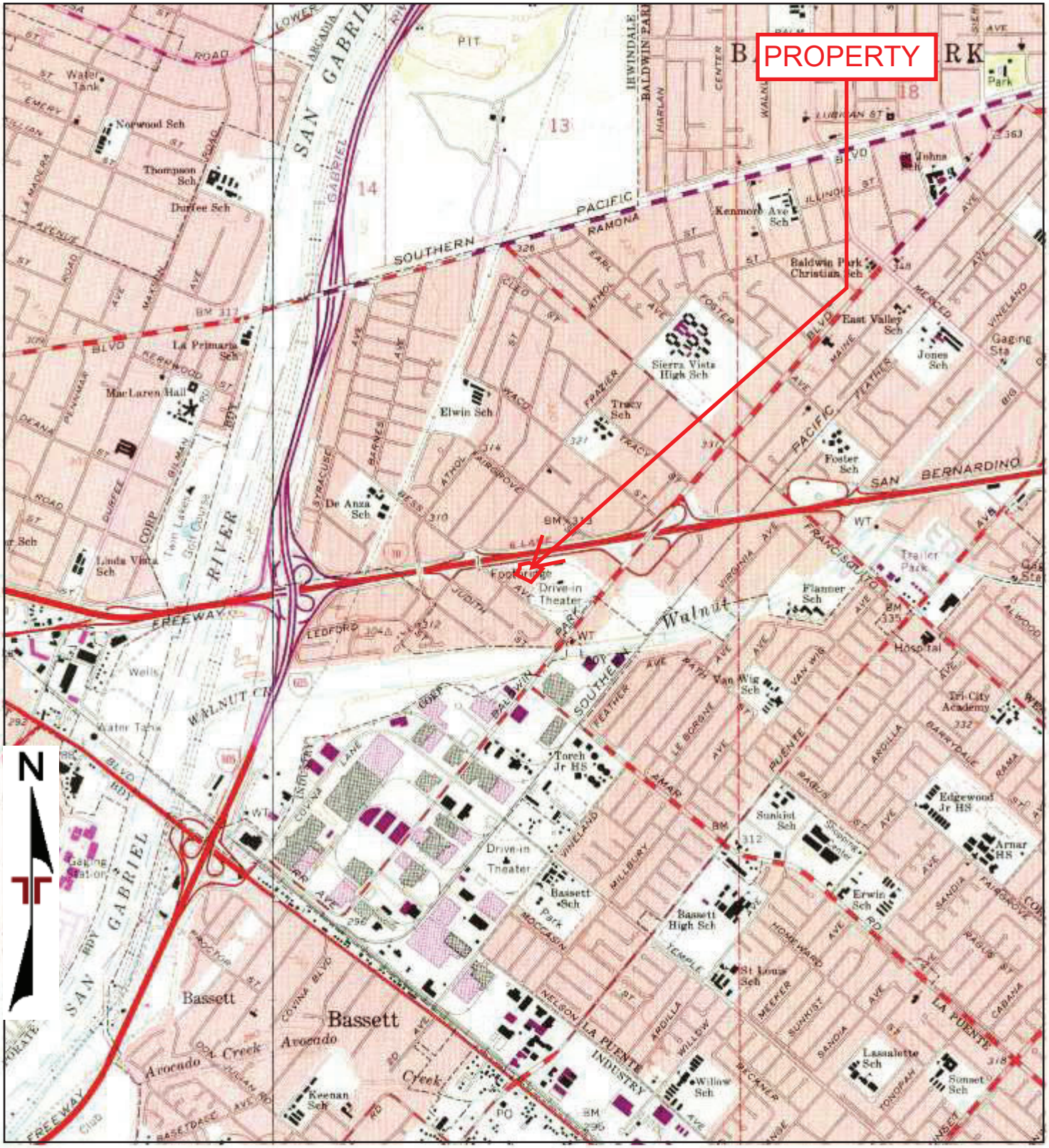
1355 East Cooley Drive, Suite C
Colton, California 92324

## 1981 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C




TP, Baldwin Park, 1972, 7.5-minute
W, El Monte, 1972, 7.5-minute

0 Miles 0.25 0.5 1 1.5

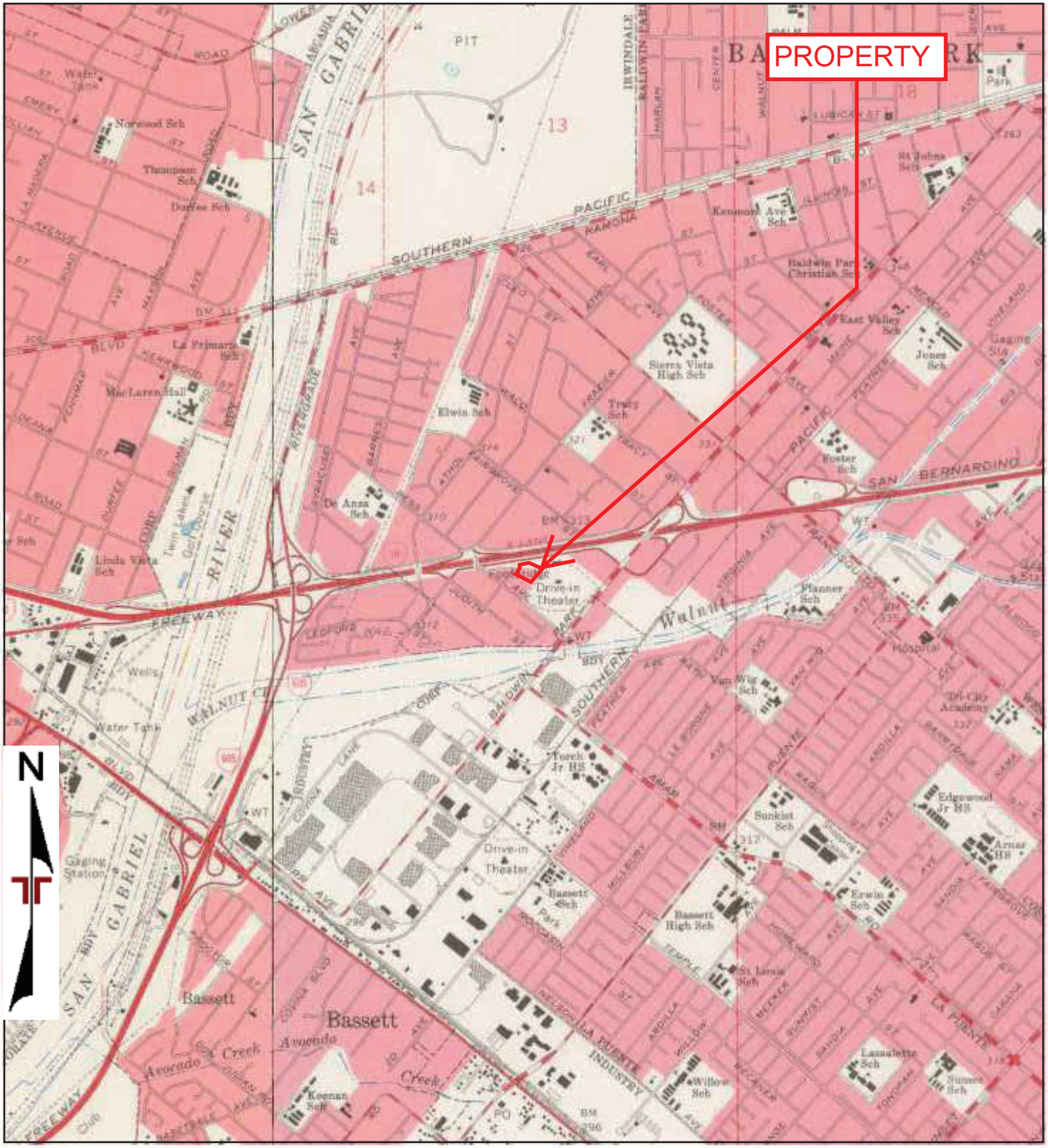
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1972 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

## 1972 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C




TP, Baldwin Park, 1966, 7.5-minute
W, El Monte, 1966, 7.5-minute

0 Miles 0.25 0.5 1 1.5

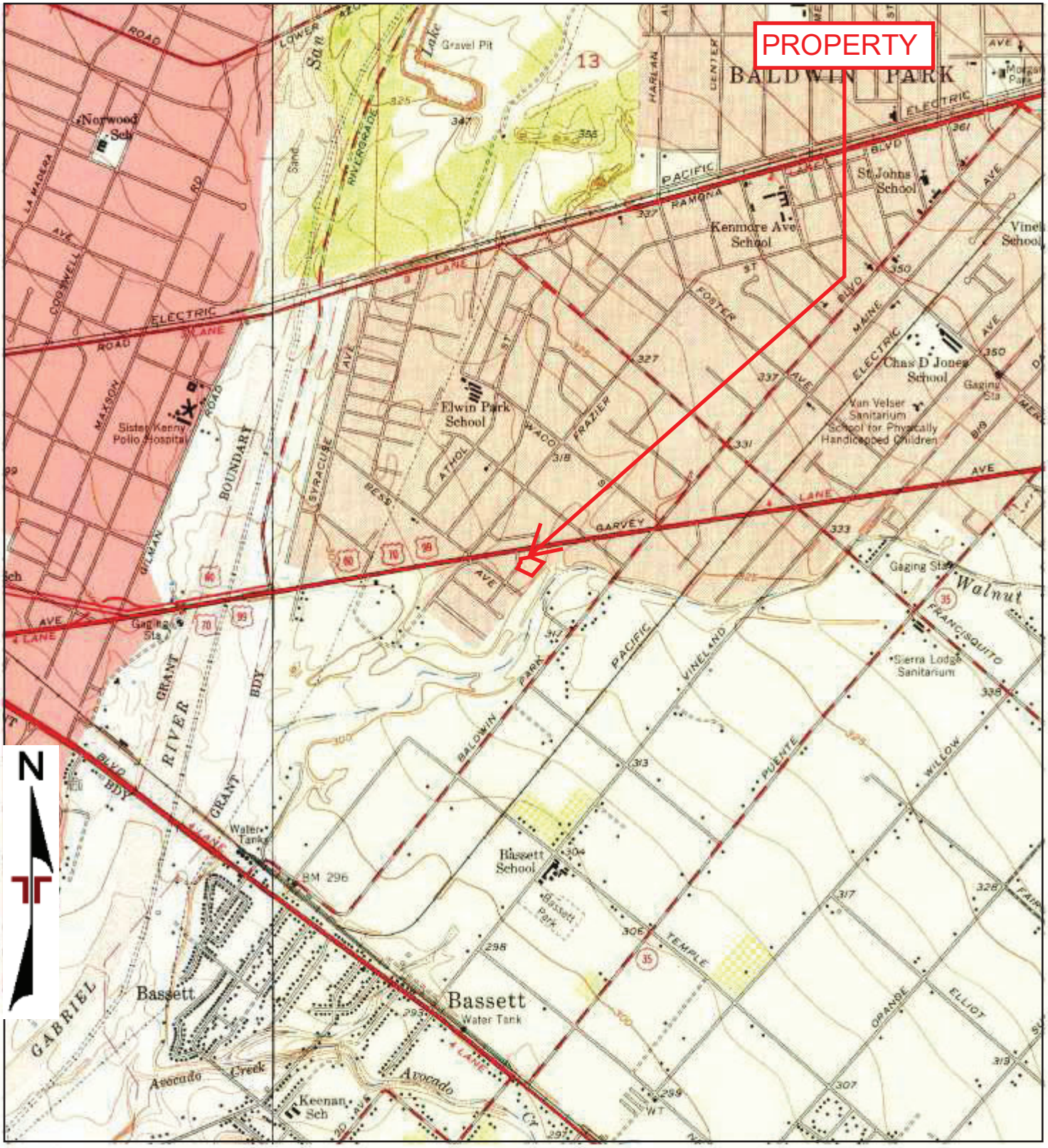
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1966 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

## 1966 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C




TP, Baldwin Park, 1953, 7.5-minute
W, El Monte, 1953, 7.5-minute

0 Miles 0.25 0.5 1 1.5

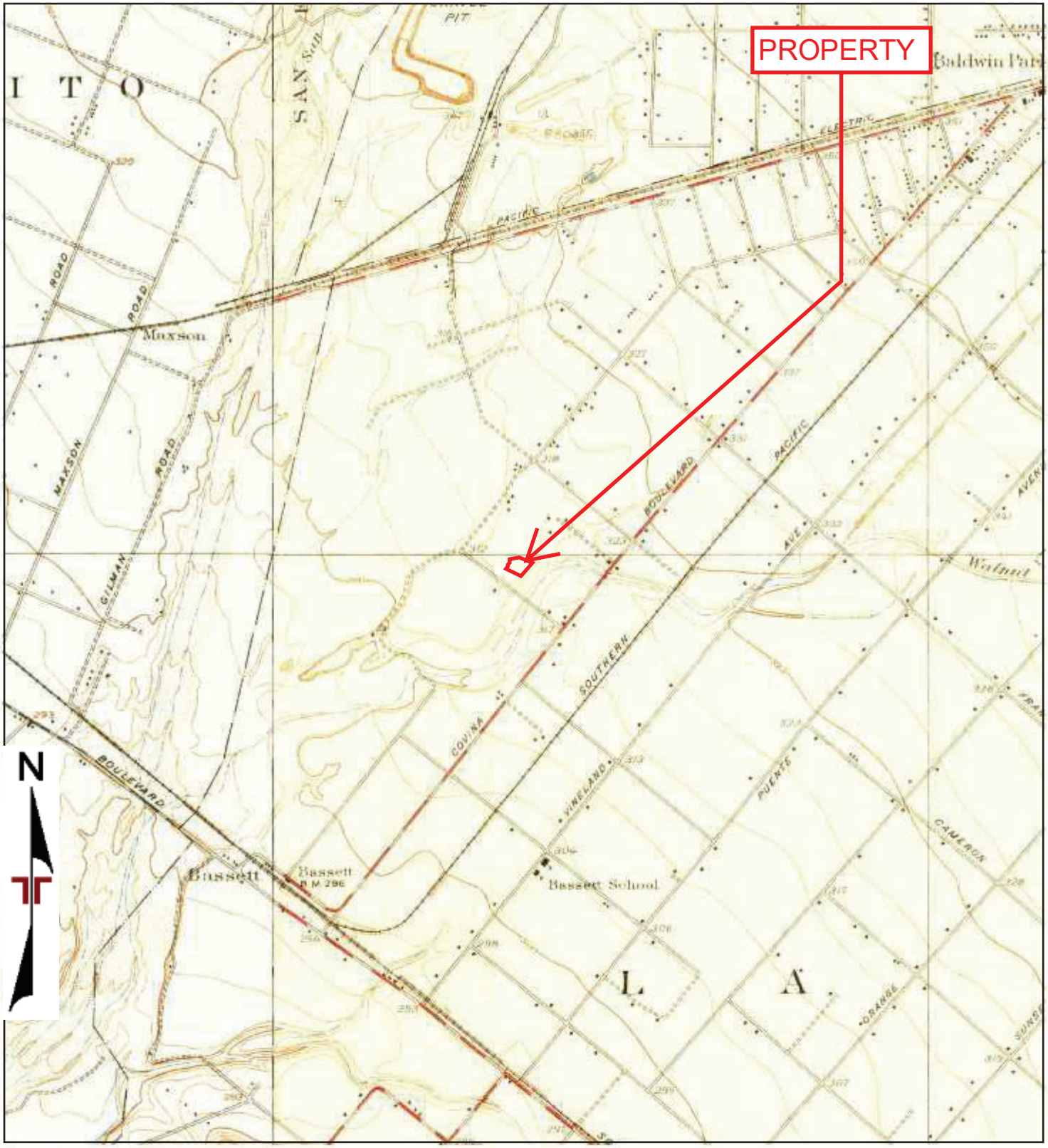
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1953 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

## 1953 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C




TP, Puente, 1927, 7.5-minute
W, El Monte, 1926, 7.5-minute

0 Miles 0.25 0.5 1 1.5

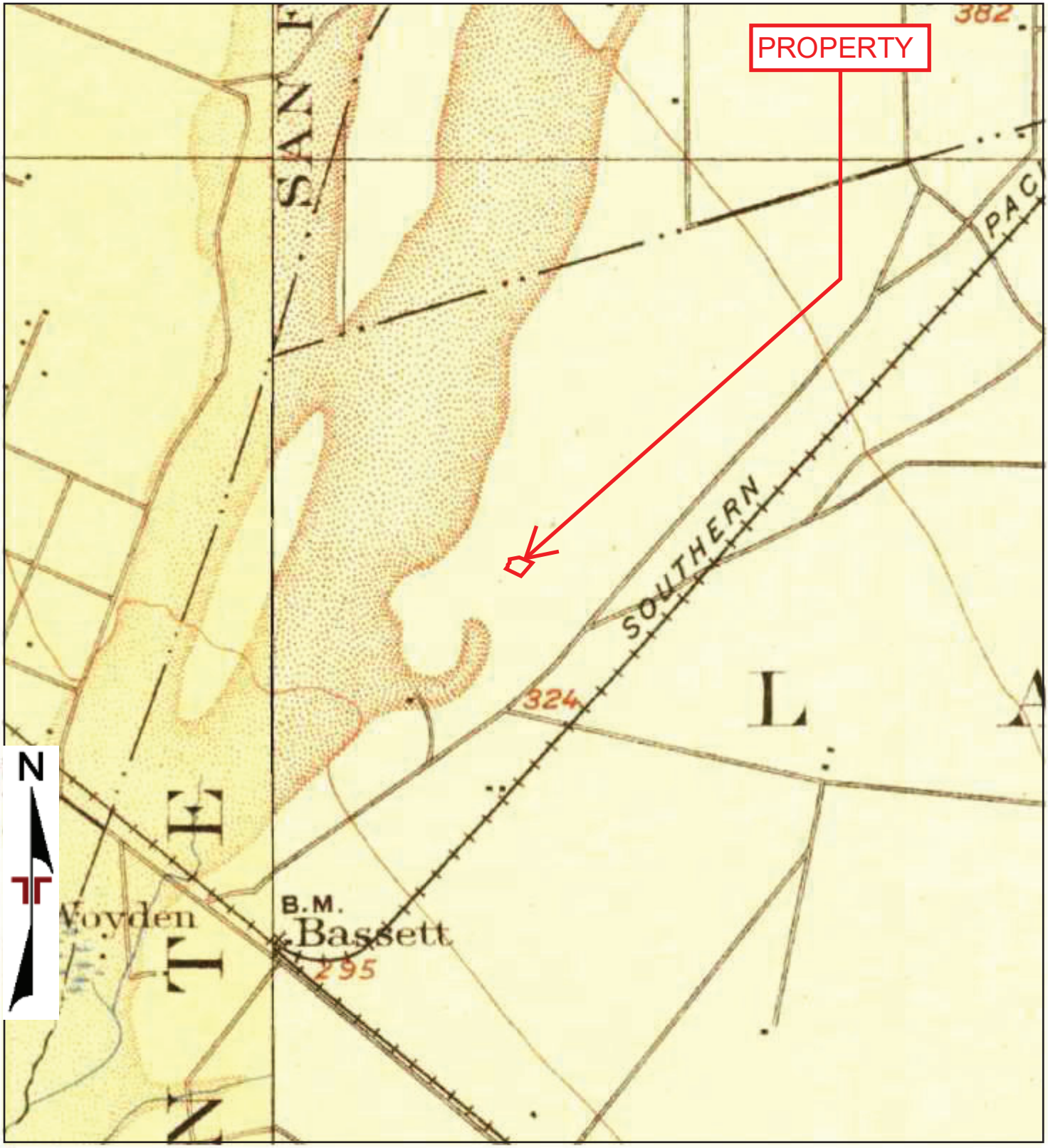
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1926, 1927 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

1926, 1927 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C




TP, Pomona, 1904, 15-minute
W, Los Angeles, 1900, 15-minute
NW, Pasadena, 1900, 15-minute

0 Miles 0.25 0.5 1 1.5

| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1900, 1904 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

1900, 1904 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C

TP, Pomona, 1898, 15-minute

0 Miles 0.25 0.5 1 1.5

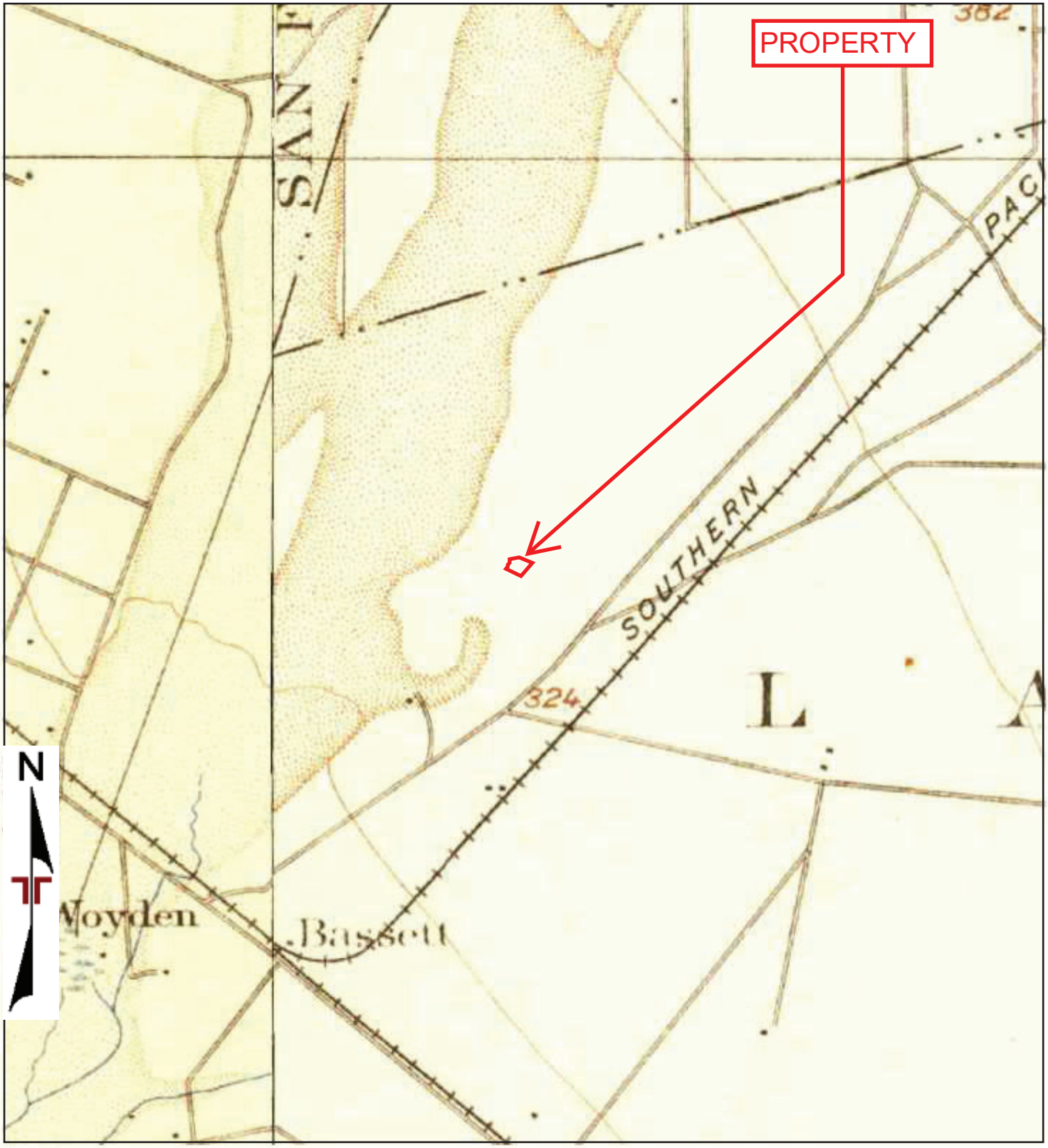
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1898 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

1898 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C




TP, Pomona, 1897, 15-minute
NW, Pasadena, 1896, 15-minute

0 Miles 0.25 0.5 1 1.5

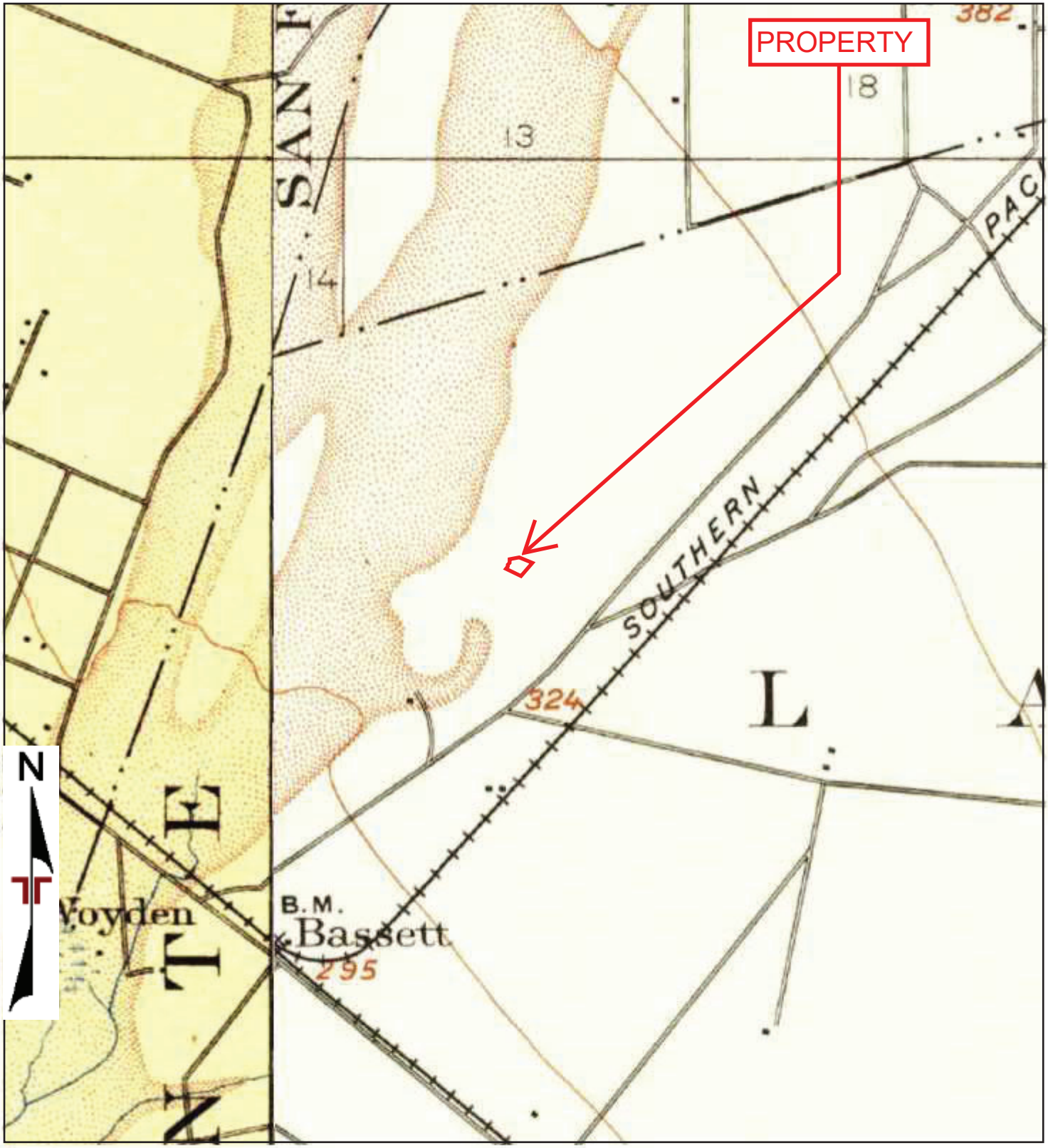
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1896, 1897 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

1896, 1897 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C




TP, Pomona, 1894, 15-minute
W, Los Angeles, 1894, 15-minute

0 Miles 0.25 0.5 1 1.5

| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 1894 |

Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324

1894 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Appendix C

**SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land**
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Inquiry Number: 6381562.8

February 26, 2021

# The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Aerial Photo Decade Package

02/26/21

| Site Name: | Client Name: |
|---|---|
| Kaiser- Leorita Street Broken H | Terracon |
| 1022-1026 Leorita Street | 1355 East Cooley Drive |
| Baldwin Park, CA 91706 | Colton, CA 92324 |
| EDR Inquiry # 6381562.8 | Contact: Laura Hedman |

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## Search Results:

| Year | Scale | Details | Source |
|---|---|---|---|
| 2016 | 1"=500' | Flight Year: 2016 | USDA/NAIP |
| 2012 | 1"=500' | Flight Year: 2012 | USDA/NAIP |
| 2009 | 1"=500' | Flight Year: 2009 | USDA/NAIP |
| 2005 | 1"=500' | Flight Year: 2005 | USDA/NAIP |
| 2002 | 1"=500' | Flight Date: May 22, 2002 | USDA |
| 1994 | 1"=500' | Acquisition Date: June 01, 1994 | USGS/DOQQ |
| 1990 | 1"=500' | Flight Date: September 06, 1990 | USDA |
| 1989 | 1"=500' | Flight Date: August 22, 1989 | USDA |
| 1983 | 1"=500' | Flight Date: November 19, 1983 | EDR Proprietary Brewster Pacific |
| 1977 | 1"=500' | Flight Date: April 25, 1977 | EDR Proprietary Brewster Pacific |
| 1970 | 1"=500' | Flight Date: February 08, 1970 | EDR Proprietary Brewster Pacific |
| 1964 | 1"=500' | Flight Date: July 28, 1964 | USGS |
| 1952 | 1"=500' | Flight Date: August 02, 1952 | USGS |
| 1948 | 1"=500' | Flight Date: July 10, 1948 | USGS |
| 1938 | 1"=500' | Flight Date: May 06, 1938 | USDA |

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0 Feet 500 1000 2000

| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 2016 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 2016 | | Appendix C |

0 Feet 500 1000 2000

| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 2012 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | Appendix: C |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 2012 | | |

| | | | | |
|---|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 2009 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 | Appendix<br>C |
| Drawn By: LSH | Scale: As Shown | | | |
| Checked By: TGM | File Name: N/A | | | |
| Approved By: CAP | Date: 2009 | | | |

0 Feet 500 1000 2000

| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 2005 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | Appendix: C |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 2005 | | |

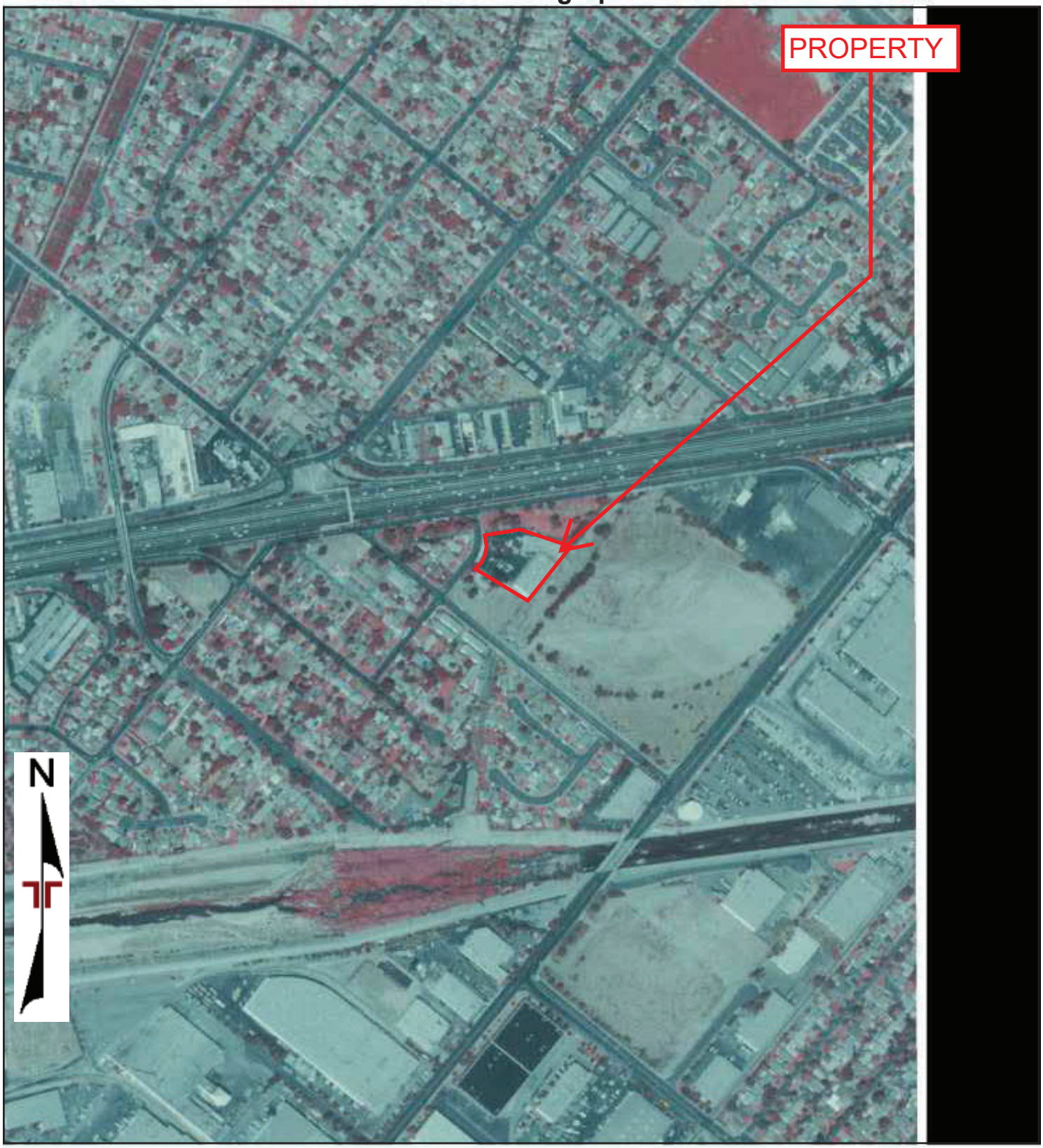
0 Feet 500 1000 2000

| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 2002 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | Appendix: C |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 2002 | | |

| | | | | |
|---|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1994 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 | Appendix<br>C |
| Drawn By: LSH | Scale: As Shown | | | |
| Checked By: TGM | File Name: N/A | | | |
| Approved By: CAP | Date: 1994 | | | |

0 Feet 500 1000 2000

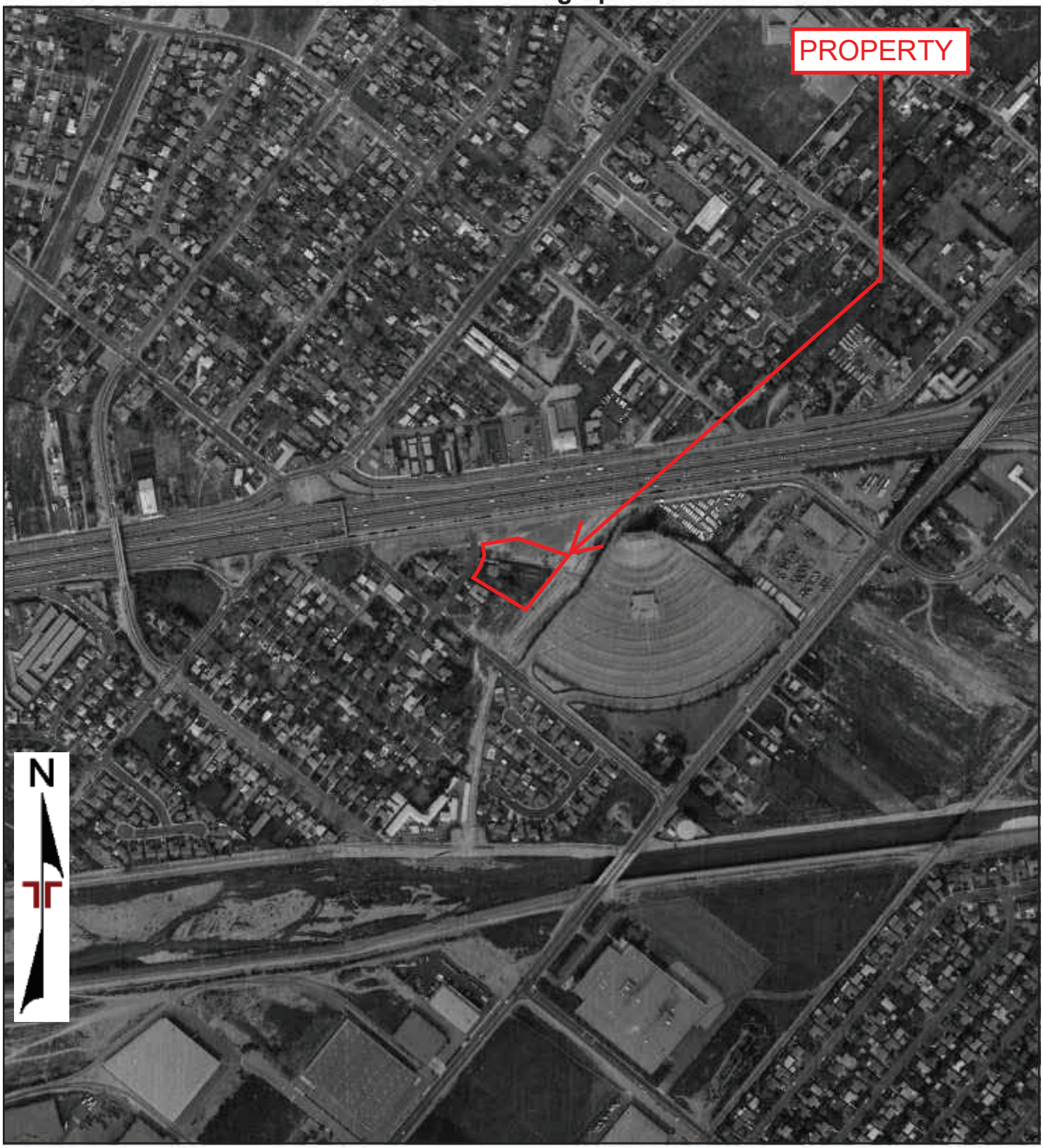
| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1990 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | Appendix: C |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 1990 | | |




| | | | | |
|---|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1989 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 | Appendix<br>C |
| Drawn By: LSH | Scale: As Shown | | | |
| Checked By: TGM | File Name: N/A | | | |
| Approved By: CAP | Date: 1989 | | | |

| | | | | |
|---|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1983 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 | Appendix<br>C |
| Drawn By: LSH | Scale: As Shown | | | |
| Checked By: TGM | File Name: N/A | | | |
| Approved By: CAP | Date: 1983 | | | |

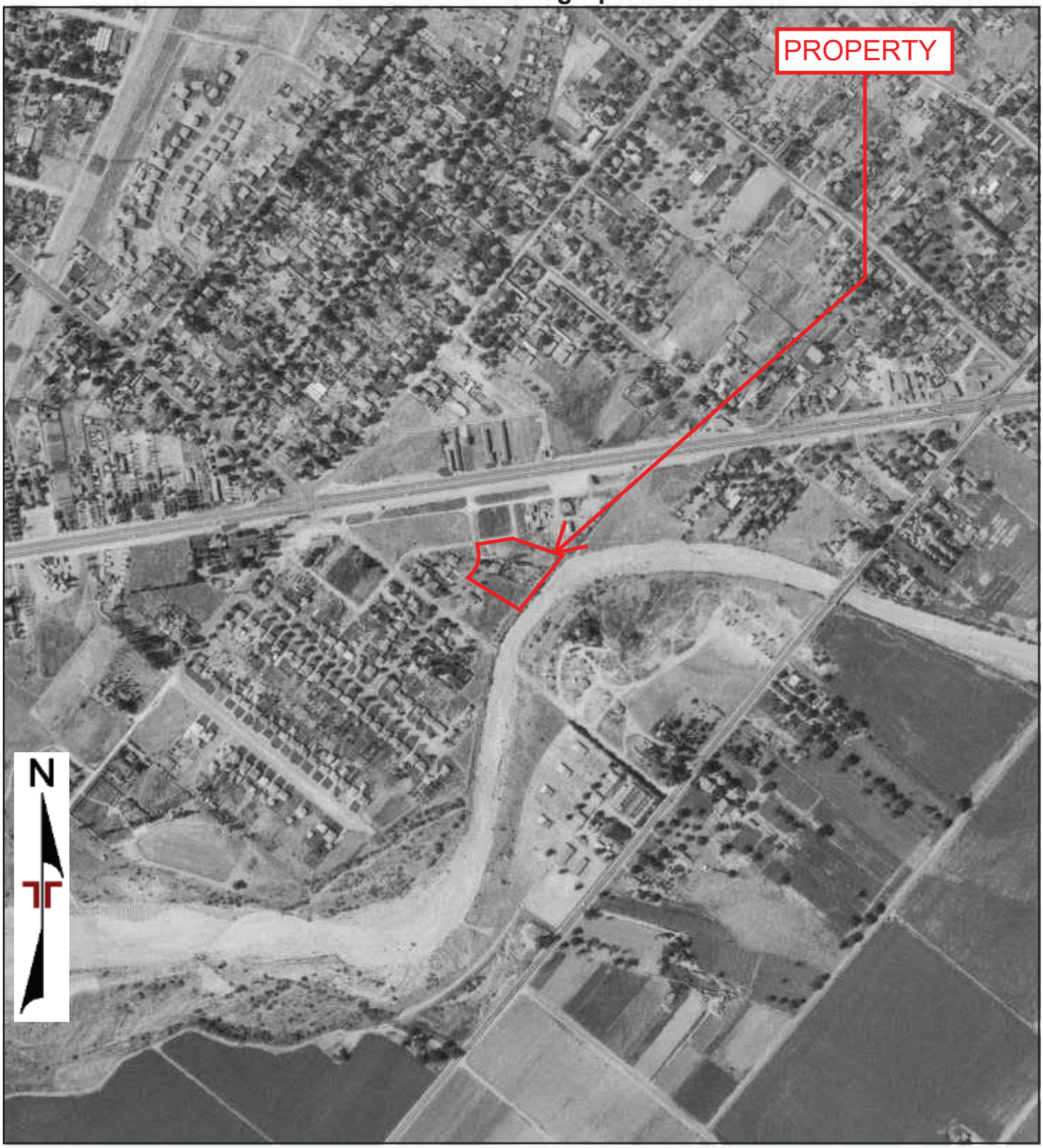
| | | | | |
|---|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1977 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 | Appendix<br>C |
| Drawn By: LSH | Scale: As Shown | | | |
| Checked By: TGM | File Name: N/A | | | |
| Approved By: CAP | Date: 1977 | | | |




0 Feet 500 1000 2000

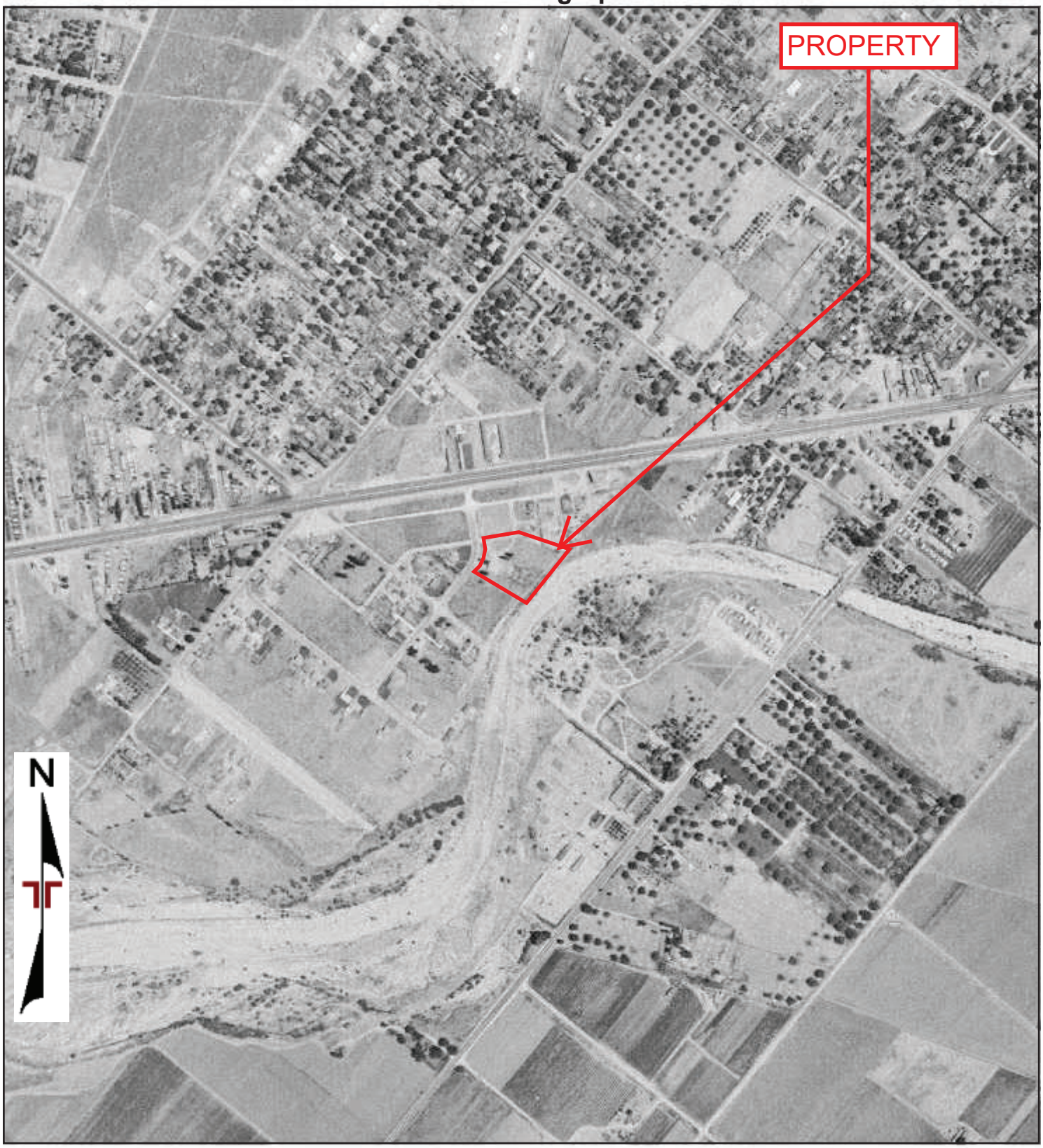
| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1970 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | Appendix C |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 1970 | | |

| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1964 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | Appendix: C |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 1964 | | |

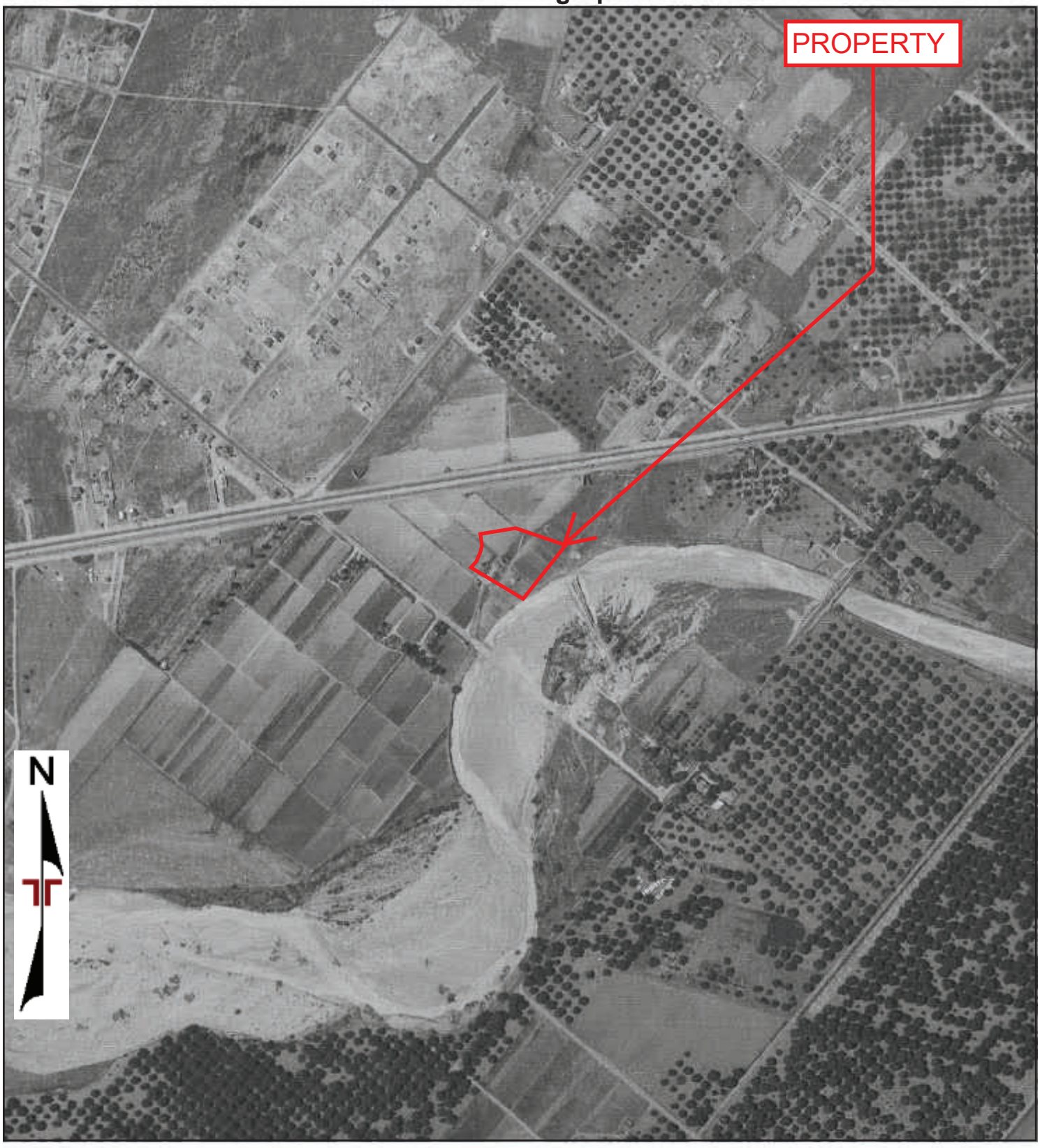



| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1952 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 1952 | | |

Appendix C




| | | | | |
|---|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1948 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 | Appendix<br>C |
| Drawn By: LSH | Scale: As Shown | | | |
| Checked By: TGM | File Name: N/A | | | |
| Approved By: CAP | Date: 1948 | | | |




0 Feet 500 1000 2000

| | | | |
|---|---|---|---|
| Project Manager: TGM | Project No: CB21P020 | Terracon<br>1355 East Cooley Drive, Suite C<br>Colton, California 92324 | 1938 AERIAL PHOTOGRAPH<br>SBPK 2021 MLF 1022-1026 Leorita Street<br>Broken Horn Land<br>1022-1026 Leorita Street<br>Baldwin Park, Los Angeles County, California 91706 |
| Drawn By: LSH | Scale: As Shown | | |
| Checked By: TGM | File Name: N/A | | |
| Approved By: CAP | Date: 1938 | | |

Appendix C

**SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land**
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Inquiry Number: 6381562.3

February 25, 2021

# Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# Certified Sanborn® Map Report

02/25/21

**Site Name:**

Kaiser- Leorita Street Broken H
1022-1026 Leorita Street
Baldwin Park, CA 91706
EDR Inquiry # 6381562.3

**Client Name:**

Terracon
1355 East Cooley Drive
Colton, CA 92324
Contact: Laura Hedman

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Terracon were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

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## *Certified Sanborn Results:*

**Certification #** EF46-4F4C-A7F9

**PO #** 13

**Project** CB21P020

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Sanborn® Library search results

Certification #: EF46-4F4C-A7F9

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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**SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land**
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Inquiry Number: 6381562.5
February 25, 2021

# The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

# TABLE OF CONTENTS

## SECTION

**Executive Summary**

**Findings**

**City Directory Images**

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with any questions or comments.

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# EXECUTIVE SUMMARY

## DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

## RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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## RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

| Year | Source | TP | Adjoining | Text Abstract | Source Image |
|---|---|---|---|---|---|
| 2014 | Cole Information Services | X | X | X | - |
| 2009 | Cole Information Services | - | X | X | - |
| | Cole Information Services | X | X | X | - |
| 2006 | Haines Company | - | - | - | - |
| 2004 | Cole Information Services | - | X | X | - |
| | Cole Information Services | X | X | X | - |
| | Haines Company | - | - | - | - |
| | Haines Company | X | - | X | - |
| 2003 | Haines & Company | - | X | X | - |
| | Haines & Company | X | X | X | - |
| 2001 | Haines & Company, Inc. | - | - | - | - |
| 2000 | Pacific Bell Telephone | - | - | - | - |

# EXECUTIVE SUMMARY

| Year | Source | TP | Adjoining | Text Abstract | Source Image |
|---|---|---|---|---|---|
| 1999 | Cole Information Services | - | X | X | - |
| | Cole Information Services | X | X | X | - |
| | Haines Company | - | - | - | - |
| | Haines Company | X | - | X | - |
| 1996 | GTE | - | - | - | - |
| 1995 | Pacific Bell | - | X | X | - |
| | Pacific Bell | X | X | X | - |
| 1994 | Cole Information Services | - | X | X | - |
| | Cole Information Services | X | X | X | - |
| 1992 | PACIFIC BELL WHITE PAGES | - | - | - | - |
| 1991 | Pacific Bell | - | - | - | - |
| 1990 | PACIFIC BELL WHITE PAGES | - | - | - | - |
| 1986 | Pacific Bell | - | - | - | - |
| 1985 | Pacific Bell | - | X | X | - |
| | Pacific Bell | X | X | X | - |
| 1981 | Pacific Telephone | - | - | - | - |
| 1980 | Pacific Telephone | - | X | X | - |
| | Pacific Telephone | X | X | X | - |
| 1976 | R.L. Polk & Co Publishers | - | - | - | - |
| 1975 | Pacific Telephone | - | X | X | - |
| 1972 | R. L. Polk & Co. | - | - | - | - |
| 1971 | R. L. Polk & Co. | - | - | - | - |
| 1970 | Pacific Telephone | - | - | - | - |
| 1969 | Pacific Telephone | - | - | - | - |
| 1967 | R. L. Polk & Co. | - | - | - | - |
| 1966 | Pacific Telephone | - | X | X | - |
| 1965 | GTE | - | - | - | - |
| 1964 | Pacific Telephone | - | - | - | - |
| 1963 | Pacific Telephone | - | - | - | - |
| 1962 | Pacific Telephone | - | - | - | - |
| 1961 | R. L. Polk & Co. | - | - | - | - |
| 1960 | Pacific Telephone | - | X | X | - |
| 1958 | Pacific Telephone | - | - | - | - |
| 1957 | Pacific Telephone | - | X | X | - |
| 1956 | Pacific Telephone | - | - | - | - |
| 1955 | R. L. Polk & Co. | - | - | - | - |
| 1954 | R. L. Polk & Co. | - | - | - | - |
| 1952 | Los Angeles Directory Co. | - | - | - | - |
| 1951 | Los Angeles Directory Co Publishers | - | - | - | - |
| 1950 | Pacific Telephone | - | X | X | - |
| 1949 | Los Angeles Directory Co. | - | - | - | - |
| 1948 | Los Angeles Directory Co. | - | - | - | - |

# EXECUTIVE SUMMARY

| Year | Source | TP | Adjoining | Text Abstract | Source Image |
|---|---|---|---|---|---|
| 1947 | Pacific Directory Co. | - | - | - | - |
| 1946 | Southern California Telephone Co | - | - | - | - |
| 1945 | The Glendale Directory Co. | - | - | - | - |
| 1944 | R. L. Polk & Co. | - | - | - | - |
| 1942 | Los Angeles Directory Co. | - | - | - | - |
| 1940 | Los Angeles Directory Co. | - | - | - | - |
| 1939 | Los Angeles Directory Co. | - | - | - | - |
| 1938 | Los Angeles Directory Company Publishers | - | - | - | - |
| 1937 | Los Angeles Directory Co. | - | - | - | - |
| 1936 | Los Angeles Directory Co. | - | - | - | - |
| 1935 | Los Angeles Directory Co. | - | - | - | - |
| 1934 | Los Angeles Directory Co. | - | - | - | - |
| 1933 | Los Angeles Directory Co. | - | - | - | - |
| 1932 | Los Angeles Directory Co. | - | - | - | - |
| 1931 | Los Angeles Directory Company Publishers | - | - | - | - |
| 1930 | Los Angeles Directory Co. | - | - | - | - |
| 1929 | Los Angeles Directory Co. | - | - | - | - |
| 1928 | Los Angeles Directory Co. | - | - | - | - |
| 1927 | Los Angeles Directory Co. | - | - | - | - |
| 1926 | Los Angeles Directory Co. | - | - | - | - |
| 1925 | Los Angeles Directory Co. | - | - | - | - |
| 1924 | Los Angeles Directory Co. | - | - | - | - |
| 1923 | Los Angeles Directory Co. | - | - | - | - |
| 1921 | Los Angeles Directory Co. | - | - | - | - |
| 1920 | Los Angeles Directory Co. | - | - | - | - |

# EXECUTIVE SUMMARY

## SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

| *Address* | *Type* | *Findings* |
|---|---|---|
| 1011 Baldwin Park Boulevard | Client Entered | X |
| 1019 Leorita Street | Client Entered | X |
| 1011 Leorita Street | Client Entered | X |
| 13050 Bess Street | Client Entered | X |
| 13067 Bess Street | Client Entered | X |
| 13065 Garvey Avenue | Client Entered | X |
| 13075 Garvey Avenue | Client Entered | X |
| 13109 Garvey Avenue | Client Entered | X |

# FINDINGS

## TARGET PROPERTY INFORMATION

### ADDRESS

1022-1026 Leorita Street
Baldwin Park, CA 91706

### FINDINGS DETAIL

Target Property research detail.

### LEORITA ST

**1022 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | BROKEN HORN INC | Cole Information Services |
| | MARIO SILVER SHOP | Cole Information Services |
| | SADDLE REPAIR SHOP | Cole Information Services |
| 2009 | BROKEN HORN SADDLERY INC | Cole Information Services |
| | MARIOS SILVER SHOP | Cole Information Services |
| | SADDLE REPAIR SHOP | Cole Information Services |
| 2004 | BROKEN HORN SADDLERY CO | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| | SADDLE REPAIR SHOP | Cole Information Services |
| 2003 | MARIOS SILVER SHOP | Haines & Company |
| | SADDLE REPAIR SHOP | Haines & Company |
| 1999 | BROKEN HORN INCORPORATED | Cole Information Services |
| | MARIOS SILVER SHOP | Cole Information Services |
| | SADDLE REPAIR SHOP | Cole Information Services |
| 1994 | BROKEN HORN INC | Cole Information Services |
| | MARIOS SILVER SHOP | Cole Information Services |
| | SADDLE REPAIR SHOP | Cole Information Services |
| 1980 | CAPLENER LAURA B LEORITA ST BALDWIN PARK | Pacific Telephone |
| | MC DONALD KATHY LEORITA ST BALDWIN PARK | Pacific Telephone |

**1024 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2003 | XXXX | Haines & Company |

# FINDINGS

**1026 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | SALS CUSTOM SATTLES | Cole Information Services |
| 2004 | CHARLES NUZZO | Cole Information Services |
| | MARIOS SILVER SHOP | Cole Information Services |
| | SUPERIOR SADDLERY | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | TREVORS LEATHER SHOPPE | Cole Information Services |
| 1995 | Trevors Leather Shoppe | Pacific Bell |
| 1994 | TREVORS LEATHER SHOPPE | Cole Information Services |
| 1985 | BROKEN HORN INC | Pacific Bell |
| 1980 | BROKEN HORN INC LEORITA ST BALDWIN PARK | Pacific Telephone |

# FINDINGS

## ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

### 929 931 LEORITA ST

**927 929 931 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2009 | RAYMOND CARRANZA | Cole Information Services |

### BALDWIN PARK BLVD

**1011 BALDWIN PARK BLVD**

| Year | Uses | Source |
|---|---|---|
| 2014 | KAISER FOUNDATION HOSPITAL BALDWIN | Cole Information Services |
| | KAISER PERMANENTE BALDWIN PARK MEDIC | Cole Information Services |
| 2009 | BALDWIN PARK PHARMACY | Cole Information Services |
| | KAISER PERMANENTE MEDICAL CENTER | Cole Information Services |
| | DEPT OF OPHTHALMOLOGY | Cole Information Services |
| | KAIZER | Cole Information Services |
| | KAISER FOUNDATION HEALTH PLAN | Cole Information Services |
| | KAISER PERMANENTE 2ND FL PHARMACY | Cole Information Services |
| | CASSA PERMANANTE SURGERY DEPT | Cole Information Services |
| | SO CAL PERMANENTE MEDICAL GROUP | Cole Information Services |
| | DERMATOLOGY DEPT | Cole Information Services |
| | DEPT HEMON | Cole Information Services |
| 2004 | KAISER FOUNDATION HOSPITAL | Cole Information Services |
| | KAISER BALDWIN PARK MED CTR | Cole Information Services |
| | KAISER PERMANETE HOSPITAL | Cole Information Services |
| | KAISER PERMANENTE MOB PHARMACY | Cole Information Services |
| | SO CALIFORNIA KSR PRMNNT | Cole Information Services |
| | SOUTHERN CALIFORNIA PERMANENTE | Cole Information Services |
| | KAISER PRMNNT 2ND FL PHRMCY | Cole Information Services |
| | KAISER MEDICAL CTR | Cole Information Services |
| | KAISER MEDICAL CTR OTPT PHRMCY | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2004 | KAISER PERMANENTE BALDWIN PARK | Cole Information Services |
| 1999 | KAISER PERMANENTE MEDICAL CARE PROGRAM BALDWIN PARK ME | Cole Information Services |

## Baldwin Park Boulevard

### 1011 Baldwin Park Boulevard

| Year | Uses | Source |
|---|---|---|
| 2003 | XXXX | Haines & Company |
| 1995 | Baldwin Park Medical Offices | Pacific Bell |
| | Information | Pacific Bell |
| | Appointments | Pacific Bell |
| | Cancellations a | Pacific Bell |
| | Pharmacy | Pacific Bell |
| | Refills | Pacific Bell |
| | Message Center | Pacific Bell |
| 1975 | GARROW JAMES A BALDWIN PARK | Pacific Telephone |
| | WALKER FOREST R | Pacific Telephone |
| 1966 | GARROW JAS A | Pacific Telephone |
| | WALKER FOREST R | Pacific Telephone |
| 1960 | GARROW JAS A | Pacific Telephone |
| 1957 | GARROW JAS A | Pacific Telephone |

## BESS AVE

### 13040 BESS AVE

| Year | Uses | Source |
|---|---|---|
| 2014 | PATRICIA ALANIZ | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 2009 | SIMEON CRUZ | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | SIMEON CRUZ | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | GONZALEZ David | Haines & Company |
| | CRUZ Simeon | Haines & Company |
| 1999 | SIMEON CRUZ | Cole Information Services |
| | SUSANA RODRIGUEZ | Cole Information Services |
| 1985 | STOWELL ROBT | Pacific Bell |
| 1975 | WILSON HELEN MRS | Pacific Telephone |

# FINDINGS

**13042 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | BLANCA IBARRA | Cole Information Services |
| | ZOILA VASQUEZ | Cole Information Services |
| 2009 | ZOILA VASQUEZ | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| | BLANCA IBARRA | Cole Information Services |
| 2004 | BLANCA IBARRA | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | BLANCA IBARRA | Cole Information Services |
| | ZOILA VASQUEZ | Cole Information Services |
| 1980 | JOHNSON RETHA BESS AVE BALDWIN PARK | Pacific Telephone |
| 1966 | ROGERS JENNIE | Pacific Telephone |

**13046 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | NGAN PAHAM | Cole Information Services |
| | MARISOL MARTINEZ | Cole Information Services |
| 2009 | OCCUPANT UNKNOWN | Cole Information Services |
| | OFELIA BALLESTEROS | Cole Information Services |
| 2004 | MIGUEL RUEDA | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | GONZALEZ David | Haines & Company |
| 1999 | OFELIA BALLESTEROS | Cole Information Services |
| | JOSE RODRIGUEZ | Cole Information Services |
| 1975 | TROVILLION JON G L BALDWIN PARK | Pacific Telephone |

**13048 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | ALBERTO RAMIREZ | Cole Information Services |
| | GUADALUPE GOMEZ | Cole Information Services |
| 2009 | EMELIA CAZAREZ | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| | LUIS PEREZ | Cole Information Services |
| 2003 | CAZAREZ Emelia | Haines & Company |
| 1999 | LUIS PEREZ | Cole Information Services |

**13050 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | STEVEN DIAZ | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2014 | STEVEN DIAZ | Cole Information Services |
| 2009 | PABLO HERNANDEZ | Cole Information Services |
| | PABLO HERNANDEZ | Cole Information Services |
| 2004 | SALVADOR HERNANDEZ | Cole Information Services |
| | SALVADOR HERNANDEZ | Cole Information Services |
| 2003 | HERNANDEZ Salvador | Haines & Company |
| 1999 | PABLO HERNANDEZ | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| | PABLO HERNANDEZ | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 1995 | I Shawwaf Talser | Pacific Bell |
| | S HAY S E E ALS O S HE A | Pacific Bell |

**13052 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | JAIME MEJIA | Cole Information Services |
| 2004 | JAIME MEJIA | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1994 | SHAWWAF, TAISER | Cole Information Services |
| 1985 | BABNIK JOS D | Pacific Bell |
| 1980 | WHITE ALBERT G BESS AVE BALDWIN PARK | Pacific Telephone |
| 1975 | HALSTEAD S D | Pacific Telephone |

**13054 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | JAVIER CERVANTES | Cole Information Services |
| 2009 | MARIA CERVANTES | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |
| | MARIA CERVANTES | Cole Information Services |

**13055 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | BENJAMIN KENEVAN | Cole Information Services |
| | GABRIELA LOPEZ | Cole Information Services |
| | ADRIANA RASCON | Cole Information Services |
| | SHAILA GARCIA | Cole Information Services |
| | ANTONIO HERNANDEZ | Cole Information Services |
| | MARIO GONZALEZ | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2009 | GABRIELA LOPEZ | Cole Information Services |
| | VILMA VELASQUEZ | Cole Information Services |
| | GIOBANNI CONZALEZ | Cole Information Services |
| | ALEJANDRA HERNANDEZ | Cole Information Services |
| | ADRIANA RASCON | Cole Information Services |
| 2004 | GABRIELA LOPEZ | Cole Information Services |
| | JOEL CERVANTES | Cole Information Services |
| | SILVIA PARDO | Cole Information Services |
| 2003 | PARDO Silvia | Haines & Company |
| 1999 | ALEJANDRA HERNANDEZ | Cole Information Services |
| | GABRIELA LOPEZ | Cole Information Services |
| | ADRIANA RASCON | Cole Information Services |
| | GIOBANNI CONZALEZ | Cole Information Services |
| | VILMA VELASQUEZ | Cole Information Services |
| 1995 | Cartes Asuncion | Pacific Bell |
| 1994 | CORTES, ASUNCIO | Cole Information Services |
| 1980 | HERNANDEZ RANDOLPH BESS AVE BALDWIN PARK | Pacific Telephone |
| | FATHERREE W E BESS AVE BALDWIN PARK | Pacific Telephone |

**13056 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2009 | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | RAMIREZ Pedro | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |
| 1995 | Avelino Jose | Pacific Bell |
| 1994 | AVELINO, JOSE | Cole Information Services |
| 1975 | MARCUS FRED | Pacific Telephone |

**13057 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 1985 | ELKO EDWIN BALDWIN PARK | Pacific Bell |
| 1980 | ELKO EDWIN BESS AVE BALDWIN PARK | Pacific Telephone |
| 1975 | GALLEGOS MARTIN | Pacific Telephone |
| | FATHERREE WE | Pacific Telephone |
| | ELKO EDWIN | Pacific Telephone |
| | ARMSTRONG L A | Pacific Telephone |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 1960 | NISSENSON JOS | Pacific Telephone |

**13058 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | OCCUPANT UNKNOWN | Cole Information Services |
| 2009 | C GARCIA | Cole Information Services |
| 2004 | NATALIA FRANSISCA | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |
| | C GARCIA | Cole Information Services |

**13067 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2003 | XXXX | Haines & Company |
| 1995 | Marsicovete Anthony C | Pacific Bell |
| | MARSICOVETE ANTHONY C | Pacific Bell |
| 1994 | MARSICOVETE, ANTHONY C | Cole Information Services |
| | MARSICOVETE, ANTHONY C | Cole Information Services |
| 1985 | MARSICOVETE ANTHONY C | Pacific Bell |
| 1980 | MARSICOVETE ANTHONY C BESS AVE BALDWIN PARK | Pacific Telephone |
| 1975 | MARSICOVETE ANTHONY C | Pacific Telephone |

**13159 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 2003 | XXXX | Haines & Company |
| 1985 | EDGEWOOD DRIVE-IN THEATRE | Pacific Bell |
| 1980 | EDGEWOOD DRIVE-IN THEATRE BESS AVE BALDWIN PARK | Pacific Telephone |

**13046 1/2 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 1980 | FOX L D BESS AVE BALDWIN PARK | Pacific Telephone |

**13048 1/2 BESS AVE**

| Year | Uses | Source |
|---|---|---|
| 1975 | BUSH LEW | Pacific Telephone |

# FINDINGS

## Bess Street

### 13050 Bess Street

| Year | Uses | Source |
|---|---|---|
| 2003 | HERNANDEZ Salvador | Haines & Company |
| 1995 | I Shawwaf Talser | Pacific Bell |
| | S HAY S E E ALS O S HE A | Pacific Bell |

### 13067 Bess Street

| Year | Uses | Source |
|---|---|---|
| 2003 | XXXX | Haines & Company |
| 1995 | MARSICOVETE ANTHONY C | Pacific Bell |
| | Marsicovete Anthony C | Pacific Bell |
| 1985 | MARSICOVETE ANTHONY C | Pacific Bell |
| 1980 | MARSICOVETE ANTHONY C BESS AVE BALDWIN PARK | Pacific Telephone |
| 1975 | MARSICOVETE ANTHONY C | Pacific Telephone |

## DALEWOOD ST

### 13018 DALEWOOD ST

| Year | Uses | Source |
|---|---|---|
| 2009 | LORENZO BAUTISTA | Cole Information Services |
| 2004 | LORENZO BAUTISTA | Cole Information Services |
| 2003 | SALAIZA Victor | Haines & Company |
| 1999 | LORENZO BAUTISTA | Cole Information Services |

## FRAZIER ST

### 3011 FRAZIER ST

| Year | Uses | Source |
|---|---|---|
| 2014 | LUIS CRUZ | Cole Information Services |
| 2009 | NOEMI AGUILAR | Cole Information Services |
| 2004 | ELIAZAR DIAZ | Cole Information Services |
| 2003 | Di AZ Eliazar | Haines & Company |
| 1999 | NOEMI AGUILAR | Cole Information Services |
| 1975 | LUND RALPH W | Pacific Telephone |

### 3015 FRAZIER ST

| Year | Uses | Source |
|---|---|---|
| 2014 | RUBEN GORDILLO | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2009 | RUBEN GORDILLO | Cole Information Services |
| 2004 | RUBEN GORDILLO | Cole Information Services |
| 2003 | GORDILLORunen | Haines & Company |
| 1999 | RUBEN GORDILLO | Cole Information Services |

**3019 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | JOSE NAVARRETE | Cole Information Services |
| 2009 | RUIGEN YU | Cole Information Services |
| | LAURENCIA ROSALES | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | RUIGEN YU | Cole Information Services |
| 1994 | VARGAS, JUAN L | Cole Information Services |

**3021 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | SUSANA GAYTAN | Cole Information Services |
| 2009 | JULIA JIMENEZ | Cole Information Services |
| 2004 | RUIGEN YU | Cole Information Services |
| 2003 | YU Ruigen | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |
| | JULIA JIMENEZ | Cole Information Services |
| 1980 | HOPPER KENNETH FRAZIER ST BALDWIN PARK | Pacific Telephone |

**3023 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ADRIANA ALDRETE | Cole Information Services |
| | NANCY JARA | Cole Information Services |
| | PAOLA LUNA | Cole Information Services |
| | JESSICA EUSEBIO | Cole Information Services |
| 2009 | MARIA GOMEZ | Cole Information Services |
| 2004 | VERONICA ANTOLEN | Cole Information Services |
| | ARMANDO GOMEZ | Cole Information Services |
| 2003 | ANTOLEN Veronica | Haines & Company |
| 1999 | MARIA GOMEZ | Cole Information Services |
| 1994 | MARQUEZ, ARMANDO | Cole Information Services |
| | PONCE, ISABEL | Cole Information Services |
| 1975 | CASTRO MERCEDES | Pacific Telephone |

# FINDINGS

**3025 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | LETICIA ANTOLIN | Cole Information Services |
| | ANDREW MARTINEZ | Cole Information Services |
| | SOLEDAD CASTELLON | Cole Information Services |
| 2009 | MAYRA CHAVEZ | Cole Information Services |
| | ANN DOMINGUEZ | Cole Information Services |
| | MARITZA BOJORQUEZ | Cole Information Services |
| | SOLEDAD CASTELLON | Cole Information Services |
| 2004 | KARENA MARQUEZ | Cole Information Services |
| | ALICIA HARO | Cole Information Services |
| | TRINA DOMINGUEZ | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | ANN DOMINGUEZ | Cole Information Services |
| | MARITZA BOJORQUEZ | Cole Information Services |
| | MAYRA CHAVEZ | Cole Information Services |
| 1994 | ARRELLANO, ALICIA | Cole Information Services |
| | ANTOLIN, S | Cole Information Services |
| 1980 | HARRIS F FRAZIER ST BALDWIN PARK | Pacific Telephone |
| 1975 | ANDREWS J | Pacific Telephone |
| | GONZALES R L | Pacific Telephone |

**3026 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | SUPER TECH AUTO SERVICES | Cole Information Services |
| 2003 | SHAATH Saker | Haines & Company |
| 1994 | ALIS AUTO SVC | Cole Information Services |
| 1985 | R & M SERVICE | Pacific Bell |
| 1980 | SELL H A TEXACO SERVICE STATION FRAZIER ST BALDWIN PARK | Pacific Telephone |
| 1975 | SELL H A TEXACO SERVICE STATION | Pacific Telephone |

**3027 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ADRIAN NAVARRETE | Cole Information Services |
| 2009 | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | ROBERTO GONZALEZ | Cole Information Services |
| 2003 | YU Ruigen | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |

# FINDINGS

**3029 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | OCCUPANT UNKNOWN | Cole Information Services |
| 2009 | SALVADOR OROSCO | Cole Information Services |
| 2003 | YU Kenneth | Haines & Company |
| 1999 | SALVADOR OROSCO | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |

**3031 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | VERONICA PEREIDA | Cole Information Services |
| | MARICELA GARCIA | Cole Information Services |
| | SONIA RUIZ | Cole Information Services |
| | MARINA ESCOBAR | Cole Information Services |
| 2009 | C DELACRUZ | Cole Information Services |
| | LETICIA ANTOLIN | Cole Information Services |
| | MARICELA GARCIA | Cole Information Services |
| | CHRISTANE SCHUENEMANN | Cole Information Services |
| | MARGARITO MANDUJANO | Cole Information Services |
| 2004 | ARACELI CARAGAO | Cole Information Services |
| | LETICIA ANTOLIN | Cole Information Services |
| | MIGUEL LOPEZ | Cole Information Services |
| | ANGELICA MANDUJANO | Cole Information Services |
| 1999 | C DELACRUZ | Cole Information Services |
| | LETICIA ANTOLIN | Cole Information Services |
| | MARICELA GARCIA | Cole Information Services |
| | CHRISTANE SCHUENEMANN | Cole Information Services |
| 1994 | VELAZQUEZ, V | Cole Information Services |
| 1975 | URIAS LUCILLE | Pacific Telephone |

**3035 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | GABRIEL ESPINO | Cole Information Services |
| 2009 | GABRIEL ESPINO | Cole Information Services |
| 2004 | GABRIEL ESPINO | Cole Information Services |
| 2003 | ESPINO Gabriel | Haines & Company |
| 1999 | GABRIEL ESPINO | Cole Information Services |
| 1994 | AVILA, G | Cole Information Services |
| | SANCHEZ, ALEJO | Cole Information Services |
| 1985 | PATTERSON SHARON | Pacific Bell |

# FINDINGS

**3040 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ANA BULLARD | Cole Information Services |
| 2009 | JOSE GARCIA | Cole Information Services |
| 2004 | JOSE GARCIA | Cole Information Services |
| 2003 | GARCIA Jose | Haines & Company |
| 1999 | JOSE GARCIA | Cole Information Services |
| 1975 | VALENZUELA MARY | Pacific Telephone |

**3041 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | SOPHIA VU | Cole Information Services |
| | RAYMOND RODRIGUEZ | Cole Information Services |
| | CUC NGUYEN | Cole Information Services |
| 2009 | RAYMOND RODRIGUEZ | Cole Information Services |
| | LUIS HERRERA | Cole Information Services |
| | ANTONIO OLIVERA | Cole Information Services |
| | A BERTADO | Cole Information Services |
| 2004 | VICENTE VELAZQUEZ | Cole Information Services |
| | LUIS HERRERA | Cole Information Services |
| | ARIEL CERVANTES | Cole Information Services |
| | TRINA JACOBO | Cole Information Services |
| | ABIMAEL GARCIA | Cole Information Services |
| 2003 | GARCIA Abisai | Haines & Company |
| 1999 | A BERTADO | Cole Information Services |
| | ANTONIO OLIVERA | Cole Information Services |
| | LUIS HERRERA | Cole Information Services |
| 1994 | RAMIREZ, F | Cole Information Services |
| | TIRADO, ARACELI | Cole Information Services |
| 1985 | RAMOS VALERIE | Pacific Bell |
| | AMEZQUITA GEORGE A | Pacific Bell |
| 1975 | AMEZQUITA GEORGE A | Pacific Telephone |

**3044 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | HUANG JEN | Cole Information Services |
| 2009 | HENRY SMITH | Cole Information Services |
| 2004 | HENRY SMITH | Cole Information Services |
| 2003 | SMITH Scof W | Haines & Company |
| 1999 | HENRY SMITH | Cole Information Services |

# FINDINGS

**3047 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | REYNA SANCHEZ | Cole Information Services |
| 2009 | SOCORRO MORENO | Cole Information Services |
| 2004 | IGNACIO GARCIA | Cole Information Services |
| 2003 | OGARCIA Ignacio | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |
| | SOCORRO MORENO | Cole Information Services |
| 1975 | SALAZAR JESUS | Pacific Telephone |

**3041B FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 1975 | HERNANDEZ LUCIANA | Pacific Telephone |
| | AMEZQUITA GEO A | Pacific Telephone |

**3031 1/2 FRAZIER ST**

| Year | Uses | Source |
|---|---|---|
| 1980 | LOPEZ FERNANDO FRAZIER ST BALDWIN PARK | Pacific Telephone |
| | COLLINS SAM FRAZIER ST BALDWIN PARK | Pacific Telephone |
| 1975 | MORALES T BALDWIN PARK | Pacific Telephone |

## GARVEY AVE

**13011 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2004 | STAR GOLD | Cole Information Services |
| 2003 | VAZOUEZSalvador | Haines & Company |
| | GOLD STAR AUTO | Haines & Company |
| | SERVICE | Haines & Company |
| 1999 | INDEPENDENT AUTO REPAIR | Cole Information Services |
| 1995 | Rays Landscape Co Duarte e | Pacific Bell |
| | RAY S INDEPENDENT AUTO REPAIR | Pacific Bell |
| | Rays Independent Auto Repair | Pacific Bell |
| 1994 | RAYS INDEPENDENCE | Cole Information Services |
| | RAYS INDEPENDENT AUTO REPAIR | Cole Information Services |
| 1985 | ECONOMY CAR REPAIR | Pacific Bell |
| 1980 | ECONOMY CAR REPAIR GARVEY AVE BALDWIN PARK | Pacific Telephone |

# FINDINGS

**13057 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2004 | CLASSIFIED PRIVATE SECURITY | Cole Information Services |
| 2003 | AYAD Emil | Haines & Company |
| 1995 | QUALITY STRIPING | Pacific Bell |
| | Quality Striping | Pacific Bell |
| 1994 | QUALITY STRIPING | Cole Information Services |
| 1980 | C W ENGINEERING INC GARVEY AVE BALDWIN PARK | Pacific Telephone |
| | ARCHIE A COWAN ENGINEERING INC GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | T-P ACOUSTICS | Pacific Telephone |
| | LIGHT GLASS CO | Pacific Telephone |
| | PACIFIC INTERIORS | Pacific Telephone |
| | TILE-PARTITION CO | Pacific Telephone |

**13061 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | RUTH GARCIA | Cole Information Services |
| | MICHELE DONNER | Cole Information Services |
| 2009 | RALPH SELINE | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| | RUTH GARCIA | Cole Information Services |
| 2004 | RUTH GARCIA | Cole Information Services |
| 1999 | RALPH SELINE | Cole Information Services |
| | RUTH GARCIA | Cole Information Services |
| 1985 | FRANCO ANTONIO | Pacific Bell |
| 1975 | VIGIL RICARDO | Pacific Telephone |

**13063 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | C CHAVEZ | Cole Information Services |
| 2009 | C CHAVEZ | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| | RUDY CORDERO | Cole Information Services |
| 1999 | C CHAVEZ | Cole Information Services |
| 1975 | WILLIAMS BILL | Pacific Telephone |

# FINDINGS

**13065 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | RAFAEL LARA | Cole Information Services |
| | RAFAEL LARA | Cole Information Services |
| 2009 | RAFAEL LARA | Cole Information Services |
| | RAFAEL LARA | Cole Information Services |
| 2004 | MARIA LEDESMA | Cole Information Services |
| | KARINA SERRANO | Cole Information Services |
| | RALPH SELINE | Cole Information Services |
| | MARIA LEDESMA | Cole Information Services |
| | KARINA SERRANO | Cole Information Services |
| | RALPH SELINE | Cole Information Services |
| 2003 | CHIPPAllan | Haines & Company |
| | LEDESMA Mana Elena | Haines & Company |
| 1999 | RAFAEL LARA | Cole Information Services |
| | RAFAEL LARA | Cole Information Services |
| 1980 | HIPOLITO HECTOR GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | SHEETS CHERIE K | Pacific Telephone |

**13067 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | MIKE FIMBREZ | Cole Information Services |
| 2009 | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | LUPE ESPITIA | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1985 | LOPEZ RAMONA | Pacific Bell |

**13075 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2009 | TITAN GRAPHICS & PROMOTIONS | Cole Information Services |
| | TITAN GRAPHICS & PROMOTIONS | Cole Information Services |
| 2004 | WINNING PROMOTIONS & GRAPHICS | Cole Information Services |
| | CORP COLOUR PRINTING INC | Cole Information Services |
| | 28K SIGNS | Cole Information Services |
| | SHOWER WALLS SAN GABRIEL | Cole Information Services |
| | CJW BUILDERS INC | Cole Information Services |
| | WINNING PROMOTIONS & GRAPHICS | Cole Information Services |
| | CORP COLOUR PRINTING INC | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2004 | 28K SIGNS | Cole Information Services |
| | SHOWER WALLS SAN GABRIEL | Cole Information Services |
| | CJW BUILDERS INC | Cole Information Services |
| 2003 | C J W BUILDERS | Haines & Company |
| | CORPORATECLR | Haines & Company |
| | PRNTG KTTOOLS | Haines & Company |
| | PRINTING&PROMOTIO | Haines & Company |
| | NAL ITEMS SHOWERWALLSSAN | Haines & Company |
| | GABRIEL | Haines & Company |
| 1999 | CORPORATE COLOUR PRINTING INCORPORATED | Cole Information Services |
| | AMERICAN DESIGN WEAR | Cole Information Services |
| | GRAYS PLUMBING | Cole Information Services |
| | SHOWER WALLS UNLIMITED SAN GABRIEL VALLEY | Cole Information Services |
| | C SYSTEM GRAPHICS | Cole Information Services |
| | LAPRINTING & PROMOTIONAL ITEMS | Cole Information Services |
| | CORPORATE COLOUR PRINTING INCORPORATED | Cole Information Services |
| | AMERICAN DESIGN WEAR | Cole Information Services |
| | GRAYS PLUMBING | Cole Information Services |
| | SHOWER WALLS UNLIMITED SAN GABRIEL VALLEY | Cole Information Services |
| | C SYSTEM GRAPHICS | Cole Information Services |
| | LAPRINTING & PROMOTIONAL ITEMS | Cole Information Services |
| 1995 | CORPORATE COLOUR PRINTING INC | Pacific Bell |
| | SHOWER WALLS UNLIMITED-SAN GABRIEL VALLEY | Pacific Bell |
| | American Design Wear | Pacific Bell |
| | Corporate Colour Printing Inc | Pacific Bell |
| | Corporate Communication | Pacific Bell |
| | Corporate Communications S Mad | Pacific Bell |
| | Shower Walls Unlimited San Gabriel Valley | Pacific Bell |
| | Showers Duet Pico Riv | Pacific Bell |
| 1994 | FUN RUNNER | Cole Information Services |
| | CORPORATE COLOUR PRINTING INC | Cole Information Services |
| | SHOWER WALLS UNLIMITED | Cole Information Services |
| | OLSONS MOBILE FURNITURE FIXER | Cole Information Services |
| | FUN RUNNER | Cole Information Services |
| | CORPORATE COLOUR PRINTING INC | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 1994 | SHOWER WALLS UNLIMITED | Cole Information Services |
| | OLSONS MOBILE FURNITURE FIXER | Cole Information Services |
| 1985 | EDIFICE BUILDERS | Pacific Bell |
| | LAGUNA OPTICAL SUPPLIES | Pacific Bell |
| | METRIC TOOL & MACHINE | Pacific Bell |
| 1975 | KRAUSE B E MRS | Pacific Telephone |

**13079 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | MCNEILL SOUND & SECURITY | Cole Information Services |
| 2009 | MCNEILL SOUND & SECURITY | Cole Information Services |
| 2004 | MCNEILL SOUND & SECURITY | Cole Information Services |
| 2003 | MCNEILL Richard | Haines & Company |
| | MCNEILL | Haines & Company |
| | SOUND&SCRTY | Haines & Company |
| 1999 | MCNEILL SOUND & SECURITY | Cole Information Services |
| 1995 | MCNELIL SOUND & SECURITY | Pacific Bell |
| | Mc Nelil Sound & Security | Pacific Bell |
| 1994 | MCNEILL SOUND&SCRTY | Cole Information Services |
| | MC NEILL SOUND & SECURITY | Cole Information Services |
| 1985 | MUNNELL GREGORY | Pacific Bell |
| | GARCIA ANGELINA B PK | Pacific Bell |
| 1980 | GARCIA ANGELINA GARVEY AVE BALDWIN PARK | Pacific Telephone |
| | SEGOVIA RAMON GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | ESPINOSA ROSA | Pacific Telephone |
| | LEMUS ERACLIO | Pacific Telephone |

**13081 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2004 | TRACY ELLIS | Cole Information Services |
| 2003 | MCNEILL Richard | Haines & Company |
| 1985 | ELLIS CONSTRUCTION | Pacific Bell |
| | ELLIS ROOFING | Pacific Bell |

**13109 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | ARISTOCRAT MOTEL | Cole Information Services |
| | ARISTOCRAT MOTEL | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2009 | ARISTOCRAT MOTEL | Cole Information Services |
| | ARISTOCRAT MOTEL | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| | ARISTOCRAT MOTEL | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| | ARISTOCRAT MOTEL | Cole Information Services |
| 2003 | ARISTOCRATMOTEL | Haines & Company |
| | LAXAGUE Edouard | Haines & Company |
| 1999 | ARISTOCRAT MOTEL | Cole Information Services |
| | ARISTOCRAT MOTEL | Cole Information Services |
| 1995 | Aristocrat Motel | Pacific Bell |
| | ARISTOCRAT MOTEL | Pacific Bell |
| 1994 | ARISTOCRAT MOTEL | Cole Information Services |
| | ARISTOCRAT MOTEL | Cole Information Services |
| 1985 | ARISTOCRAT MOTEL | Pacific Bell |
| 1980 | ARISTOCRAT MOTEL GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | SPELLMAN ANNA | Pacific Telephone |

**13127 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2004 | MANUEL FERNANDEZ | Cole Information Services |
| 2003 | TAXCO SALCEDO CAFE | Haines & Company |
| 1999 | TAXCO SALCEDO CAFE | Cole Information Services |
| 1995 | TAXCOSALCEDO CAFE | Pacific Bell |
| | Taxco Salcedo Cafe | Pacific Bell |
| 1994 | TAXCO SALCEDO CAFE | Cole Information Services |
| 1985 | TAXCO SALCEDO CAFE | Pacific Bell |
| 1975 | TAXCO SALCEDO CAFE | Pacific Telephone |

**13131 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2009 | JORGE GONZALEZ | Cole Information Services |
| 2004 | JOSE SEGOVIA | Cole Information Services |
| | ESTELA RIVERA | Cole Information Services |
| 2003 | D SEGOVIAJose Ramon | Haines & Company |
| | RIVERA Eslela | Haines & Company |
| 1999 | JORGE GONZALEZ | Cole Information Services |
| 1995 | Segovia M & J Pico Riv | Pacific Bell |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 1995 | Segovia M IM | Pacific Bell |
| | Segovia Jose Ramon | Pacific Bell |
| | SEGOVIA JOSE RAMON | Pacific Bell |
| 1994 | SEGOVIA, JOSE R | Cole Information Services |
| 1985 | SEGOVIA JOSE RAMON | Pacific Bell |
| 1980 | ARIZPE ARTURO GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | ZAMORA MARGARITA M | Pacific Telephone |
| | TORRES ERNEST | Pacific Telephone |
| | SALCEDO JESSE V | Pacific Telephone |

**13135 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2009 | BALDWIN PARK CITY | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 1980 | BALDWIN PARK CITY OF | Pacific Telephone |
| 1975 | LOS ANGELES COUNTY OF PPROBATION DEPT AREA OFCS | Pacific Telephone |

**13165 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1985 | OPT CON SERVICE INC | Pacific Bell |
| 1980 | OPT CON SERVICES INC GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | WALLCRAFT INC | Pacific Telephone |
| | GREENS INDUTRIAL PAINTING | Pacific Telephone |

**13167 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | MALCOLMS PLUMBING & ROOTER SERVICE | Cole Information Services |
| 2009 | MR ROOTER | Cole Information Services |
| | MALCOMBS PLUMBING & RTR SERVICE | Cole Information Services |
| | MALCOLM S PLUMBING | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | JOY TRANS COMPANY | Cole Information Services |
| 1995 | Perma Roofing Co | Pacific Bell |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 1995 | Perma Roofing Co | Pacific Bell |
| | PERMA ROOFING CO | Pacific Bell |
| | PERMA ROOFING CO | Pacific Bell |
| 1994 | PERMA ROOFING CO | Cole Information Services |
| 1985 | PERMA ROOFING | Pacific Bell |
| 1980 | SOUTHERN CALIFORNIA INTERIORS INC GARVEY AVE BALDWIN PARK | Pacific Telephone |
| | GREEN S INDUSTRIAL PAINTING GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | A ADVANCED MAIL DELIVERY SERVICE | Pacific Telephone |

**13179 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | VICTOR CATANO | Cole Information Services |
| 2009 | VICTOR CATANO | Cole Information Services |
| 2004 | VICTOR CATANO | Cole Information Services |
| 2003 | CATANO Victor | Haines & Company |

**13209 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 2014 | FIDELITY FIRST ENTERPRISES INC | Cole Information Services |
| | ACHIEVE PEST CONTROL INC | Cole Information Services |
| 2009 | TAX & INSURANCE CO | Cole Information Services |
| | FIDELITYFIRSTENTERPRISESINC | Cole Information Services |
| | SUPERIOR HOME LENDING | Cole Information Services |
| | RYDER INTEGRATED LOGISTICS | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | SNYDER MOVING INCORPORATED | Cole Information Services |
| | SNYDER MOVING | Cole Information Services |
| | RYDER TRCK RENTAL ONE WAY INCORPORATED NEIGHBORHOOD DEALERS | Cole Information Services |
| | INTERSTATE AUTO EXCHANGE | Cole Information Services |

**13065 1/2 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 1975 | RIOS GREG BALDWIN PARK | Pacific Telephone |

# FINDINGS

**13067 1/2 GARVEY AVE**

| Year | Uses | Source |
|---|---|---|
| 1966 | POTTER GEO | Pacific Telephone |

## Garvey Avenue

**13065 Garvey Avenue**

| Year | Uses | Source |
|---|---|---|
| 2003 | CHIPPAllan | Haines & Company |
| | LEDESMA Mana Elena | Haines & Company |
| 1980 | HIPOLITO HECTOR GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | SHEETS CHERIE K | Pacific Telephone |

**13075 Garvey Avenue**

| Year | Uses | Source |
|---|---|---|
| 2003 | C J W BUILDERS | Haines & Company |
| | CORPORATECLR | Haines & Company |
| | PRNTG KTTOOLS | Haines & Company |
| | PRINTING&PROMOTIO | Haines & Company |
| | NAL ITEMS SHOWERWALLSSAN | Haines & Company |
| | GABRIEL | Haines & Company |
| 1995 | CORPORATE COLOUR PRINTING INC | Pacific Bell |
| | SHOWER WALLS UNLIMITED-SAN GABRIEL VALLEY | Pacific Bell |
| | American Design Wear | Pacific Bell |
| | Corporate Colour Printing Inc | Pacific Bell |
| | Corporate Communication | Pacific Bell |
| | Corporate Communications S Mad | Pacific Bell |
| | Shower Walls Unlimited San Gabriel Valley | Pacific Bell |
| | Showers Duet Pico Riv | Pacific Bell |
| 1985 | LAGUNA OPTICAL SUPPLIES | Pacific Bell |
| | EDIFICE BUILDERS | Pacific Bell |
| | METRIC TOOL & MACHINE | Pacific Bell |
| 1975 | KRAUSE B E MRS | Pacific Telephone |

**13109 Garvey Avenue**

| Year | Uses | Source |
|---|---|---|
| 2003 | ARISTOCRATMOTEL | Haines & Company |
| | LAXAGUE Edouard | Haines & Company |

| Year | Uses | Source |
|---|---|---|
| 1995 | ARISTOCRAT MOTEL | Pacific Bell |
| | Aristocrat Motel | Pacific Bell |
| 1985 | ARISTOCRAT MOTEL | Pacific Bell |
| 1980 | ARISTOCRAT MOTEL GARVEY AVE BALDWIN PARK | Pacific Telephone |
| 1975 | SPELLMAN ANNA | Pacific Telephone |

## JUDITH ST

### 13052 JUDITH ST

| Year | Uses | Source |
|---|---|---|
| 2014 | ANDREW SANTIAGO | Cole Information Services |
| 2009 | CIFUENTES EVA L | Cole Information Services |
| | EVA CIFUENTES | Cole Information Services |
| 2004 | ERNESTO SIQUEIROS | Cole Information Services |
| 2003 | SIQUEIROS Emesto | Haines & Company |
| | ROMAN Juan | Haines & Company |
| 1999 | EVA CIFUENTES | Cole Information Services |
| 1975 | CAUVEL EARL | Pacific Telephone |

### 13053 JUDITH ST

| Year | Uses | Source |
|---|---|---|
| 2014 | JESUS GONZALEZ | Cole Information Services |
| 2009 | JESUS GONZALEZ | Cole Information Services |
| 2004 | JESUS GONZALEZ | Cole Information Services |
| 2003 | GONZALEZMaria | Haines & Company |
| 1999 | JESUS GONZALEZ | Cole Information Services |
| 1995 | HALE CHESTER C | Pacific Bell |
| | Hale Chester C | Pacific Bell |
| 1994 | HALE, CHESTER C | Cole Information Services |
| 1985 | HALE CHESTER C | Pacific Bell |
| 1975 | HALE CHESTER C | Pacific Telephone |

### 13056 JUDITH ST

| Year | Uses | Source |
|---|---|---|
| 2014 | CATHY MARTINEZ | Cole Information Services |

### 13058 JUDITH ST

| Year | Uses | Source |
|---|---|---|
| 2014 | LILLIAN DOHERTY | Cole Information Services |

| Year | Uses | Source |
|---|---|---|
| 2009 | LILLIAN DOHERTY | Cole Information Services |
| 2004 | LILLIAN DOHERTY | Cole Information Services |
| 2003 | DOHERTY Lillian | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |
| | LILLIAN DOHERTY | Cole Information Services |

**13059 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | GABRIEL MERCADO | Cole Information Services |
| 2009 | GABRIEL MERCADO | Cole Information Services |
| 2004 | MANUEL TAVAREZ | Cole Information Services |
| 2003 | OBEELER Elizabeth | Haines & Company |
| 1999 | GABRIEL MERCADO | Cole Information Services |

**13062 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | JOSE QUIRARTE | Cole Information Services |

**13064 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | SUSAN BRAY | Cole Information Services |
| 2009 | JOSE QUIRARTE | Cole Information Services |
| 2004 | JOSE QUIRARTE | Cole Information Services |
| 2003 | QUIRARTE Jose | Haines & Company |
| 1999 | JOSE QUIRARTE | Cole Information Services |
| 1995 | QUIRARTE JOSE | Pacific Bell |
| | Quirarte Jose | Pacific Bell |
| 1994 | QUIRARTE, JOSE | Cole Information Services |
| 1975 | LUSKLEET CHAS | Pacific Telephone |

**13100 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2009 | INEZ LOPEZ | Cole Information Services |
| 2004 | INEZ LOPEZ | Cole Information Services |
| 1999 | INEZ LOPEZ | Cole Information Services |

**13102 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ROSA AMEZCUA | Cole Information Services |
| 2009 | ROSA AMEZCUA | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2004 | GUILLERMO BERBER | Cole Information Services |
| 2003 | BERBER Guillenmo | Haines & Company |
| 1999 | ROSA AMEZCUA | Cole Information Services |
| 1985 | BUTKOVICH JOHN M | Pacific Bell |
| 1980 | BUTKOVICH JOHN M JUDITH ST BALDWIN PARK | Pacific Telephone |
| 1975 | BUTKOVICH JOHN M | Pacific Telephone |

**13106 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | MAYRA LOPEZ | Cole Information Services |
| 2009 | JUAN ROJASREYES | Cole Information Services |
| 2004 | ADAM HO | Cole Information Services |
| 2003 | HO Huy | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |

**13107 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | JOSE JIMENEZ | Cole Information Services |
| | JAIME REYES | Cole Information Services |
| 2009 | MIRIAM AHUMADA | Cole Information Services |
| | JAIME REYES | Cole Information Services |
| 2004 | JAIME REYES | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | REYESJaime | Haines & Company |
| 1999 | MIRIAM AHUMADA | Cole Information Services |
| | JAIME REYES | Cole Information Services |

**13110 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ADELA MENDEZ | Cole Information Services |
| 2009 | JOSE VILLACORTA | Cole Information Services |
| 2004 | JOSE VILLACORTA | Cole Information Services |
| 2003 | Di AZClaudia 626 33 B 2547 | Haines & Company |
| | SVILLACORTA Martha | Haines & Company |
| 1999 | JOSE VILLACORTA | Cole Information Services |
| 1980 | RUIZ VICTOR JUDITH ST BALDWIN PARK | Pacific Telephone |

# FINDINGS

**13112 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | VICTOR ESCOBEDO | Cole Information Services |
| 2009 | GERARDO ZEPEDA | Cole Information Services |
| 1999 | GERARDO ZEPEDA | Cole Information Services |

**13115 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | MARIA TORRES | Cole Information Services |
| 2009 | VELIA GOMEZ | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | RAMIREZEduando | Haines & Company |
| | JIMENEZ Raqual | Haines & Company |
| 1999 | VELIA GOMEZ | Cole Information Services |
| 1985 | GOMEZ YOLANDA | Pacific Bell |
| 1975 | TISSEL RICHARD | Pacific Telephone |

**13116 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ADRIANA CAMPOS | Cole Information Services |
| 2009 | BENIGNO ARCHILA | Cole Information Services |
| 2004 | ISAIAS VARGAS | Cole Information Services |
| 2003 | VARGAS Isaias | Haines & Company |
| 1999 | BENIGNO ARCHILA | Cole Information Services |
| 1980 | ESCAMILLA GASTON JUDITH ST BALDWIN PARK | Pacific Telephone |
| 1975 | BAKKENHAUG JENS | Pacific Telephone |

**13117 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | MIGUEL VASQUEZ | Cole Information Services |
| 2009 | MIGUEL VASQUEZ | Cole Information Services |
| 2004 | NELLIE GARCIA | Cole Information Services |
| 2003 | GARCIAJoe | Haines & Company |
| 1999 | MIGUEL VASQUEZ | Cole Information Services |
| 1975 | GARCIA NELLIE | Pacific Telephone |

**13120 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ZHI TAN | Cole Information Services |
| 2009 | ERASMO ROBLES | Cole Information Services |

| Year | Uses | Source |
|---|---|---|
| 2004 | ISAI CONTRERAS | Cole Information Services |
| 2003 | ROBLESErasmo | Haines & Company |
| 1995 | CUBLASANA | Pacific Bell |
| | Cublas Ana | Pacific Bell |
| | Cubias Marion Heriberto | Pacific Bell |
| 1994 | CUBIAS, ANA | Cole Information Services |

**13123 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | GUILLERMO CUELLAR | Cole Information Services |
| 2009 | LESLY CUELLAR | Cole Information Services |
| 2004 | JAIME CUELLAR | Cole Information Services |
| 2003 | CUELLAR Lesly | Haines & Company |
| 1999 | LESLY CUELLAR | Cole Information Services |
| 1995 | CUELLAR LESLY | Pacific Bell |
| 1994 | CUELLAR, LESLY | Cole Information Services |
| 1975 | DONAHEY DOUGLAS | Pacific Telephone |

**13128 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | RODOLFO RAZO | Cole Information Services |
| 2009 | RODOLFO RAZO | Cole Information Services |
| 2004 | RODOLFO RAZO | Cole Information Services |
| 2003 | REQUEIRAGloria | Haines & Company |
| 1999 | RODOLFO RAZO | Cole Information Services |
| 1980 | REGUEIRA GLORIA JUDITH ST BALDWIN PARK | Pacific Telephone |
| 1975 | REGUEIRA GEORGE | Pacific Telephone |

**13131 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ELIAS MACIAS | Cole Information Services |
| 2009 | ELIAS MACIAS | Cole Information Services |
| 2004 | ELIAS MACIAS | Cole Information Services |
| 2003 | MACIASRosa | Haines & Company |
| 1999 | MARIA MARTINEZ | Cole Information Services |
| 1995 | HEMRANDEZ ANA MARGARITA | Pacific Bell |
| | Hemrandez Ana Margarita | Pacific Bell |
| 1985 | MARTINEZ MAURILLO | Pacific Bell |

| Year | Uses | Source |
|---|---|---|
| 1980 | PETTIBONE BRYAN JUDITH ST BALDWIN PARK | Pacific Telephone |

**13132 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2009 | GLORIA QUINTERO | Cole Information Services |
| 2004 | DANIEL ISLEY | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | GLORIA QUINTERO | Cole Information Services |
| 1995 | White Robt C | Pacific Bell |
| | WHITE ROBT C | Pacific Bell |
| 1994 | WHITE, ROBERT C | Cole Information Services |
| 1980 | CRAWFORD MILO T JUDITH ST BALDWIN PARK | Pacific Telephone |
| 1975 | CRAWFORD MILO T | Pacific Telephone |

**13135 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 2009 | JUAN ANZALDO | Cole Information Services |
| 2004 | JUAN ANZALDO | Cole Information Services |
| 2003 | ANZALDOJuan | Haines & Company |
| 1999 | JUAN ANZALDO | Cole Information Services |
| 1980 | GILLIAM S T JUDITH ST BALDWIN PARK | Pacific Telephone |
| 1975 | GILLIAM S T | Pacific Telephone |

**13139 JUDITH ST**

| Year | Uses | Source |
|---|---|---|
| 1980 | STEPHENS OPAL A JUDITH ST BALDWIN PARK | Pacific Telephone |

## LAURETTE ST

**902 LAURETTE ST**

| Year | Uses | Source |
|---|---|---|
| 1950 | ECONOMY LAUNDRY | Pacific Telephone |

## LEORITA ST

**904 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | VILMA GALLARDO | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2009 | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | GALLARDO Vlma | Haines & Company |
| 1994 | GUDINO, EDUARDO | Cole Information Services |
| 1985 | WILLIAMS ROY JR | Pacific Bell |
| 1980 | WILLIAMS ROY JR LEORITA ST BALDWIN PARK | Pacific Telephone |
| 1975 | WILLIAMS ROY JR | Pacific Telephone |

**916 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | WILMA OTERO | Cole Information Services |
| 2009 | WILMA OTERO | Cole Information Services |
| 2004 | WILMA OTERO | Cole Information Services |
| 2003 | OTERORaul | Haines & Company |
| 1999 | WILMA OTERO | Cole Information Services |
| 1975 | RICKER FRANK | Pacific Telephone |

**919 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | GUILLERMO MARRUFO | Cole Information Services |
| 2004 | JESUS RAMIREZ | Cole Information Services |
| 2003 | RAMIREZ Mary | Haines & Company |
| | RAMIREZJesus | Haines & Company |
| | ORAMIREZ Lucia | Haines & Company |
| 1980 | CLARK HENRY LEORITA ST BALDWIN PARK | Pacific Telephone |

**920 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | JOSE PEREZ | Cole Information Services |
| 2009 | JOSE PEREZ | Cole Information Services |
| 2004 | JOSE PEREZ | Cole Information Services |
| 2003 | AYALAMaur Oio | Haines & Company |
| | PEREZJose Luisa | Haines & Company |
| 1999 | JOSE PEREZ | Cole Information Services |
| 1975 | TYREE MARY | Pacific Telephone |

**921 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | CINDY MORCILLO | Cole Information Services |

| Year | Uses | Source |
|---|---|---|
| 2014 | CYNTHIA ARAGON | Cole Information Services |
| 2009 | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 2003 | SMORCILLOAlexis | Haines & Company |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |
| 1975 | BALDELLI ROGER | Pacific Telephone |

**923 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2003 | XXXX | Haines & Company |
| 1980 | DOUGHERTY BRUCE LEORITA ST BALDWIN PARK | Pacific Telephone |
| 1975 | HOTING ALLEN A | Pacific Telephone |

**926 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | URIEL RODRIGUEZ | Cole Information Services |
| | OSCAR RICO | Cole Information Services |
| | RIGOBERTO HERRERA | Cole Information Services |
| 2009 | RIGOBERTO HERRERA | Cole Information Services |
| 2004 | RIGOBERTO HERRERA | Cole Information Services |
| | GARY RODRIGUEZ | Cole Information Services |
| 2003 | HERRERA Rigoberto | Haines & Company |
| 1999 | RIGOBERTO HERRERA | Cole Information Services |
| 1975 | SPARKS JOHN G | Pacific Telephone |

**927 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2009 | MARDELLA ROMAN | Cole Information Services |
| 2004 | CLARA AGUILAR | Cole Information Services |

**929 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ARTURO MARIN | Cole Information Services |
| 2009 | EDUARDO CHAVEZ | Cole Information Services |
| 2004 | RAYMOND CARRANZA | Cole Information Services |
| 2003 | SCARRANZA Raymond | Haines & Company |
| 1999 | RAYMOND CARRANZA | Cole Information Services |
| | EDUARDO CHAVEZ | Cole Information Services |
| 1994 | CARRANZA, RAYMOND | Cole Information Services |

# FINDINGS

**930 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2004 | SYLVIA GONZALES | Cole Information Services |

**931 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | HILDA BANUELOS | Cole Information Services |
| 2009 | PATRICIA BANUELOS | Cole Information Services |
| 1999 | PATRICIA BANUELOS | Cole Information Services |
| | CESAR MARIN | Cole Information Services |
| 1995 | Ibarra Lauro | Pacific Bell |
| 1994 | IBARRA, LAURO | Cole Information Services |

**932 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | LUIS LOPEZ | Cole Information Services |
| | CRYSTAL ACEYTUNO | Cole Information Services |
| | CYNTHIA CALDERON | Cole Information Services |
| | TIA BROOKS | Cole Information Services |
| | ROBERT BODKIN | Cole Information Services |
| | CHRISTINE RAMIREZ | Cole Information Services |
| | ANNAMARIE TRIVISO | Cole Information Services |
| | ROSELIA CRUZ | Cole Information Services |
| | AFRICA LOPEZ | Cole Information Services |
| | CARLOS HERNANDEZ | Cole Information Services |
| | JESUS ZUNIGA | Cole Information Services |
| | JUAN ESPERICUETA | Cole Information Services |
| | DANIEL CALVILLO | Cole Information Services |
| | ROSELINDA MARTINEZ | Cole Information Services |
| | JUAN CHARCAS | Cole Information Services |
| | PEDRO ARCINIEGA | Cole Information Services |
| | JUAN GUTIERREZ | Cole Information Services |
| 2009 | PEDRO ARCINIEGA | Cole Information Services |
| | ERICA CAMPOS | Cole Information Services |
| | CYNTHIA CALDERON | Cole Information Services |
| | ROBERT BODKIN | Cole Information Services |
| | JUAN GUTIERREZ | Cole Information Services |
| | ROSARIO NAVAJA | Cole Information Services |
| | BERTHA ALBA | Cole Information Services |
| | AVILA ZUNIGA | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 2009 | TED LOPEZ | Cole Information Services |
| | XIAO LIU | Cole Information Services |
| | JESUS AVILA | Cole Information Services |
| | YVONNE SANCHEZ | Cole Information Services |
| | MARTHA CRUZ | Cole Information Services |
| | MIGUEL ALVAREZ | Cole Information Services |
| | DANIEL CALVILLO | Cole Information Services |
| | BENJAMIN DOMINGO | Cole Information Services |
| | QUIJANO TONY | Cole Information Services |
| | JOANN DUDLEY | Cole Information Services |
| 2004 | JUAN GUTIERREZ | Cole Information Services |
| | DOMETILA MAGALLANA | Cole Information Services |
| | LAURA HERNANDEZ | Cole Information Services |
| | ERICA RINCON | Cole Information Services |
| | ANTHONY AUTUMGAL | Cole Information Services |
| | MARIA DELRIO | Cole Information Services |
| | ROBERT BODKIN | Cole Information Services |
| | MARIO RAMIREZ | Cole Information Services |
| | MARTHA CRUZ | Cole Information Services |
| | CARLOS HERNANDEZ | Cole Information Services |
| | THO LUONG | Cole Information Services |
| | GIOVANNI IBALE | Cole Information Services |
| | MANUELA DIAZ | Cole Information Services |
| 2003 | GONZALES Chown | Haines & Company |
| | CERVANTES Benta | Haines & Company |
| | BODKIN Robt W | Haines & Company |
| | APARTMENTS AUTUMGAL Anthony | Haines & Company |
| 1999 | JUAN GUTIERREZ | Cole Information Services |
| | ROBERT BODKIN | Cole Information Services |
| | PEDRO ARCINIEGA | Cole Information Services |
| | JOANN DUDLEY | Cole Information Services |
| | QUIJANO TONY | Cole Information Services |
| | BENJAMIN DOMINGO | Cole Information Services |
| | MIGUEL ALVAREZ | Cole Information Services |
| | MARTHA CRUZ | Cole Information Services |
| | YVONNE SANCHEZ | Cole Information Services |
| | AVILA ZUNIGA | Cole Information Services |
| | JESUS AVILA | Cole Information Services |

| Year | Uses | Source |
|---|---|---|
| 1999 | XIAO LIU | Cole Information Services |
| | TED LOPEZ | Cole Information Services |
| | BERTHA ALBA | Cole Information Services |
| | ROSARIO NAVAJA | Cole Information Services |
| 1995 | i Mdk In Rotbt W | Pacific Bell |
| | Peralta Benjamin | Pacific Bell |
| | Madrid Albert & Pat | Pacific Bell |
| | Gutlerrez Julia | Pacific Bell |
| | Castillo Rosario E | Pacific Bell |
| | Gutlerrez Juaa n e | Pacific Bell |
| | Gutlerrez Judith | Pacific Bell |
| | Gutlerrez Juan J | Pacific Bell |
| | Gutlerren Juan M La Pnte | Pacific Bell |
| 1994 | GUTIERREZ, JUAN J | Cole Information Services |
| | BODKIN, ROBERT W | Cole Information Services |
| | PERALTA, B | Cole Information Services |

**933 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ELIZABETH ALVAREZ | Cole Information Services |
| | ADA LOPEZ | Cole Information Services |
| | CORNELIO VAZQUEZ | Cole Information Services |
| | SOCORITO DOMINQUEZ | Cole Information Services |
| 2009 | ARISBETH CAMPOS | Cole Information Services |
| | CORNELIO VAZQUEZ | Cole Information Services |
| | ELIZABETH ALVAREZ | Cole Information Services |
| 2004 | CORNELIO VAZQUEZ | Cole Information Services |
| 2003 | VAZQUEZComelo | Haines & Company |
| 1999 | CORNELIO VAZQUEZ | Cole Information Services |
| | ELIZABETH ALVAREZ | Cole Information Services |
| 1994 | VAZQUEZ, C | Cole Information Services |

**939 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | FRANCISCO CHAVACANO | Cole Information Services |
| 2009 | FRANCISCO CHAVACANO | Cole Information Services |
| 2004 | J PEREZ | Cole Information Services |
| 2003 | XXXX | Haines & Company |
| 1999 | FRANCISCO CHAVACANO | Cole Information Services |

| Year | Uses | Source |
|---|---|---|
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |

**1008 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2003 | XXXX | Haines & Company |
| 1985 | KOLBY MICHAEL E | Pacific Bell |

**1010 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 1985 | KOLBY KENNETH | Pacific Bell |
| 1975 | HULSE KENNETH L | Pacific Telephone |

**1011 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | CRYSTAL PEREZ | Cole Information Services |
| | CRYSTAL PEREZ | Cole Information Services |
| 2009 | ALAN PENUELA | Cole Information Services |
| | ALAN PENUELA | Cole Information Services |
| 2004 | ALAN PENUELA | Cole Information Services |
| | ALAN PENUELA | Cole Information Services |
| 2003 | PENUELAAlan | Haines & Company |
| 1999 | ALAN PENUELA | Cole Information Services |
| | ALAN PENUELA | Cole Information Services |
| 1985 | WIDLMAN V J | Pacific Bell |
| 1975 | MATTHEWS FRANK | Pacific Telephone |

**1012 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 1985 | HILADO THOS | Pacific Bell |

**1013 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2009 | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | RAMIRO CASTRO | Cole Information Services |
| 2003 | CASTRO R | Haines & Company |
| 1975 | GROSS PENELOPE | Pacific Telephone |

**1019 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | MAYRA FLORES | Cole Information Services |

| Year | Uses | Source |
|---|---|---|
| 2014 | MAYRA FLORES | Cole Information Services |
| 2009 | MARIA PALACIOS | Cole Information Services |
| | MARIA PALACIOS | Cole Information Services |
| 2004 | JOSE CASTELLON | Cole Information Services |
| | MARIA PALACIO | Cole Information Services |
| | JUAN HERNANDEZ | Cole Information Services |
| | JOSE CASTELLON | Cole Information Services |
| | MARIA PALACIO | Cole Information Services |
| | JUAN HERNANDEZ | Cole Information Services |
| 2003 | CASTELLON Jose | Haines & Company |
| 1999 | MARIA PALACIOS | Cole Information Services |
| | MARIA PALACIOS | Cole Information Services |
| 1980 | MENEES OGLE O LEORITA ST BALDWIN PARK | Pacific Telephone |
| 1975 | MC DOWELL ALICE | Pacific Telephone |
| 1966 | WELLS HENRY L | Pacific Telephone |

**921 1/2 LEORITA ST**

| Year | Uses | Source |
|---|---|---|
| 1975 | CASIAS THOS BALDWIN PARK | Pacific Telephone |

## Leorita Street

**1011 Leorita Street**

| Year | Uses | Source |
|---|---|---|
| 2003 | PENUELAAlan | Haines & Company |
| 1985 | WIDLMAN V J | Pacific Bell |
| 1975 | MATTHEWS FRANK | Pacific Telephone |

**1019 Leorita Street**

| Year | Uses | Source |
|---|---|---|
| 2003 | CASTELLON Jose | Haines & Company |
| 1980 | MENEES OGLE O LEORITA ST BALDWIN PARK | Pacific Telephone |
| 1975 | MC DOWELL ALICE | Pacific Telephone |
| 1966 | WELLS HENRY L | Pacific Telephone |

# FINDINGS

## SHAVER ST

### 13142 SHAVER ST

| Year | Uses | Source |
|---|---|---|
| 2014 | DANIEL MUNOZ | Cole Information Services |
| 2009 | DAVID MUNOZ | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 1999 | DAVID MUNOZ | Cole Information Services |

### 13146 SHAVER ST

| Year | Uses | Source |
|---|---|---|
| 2014 | CLEMENTE TARIN | Cole Information Services |
| 2009 | CLEMENTE TARIN | Cole Information Services |
| 2004 | CLEMENTE TARIN | Cole Information Services |
| 1999 | CLEMENTE TARIN | Cole Information Services |
| 1975 | TARIN CLEMEINTE G | Pacific Telephone |
| 1966 | TARIN CLEMENTE G | Pacific Telephone |

### 13147 SHAVER ST

| Year | Uses | Source |
|---|---|---|
| 2009 | RAMON RAYGOZA | Cole Information Services |
| 2004 | RAMON RAYGOZA | Cole Information Services |
| 1999 | RAMON RAYGOZA | Cole Information Services |
| 1985 | RABAGO HENRY | Pacific Bell |
| 1980 | RABAGO HENRY SHAVER ST BALDWIN PARK | Pacific Telephone |

### 13151 SHAVER ST

| Year | Uses | Source |
|---|---|---|
| 2014 | JAIME DEJESUS | Cole Information Services |
| 2009 | OCCUPANT UNKNOWN | Cole Information Services |

### 13152 SHAVER ST

| Year | Uses | Source |
|---|---|---|
| 2014 | ALAN HUYNH | Cole Information Services |
| 2009 | JACKIE LU | Cole Information Services |
| 2004 | TUNG NGUYEN | Cole Information Services |
| 1999 | JACKIE LU | Cole Information Services |
| 1994 | LAM, SON | Cole Information Services |

# FINDINGS

**13156 SHAVER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | ARTHUR LOPEZ | Cole Information Services |
| 2009 | ARTHUR LOPEZ | Cole Information Services |
| 2004 | ARTHUR LOPEZ | Cole Information Services |
| 1999 | ARTHUR LOPEZ | Cole Information Services |
| 1995 | Lopez Arthur | Pacific Bell |
| 1994 | LOPEZ, ARTHUR | Cole Information Services |
| 1985 | LOPEZ ARTHUR | Pacific Bell |
| 1975 | LOPEZ ARTHUR BALDWIN PARK | Pacific Telephone |

**13157 SHAVER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | FABIAN JUAREZ | Cole Information Services |
| 2009 | HEALTHY & HAPPY CO | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 2004 | OCCUPANT UNKNOWN | Cole Information Services |
| 1999 | OCCUPANT UNKNOWN | Cole Information Services |
| 1980 | TARIN INC SHAVER ST BALDWIN PARK | Pacific Telephone |

**13160 SHAVER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | GERARDO ESTRADA | Cole Information Services |
| 2009 | GABRIEL ESTRADA | Cole Information Services |
| 2004 | GABRIEL ESTRADA | Cole Information Services |
| 1999 | GABRIEL ESTRADA | Cole Information Services |
| | OCCUPANT UNKNOWN | Cole Information Services |
| 1975 | NARANJO ROBERT | Pacific Telephone |

**13161 SHAVER ST**

| Year | Uses | Source |
|---|---|---|
| 2009 | ROSAURO FLORDELIZA | Cole Information Services |
| 2004 | ROSAURO FLORDELIZA | Cole Information Services |
| 1999 | ROSAURO FLORDELIZA | Cole Information Services |

**13163 SHAVER ST**

| Year | Uses | Source |
|---|---|---|
| 2014 | RAL ORING | Cole Information Services |
| 2009 | RAL ORING | Cole Information Services |
| 2004 | RALPH ORING | Cole Information Services |

# FINDINGS

| Year | Uses | Source |
|---|---|---|
| 1999 | RAL ORING | Cole Information Services |
| 1985 | ORING RALPH J | Pacific Bell |
| 1975 | ORING RALPH J | Pacific Telephone |

# FINDINGS

## ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

| Address Researched | Address Not Identified in Research Source |
|---|---|
| 1008 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1010 LEORITA ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1011 BALDWIN PARK BLVD | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1011 Baldwin Park Boulevard | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1011 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1011 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1011 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1011 Leorita Street | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1012 LEORITA ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

# FINDINGS

| Address Researched | Address Not Identified in Research Source |
|---|---|
| 1013 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1013 LEORITA ST | 2014, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1019 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1019 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1019 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 1019 Leorita Street | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13011 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13011 GARVEY AVE | 2014, 2009, 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13018 DALEWOOD ST | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13018 DALEWOOD ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

# FINDINGS

| Address Researched | Address Not Identified in Research Source |
|---|---|
| 13040 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13040 BESS AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13042 BESS AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13042 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13046 1/2 BESS AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13046 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13046 BESS AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13048 1/2 BESS AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13048 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13048 BESS AVE | 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| 13050 BESS AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13050 BESS AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13050 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13050 Bess Street | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13052 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13052 BESS AVE | 2009, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13052 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13052 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13053 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13053 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13054 BESS AVE | 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 13054 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13055 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13055 BESS AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13056 BESS AVE | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13056 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13056 JUDITH ST | 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13057 BESS AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13057 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13057 GARVEY AVE | 2014, 2009, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13058 BESS AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 13058 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13058 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13058 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13059 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13059 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13061 GARVEY AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13061 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13062 JUDITH ST | 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13063 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13063 GARVEY AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 13064 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13064 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13065 1/2 GARVEY AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13065 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13065 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13065 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13065 Garvey Avenue | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13067 1/2 GARVEY AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13067 BESS AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13067 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 13067 BESS AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13067 Bess Street | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13067 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13067 GARVEY AVE | 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13075 GARVEY AVE | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13075 GARVEY AVE | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13075 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13075 Garvey Avenue | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13079 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13079 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| 13081 GARVEY AVE | 2014, 2009, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13081 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13100 JUDITH ST | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13102 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13102 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13106 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13106 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13107 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13107 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13109 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| 13109 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13109 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13109 Garvey Avenue | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13110 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13110 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13112 JUDITH ST | 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13115 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13115 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13116 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13116 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13117 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| 13117 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13120 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13120 JUDITH ST | 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13123 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13123 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13127 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13127 GARVEY AVE | 2014, 2009, 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13128 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13128 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13131 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13131 GARVEY AVE | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| 13131 JUDITH ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13131 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13132 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13132 JUDITH ST | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13135 GARVEY AVE | 2014, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13135 GARVEY AVE | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13135 JUDITH ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13135 JUDITH ST | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13139 JUDITH ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13142 SHAVER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| 13146 SHAVER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13147 SHAVER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13147 SHAVER ST | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13151 SHAVER ST | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13152 SHAVER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13156 SHAVER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13156 SHAVER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13157 SHAVER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13157 SHAVER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| Address Researched | Address Not Identified in Research Source |
|---|---|
| 13159 BESS AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13160 SHAVER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13160 SHAVER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13161 SHAVER ST | 2014, 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13163 SHAVER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13163 SHAVER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13165 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13165 GARVEY AVE | 2014, 2009, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13167 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13167 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 13179 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13179 GARVEY AVE | 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13209 GARVEY AVE | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 13209 GARVEY AVE | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3011 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3011 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3015 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3015 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3019 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3019 FRAZIER ST | 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 3021 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3021 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3023 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3023 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3025 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3025 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3026 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3026 FRAZIER ST | 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3027 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3027 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 3029 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3029 FRAZIER ST | 2006, 2004, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3031 1/2 FRAZIER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3031 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3031 FRAZIER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3035 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3035 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3040 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3040 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3041 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 3041 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3041B FRAZIER ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3044 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3044 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3047 FRAZIER ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 3047 FRAZIER ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 902 LAURETTE ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 904 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 904 LEORITA ST | 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 916 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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|---|---|
| 916 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 919 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 919 LEORITA ST | 2009, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 920 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 920 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 921 1/2 LEORITA ST | 2014, 2009, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 921 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 921 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 923 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 926 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

# FINDINGS

| Address Researched | Address Not Identified in Research Source |
|---|---|
| 926 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 927 929 931 LEORITA ST | 2014, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 927 LEORITA ST | 2014, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 929 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 929 LEORITA ST | 2014, 2009, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 930 LEORITA ST | 2014, 2009, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1994, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
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| 932 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

# FINDINGS

| Address Researched | Address Not Identified in Research Source |
|---|---|
| 933 LEORITA ST | 2006, 2003, 2001, 2000, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
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## TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

| Address Researched | Address Not Identified in Research Source |
|---|---|
| 1022-1026 Leorita Street | 2006, 2001, 2000, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

921110

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BK 8556

SEARCH NO

OFFICE OF THE AS
COUNTY OF LOS AN
COPYRIGHT © 2

MAPPING AND GIS SERVICES
SCALE 1" = 100'

SAN BERNARDINO RTE 10 FRWY

F M 11786-1

DALEWOOD VARIES VARIES ST

TRACT 36 37 38

NO 13211

BESS AVE

LEORITA

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PG 6

PG 6

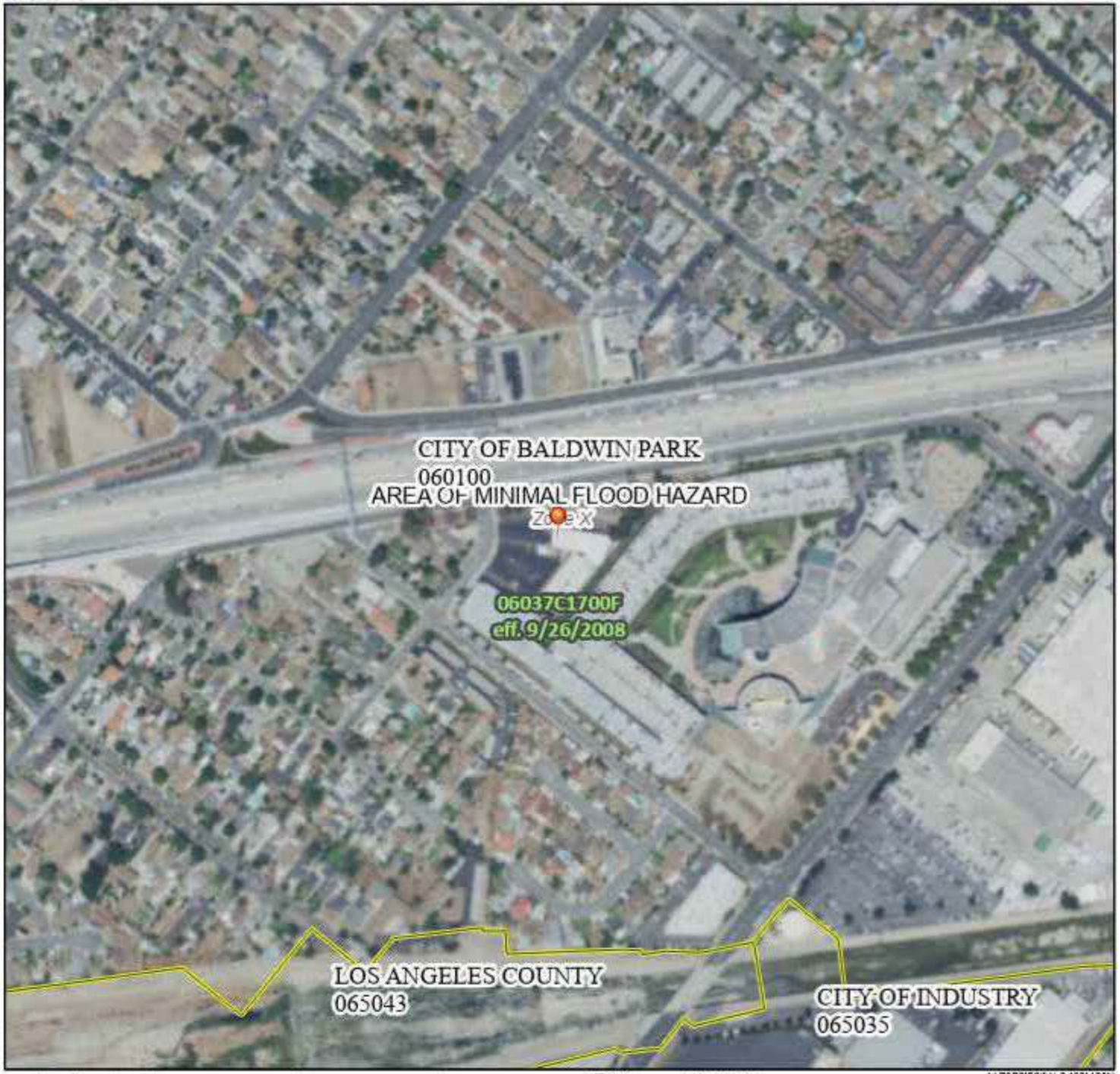
M B

ed: 11/30/2016 4:01:50 PM
d: 11/30/2016 4:01:40 PM

# National Flood Hazard Layer FIRMette

FEMA

117°59'39"W 34°4'13"N




117°58'56"W 34°3'43"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/10/2021 at 10:40 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

# San Jose Creek Watershed

## FEMA DFIRM Flood Hazard Areas

Incorporated Cities

Watershed Boundary

Flood Hazard

1% Annual Chance Flood

0.2% Annual Chance Flood

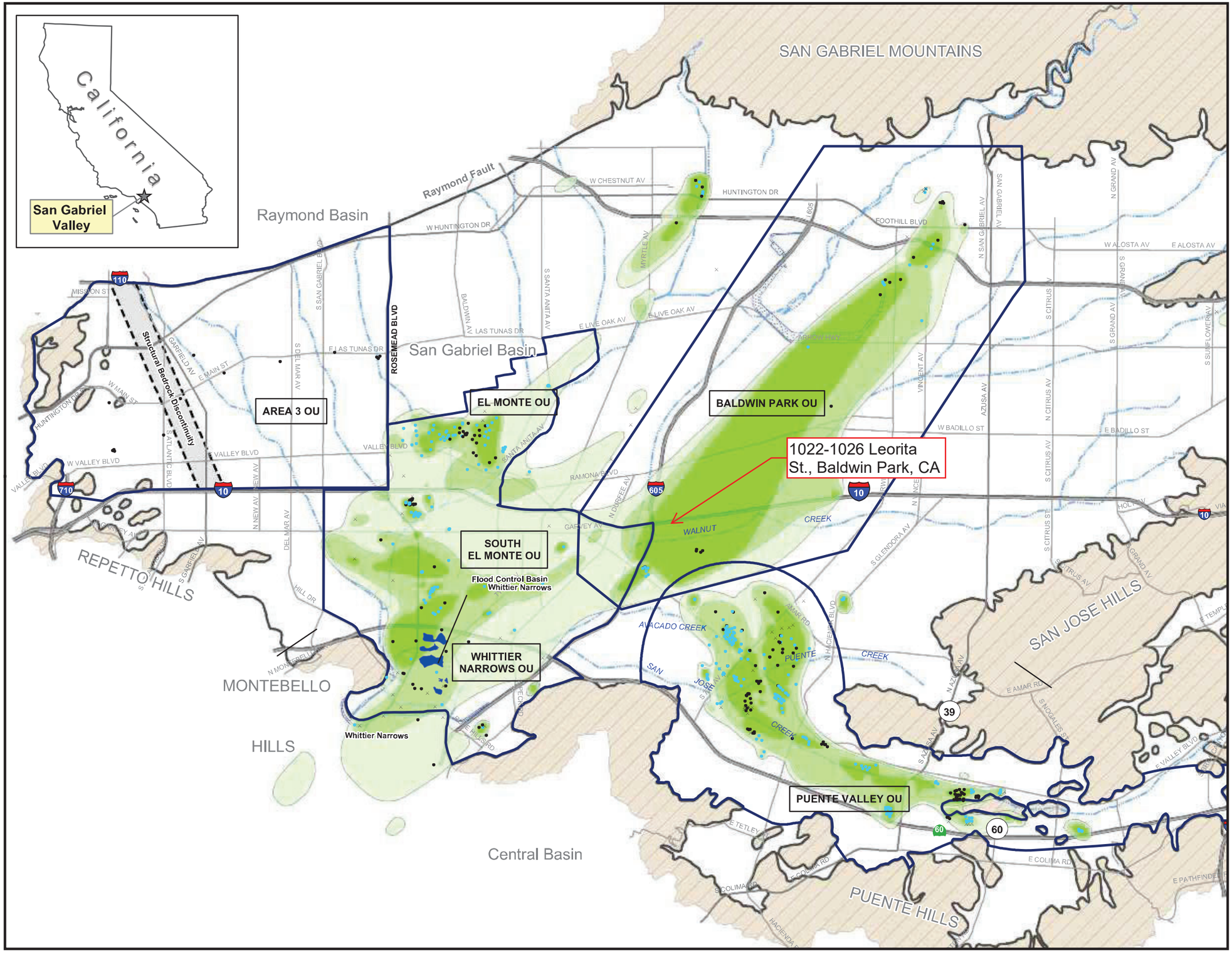
Base Map Data Sources:
Los Angeles County, ESRI

Map created: 5/27/15

TETRA TECH

N

0 1.5 3 Miles




## Legend

- **AREA 3 OU** — Operable Unit Name
- VOC Contamination Potentially Ranging From MCLs To < 10X MCLs
- VOC Contamination Potentially Ranging From Laboratory Detection Limits To MCLs
- Well with concentrations detected above the reporting limit (RL)
- X — Non-detect well with concentrations below reporting limits (RL)
- Well Sampled More Than 1 Year Prior to Last Sample Date (03/01/04)
- Structural Bedrock Discontinuity
- San Gabriel Basin Boundary
- Lakes
- Spreading Grounds
- Bedrock

Notes:
1) VOC = volatile organic compound

2) MCLs = maximum contaminant levels

Contamination plumes were not drawn for Area 3 due to the limited data set.

N

0 0.75 1.5 3

Miles

**Figure 1-1**
**Location of Area 3 Superfund Sites**
*Ground Water Monitoring Summary Report 2008-2012*
*San Gabriel Valley Area 3 Superfund Site*

\\galt\proj\EPAF\ALOU\MapFiles\2012\alou_LocArea3_compsit_Fig_1-1.mxd

# 1.0 BALDWIN PARK (SAN GABRIEL VALLEY SUPERFUND SITE) (60001336)

https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60001336

## 2.0 Site History

Baldwin Park is in area 2; and is one of eight OUs identified by USEPA for the San Gabriel Valley Superfund Sites and is also known as San Gabriel Valley Superfund Site Area 2. Located in eastern Los Angeles County and covering 10 square miles, the Baldwin Park OU includes portions of the cities of Azusa, Irwindale, Baldwin Park and West Covina. The area of groundwater contamination is more than 8 miles long and 1 miles wide, reflecting multiple, commingled groundwater contaminant plumes. Groundwater contamination extends from the water table (150 to 350 feet deep) to depths of up to 1000 feet below ground. The primary contaminants in groundwater are trichloroethene (TCE), tetrachloroethene (PCE), carbon tetrachloride, perchlorate, n-nitrosodimethylamine (NDMA), and 1,4-dioxane.

In March 1994, the USEPA issued the Interim Record of Decision (IROD) for the Baldwin Park OU which included pumping and treating impacted groundwater. USEPA issued an Explanation of Significant Differences to the IROD in May 1999 which amended the interim remedy to include treatment for perchlorate, NDMA, and 1,4-dioxane. The objective of the IROD and ESD is to prevent future increases in, and begin to reduce, concentrations of groundwater contaminants by limiting further migration of contaminated groundwater into clean or less contaminated areas. The IROD specifies extraction of contaminated groundwater at the downgradient end of two broad areas of the plume, at locations and rates sufficient to limit the movement of contaminated groundwater through each subarea during all anticipated groundwater flow conditions. In February 2002, the USEPA issued a Unilateral Administrative Order for Remedial Design/Remediation Action to 20 respondents. In March 2002, eight PRPs and seven local water agencies reached a third-party agreement (BPOU project agreement) that provided a means of implementing the remedy and commits the parties to implement a joint cleanup and water supply project. This agreement is periodically updated.

The Baldwin Park OU remedy is a large-scale groundwater extraction and treatment system, consisting of four pump and treat "subprojects" (each ranging in capacity from 2,500 to 7,800 gpm) with a combined treatment capacity of 26,000 gpm. The subprojects were built between 2000 and 2006 at a cost of more than $100 million. The projects are operated by local water utilities, supplying clean treated water to local homes and businesses. The systems consist of groundwater extraction wells, monitoring wells, pipelines, and multiple water treatment processes for removal of contaminants. From 2002 to 2012, more than 69 billion gallons of groundwater were treated and 59,000 pounds of contamination removed from the water. The projects are currently treating over 25 million gallons of water per day and removing between 5,000 and 10,000 pounds of contamination per year, and are capable of supplying water to more than 100,000 homes. Improvements are underway, including replacement of the perchlorate removal equipment to increase the reliability of the water treatment systems.

PRPs are funding a majority of the work in compliance with a June 2000 EPA Order. More than $200 million has been spent on the four cleanup projects to date, with annual operation and maintenance costs of approximately $16 million per year. Federal and state grants have contributed more than $38 million to the cleanup. The estimated total project cost is $500 million.

## Hedman, Laura S

**From:** PubReqAct@DTSC <PubReqAct@dtsc.ca.gov>
**Sent:** Monday, March 1, 2021 11:24 AM
**To:** Hedman, Laura S
**Subject:** Public Records Request PR1-022521-01 Baldwin Park
**Attachments:** PR1-022521-01 NRL REQUEST RESPONSE.pdf

Hello,

Please see the attachment for a response to your Public Records Act request. A hard copy will not follow but may be available upon request.

If you have any questions, please feel free to send an email to pubreqact@dtsc.ca.gov or call the DTSC Cal Center File Room at (916) 255-4159.

Please continue to use this Regional File Room email box for future communication as it allows us to respond more efficiently to your requests.

Thank you,

Choua Her
Regional Records Coordinator
Department of Toxic Substances Control
8800 Cal Center File Room
Sacramento, California 95826
(916) 255-4159

---

**From:** Hedman, Laura S <Laura.Hedman@terracon.com>
**Sent:** Thursday, February 25, 2021 9:44 AM
**To:** PubReqAct@DTSC <PubReqAct@dtsc.ca.gov>
**Subject:** Records Request; 1022-1026 Leorita Street, Baldwin Park, California 91706

EXTERNAL:

Good Day DTSC,

Terracon has been contracted to perform an environmental site assessment of the above-mentioned property located at 1022-1026 Leorita Street, Baldwin Park, California 91706. We would like to review environmental information (i.e. hazardous material responses/ inventory, records of soil and water contamination, LUST/UST, any permits or certificate of occupancies that may be onfile from the Building or Planning Divisions, etc.) that your office may have on file for the property.

Electronic responses are preferable. If electronic responses are not possible and the files are relatively small, please copy and Terracon will pay for copying costs. If there is too much information to copy/send, please call me to schedule a time that I may review this information. I can be reached at (909) 301-6082 or by e-mail at Laura.Hedman@terracon.com. Thank you for your time. If you have any questions, please feel free to contact me.

Thank you!

**Laura S. Hedman**
**Field Geologist | Environmental Services**

**Terracon**
1355 E. Cooley Drive, Suite C | Colton, CA 92324
D (909) 301 6082 | M (951) 662-1966
laura.hedman@terracon.com | **terracon.com**

Terracon provides environmental, facilities, geotechnical, and materials consulting engineering services delivered with responsiveness, resourcefulness, and reliability.

---

*Private and confidential as detailed here (www.terracon.com/disclaimer). If you cannot access the hyperlink, please e-mail sender.*

Jared Blumenfeld
Secretary for
Environmental Protection

Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

March 1, 2021

Laura Hedman
Terracon
Laura.Hedman@terracon.com

**Public Records Request Number: 1-022521-01**
**Location(s): 1022 – 1026 Leorita Street, Baldwin Park, CA 91706**

Dear Requestor:

On February 25, 2021 the Department of Toxic Substances Control (DTSC) received your email of the same date requesting records under the Public Records Act. After a thorough review of our files, no site records were found pertaining to the sites/facilities referenced above.

A large number of our records are available on EnviroStor, an online database that provides non-confidential, public access to DTSCs data management system. It tracks our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues. EnviroStor is available 24/7, 365 days a year. The data reflects the latest updates as they are entered in the system. Access it from your computer or smartphone, the local library – anywhere Internet access is available. Just go to www.envirostor.dtsc.ca.gov. You'll find a step-by-step tour of EnviroStor under the "How to Use EnviroStor" menu on the website.

If you have any questions or would like further information regarding your request, please contact me at 916-255-4159 or via email at PubReqAct@dtsc.ca.gov.

Sincerely,
*Choua Her*
Choua Her
Regional Records Coordinator

## Hedman, Laura S

**From:** ChatsworthFileRoom@DTSC <ChatsworthFileRoom@dtsc.ca.gov>
**Sent:** Monday, March 1, 2021 8:43 AM
**To:** Hedman, Laura S
**Subject:** DTSC Public Records Request PR3-022521-07 Baldwin Park
**Attachments:** PR3-022521-07 request response letter (NRL) Baldwin Park.pdf

Hello Laura,

Please see the attachment for a response to your Public Records Act request. A hard copy will not follow but may be available upon request.

If you have any questions, please feel free to send an email to ChatsworthFileRoom@dtsc.ca.gov or call the DTSC Chatsworth File Room at (818) 717-6521. Please continue to use this Regional File Room email box for future communication as it allows us to respond more efficiently to your requests.

Thank you.
Robert Hardison
Records Mgt. Asst. Coordinator
Chatsworth DTSC

---

**From:** Hedman, Laura S <Laura.Hedman@terracon.com>
**Sent:** Thursday, February 25, 2021 9:41 AM
**To:** ChatsworthFileRoom@DTSC <ChatsworthFileRoom@dtsc.ca.gov>
**Subject:** Records Request; 1022-1026 Leorita Street, Baldwin Park, California 91706

EXTERNAL:

Good Day DTSC-Chatsworth,

Terracon has been contracted to perform an environmental site assessment of the above-mentioned property located at 1022-1026 Leorita Street, Baldwin Park, California 91706. We would like to review environmental information (i.e. hazardous material responses/ inventory, records of soil and water contamination, LUST/UST, any permits or certificate of occupancies that may be onfile from the Building or Planning Divisions, etc.) that your office may have on file for the property.

Electronic responses are preferable. If electronic responses are not possible and the files are relatively small, please copy and Terracon will pay for copying costs. If there is too much information to copy/send, please call me to schedule a time that I may review this information. I can be reached at (909) 301-6082 or by e-mail at Laura.Hedman@terracon.com. Thank you for your time. If you have any questions, please feel free to contact me.

Thank you!

**Laura S. Hedman**
**Field Geologist I Environmental Services**

**Terracon**
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D (909) 301 6082 I M (951) 662-1966

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Terracon provides environmental, facilities, geotechnical, and materials consulting engineering services delivered with responsiveness, resourcefulness, and reliability.

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*Private and confidential as detailed here (www.terracon.com/disclaimer). If you cannot access the hyperlink, please e-mail sender.*

Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
9211 Oakdale Avenue
Chatsworth, California 91311

*Jared Blumenfeld*
Secretary for
Environmental Protection

*Gavin Newsom*
Governor

March 1, 2021

Laura S. Hedman
Terracon
Laura.Hedman@terracon.com

**Public Records Request Number: PR3-022521-07**
**Locations: 1022-1026 Leorita Street, Baldwin Park, CA 91706**

Dear Ms. Hedman:

On February 25, 2021, the Department of Toxic Substances Control (DTSC) received your email of the same date requesting records under the Public Records Act. After a thorough review of our files, no site records were found pertaining to the sites/facilities referenced above.

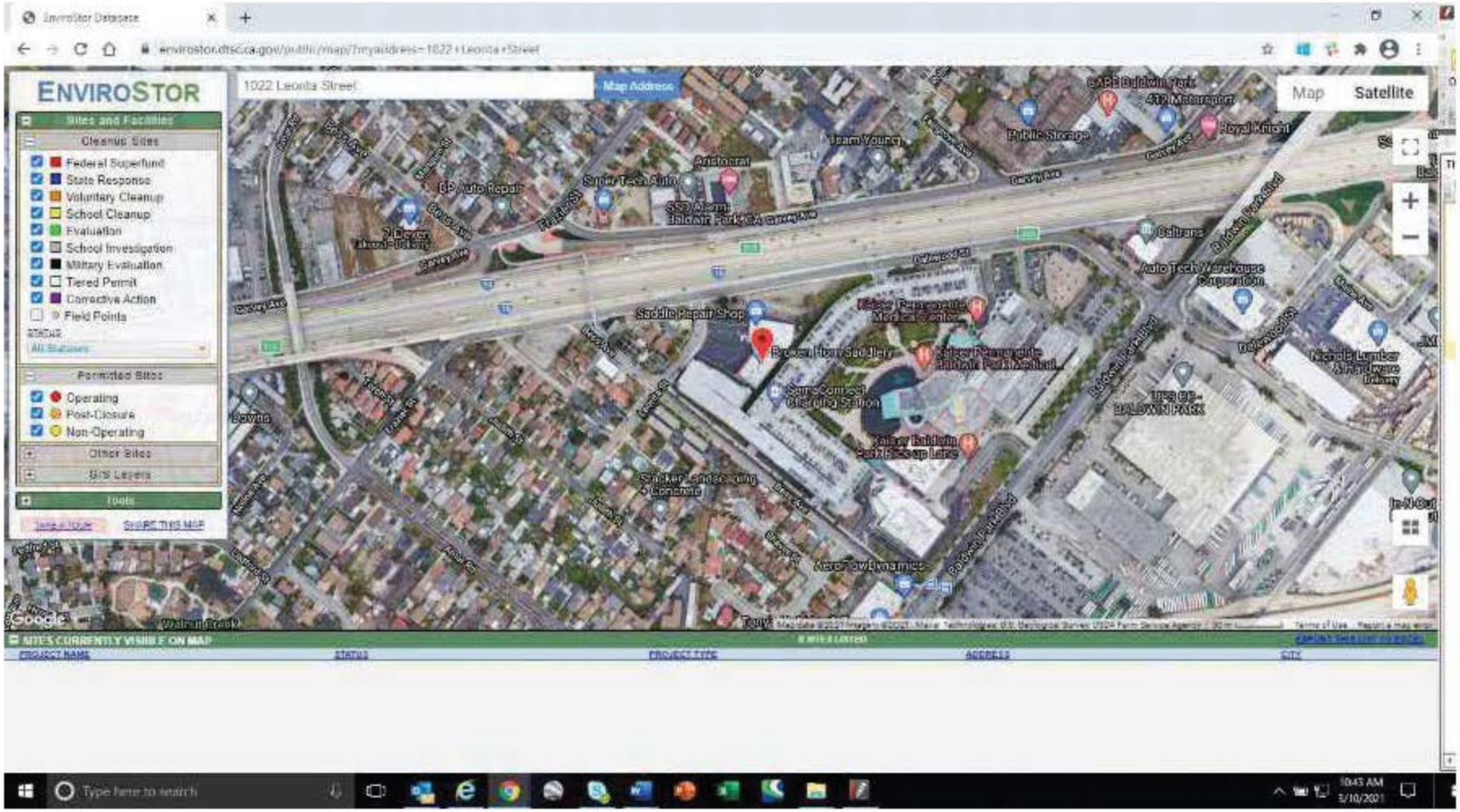
Many of our records are available on EnviroStor, an online database that provides non-confidential, public access to DTSCs data management system. It tracks our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues. EnviroStor is available 24/7, 365 days a year. The data reflects the latest updates as they are entered in the system. Access it from your computer or smartphone, the local library – anywhere Internet access is available. Just go to www.envirostor.dtsc.ca.gov. You will find a step-by-step tour of EnviroStor under the "How to Use EnviroStor" menu on the website.

If you have any questions or would like further information regarding your request, please contact me at 818-717-6521 or via email at ChatsworthFileRoom@dtsc.ca.gov.

Sincerely,

Robert Hardison

Robert Hardison
Records Mgt. Asst. Coordinator


EnviroStor Database
envirostor.dtsc.ca.gov/public/map/?myaddress=1022+Leonita+Street
ENVIROSTOR
1022 Leonita Street
Map Address
Map
Satellite
Sites and Facilities
Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GIS Layers
Tools
Public Storage
Super Tech Auto
BP Auto Repair
Saddle Repair Shop
Broken Horn Saddlery
Auto Tech Warehouse Corporation
Kiernan Lumber & Hardware
Stricker Landscaping & Concrete
Walnut Creek
SITES CURRENTLY VISIBLE ON MAP
PROJECT NAME
STATUS
PROJECT TYPE
ADDRESS
CITY
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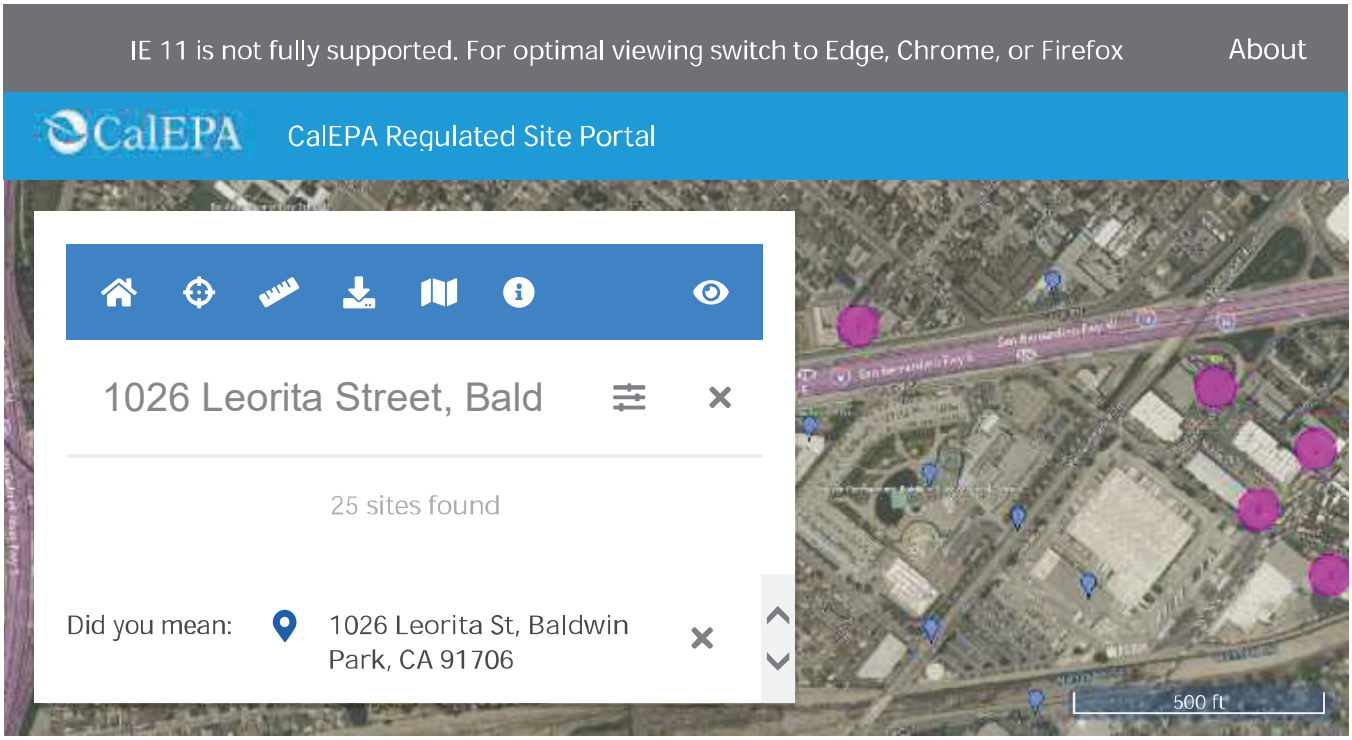
3/10/2021


IE 11 is not fully supported. For optimal viewing switch to Edge, Chrome, or Firefox
About
CalEPA
CalEPA Regulated Site Portal
1026 Leorita Street, Bald
25 sites found
Did you mean:
1026 Leorita St, Baldwin Park, CA 91706
500 ft

## Hedman, Laura S

**From:** Choi, Younga@Waterboards <Younga.Choi@Waterboards.ca.gov> on behalf of WB-RB4-PublicRecords <RB4-PublicRecords.RB4-PublicRecords@waterboards.ca.gov>
**Sent:** Friday, March 5, 2021 12:42 PM
**To:** Hedman, Laura S
**Cc:** Choi, Younga@Waterboards
**Subject:** RE: Records Request; 1022-1026 Leorita Street, Baldwin Park, California 91706 Tracking No 2021022515

Los Angeles Regional Board has reviewed its files and has concluded that it does not have any records that are responsive to your request.

Younga Choi
Associate Governmental Program Analyst, Custodian of Records
Phone: (213)576-6631/Email: younga.choi@waterboards.ca.gov
*Due to the COVID-19 emergency, I am teleworking. The quickest way to reach me is by email.*

Public Records and Freedom of Information Act
Rb4-Publicrecords@waterboards.ca.gov

**********
This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

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**From:** Hedman, Laura S <Laura.Hedman@terracon.com>
**Sent:** Thursday, February 25, 2021 9:32 AM
**To:** WB-RB4-PublicRecords <RB4-PublicRecords.RB4-PublicRecords@waterboards.ca.gov>
**Subject:** Records Request; 1022-1026 Leorita Street, Baldwin Park, California 91706

EXTERNAL:

Good Day Region 4,

Terracon has been contracted to perform an environmental site assessment of the above-mentioned property located at 1022-1026 Leorita Street, Baldwin Park, California 91706. We would like to review environmental information (i.e. hazardous material responses/ inventory, records of soil and water contamination, LUST/UST, any permits or certificate of occupancies that may be onfile from the Building or Planning Divisions, etc.) that your office may have on file for the property.

Electronic responses are preferable. If electronic responses are not possible and the files are relatively small, please copy and Terracon will pay for copying costs. If there is too much information to copy/send, please call me to schedule a time that I may review this information. I can be reached at (909) 301-6082 or by e-mail at Laura.Hedman@terracon.com. Thank you for your time. If you have any questions, please feel free to contact me.

Thank you!

**Laura S. Hedman**

**Field Geologist I Environmental Services**

**Terracon**
1355 E. Cooley Drive, Suite C I Colton, CA 92324
D (909) 301 6082 I M (951) 662-1966
laura.hedman@terracon.com I **terracon.com**

Terracon provides environmental, facilities, geotechnical, and materials consulting engineering services delivered with responsiveness, resourcefulness, and reliability.

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*Private and confidential as detailed here (www.terracon.com/disclaimer). If you cannot access the hyperlink, please e-mail sender.*

## Hedman, Laura S

**From:** ASabino@aqmd.gov
**Sent:** Friday, February 26, 2021 2:11 PM
**To:** Hedman, Laura S
**Cc:** ob_pr_support_docs@aqmd.gov
**Subject:** SCAQMD Public Records Request# 1405129, -- Completion Letter

Laura Hedman
Terracon
1355 E Cooley Suite C
Colton, Ca 92324

**Ref:** Request for Records; Control No. **1405129**, Received 2/25/2021
**RE:** P/O'S, EQL'S, NOV'S & ASBESTOS RECORDS FOR 1022 - 1026 (EVEN ONLY) LEORITA ST, BALDWIN PARK, CA.

After a thorough search of this agency's records:

NO REQUESTED RECORDS WERE FOUND FOR THE ABOVE REFERENCED FACILITY OR FACILITY SITE.

Should you have any questions or need additional information, please do not hesitate to contact me at (909) 396-3700, Tuesday through Friday, between the hours of **8:00 a.m.** and **4:30 p.m.**

Sincerely,

Andrew Sabino
For Colleen Paine
Public Records Coordinator
Information Management

## Hedman, Laura S

**From:** LACoFD <lacountyfire@mycusthelp.net>
**Sent:** Wednesday, March 10, 2021 3:30 PM
**To:** Hedman, Laura S
**Subject:** HHMD No File Responsive :: H034604-031021

RE: PRA of March 10, 2021, Reference # H034604-031021.

Dear Field Geologist Laura S Hedman,

The Los Angeles County Fire Department, Health Hazardous Materials Division, being the custodian or keeper of records, certify that a thorough search for the records you requested has been carried out.

**Re: 1022 Leorita**
**Baldwin Park CA 91706**

**The search revealed that your noted address did not match our database.**

It should be understood that this does not mean that the records you requested do not exist. It is possible that such records may be misfiled; exist under another spelling, another name, or may have been destroyed based on this Department's Record Retention Policy. However, with the information furnished to our office, and to the best of our knowledge, no records were located.

For businesses in Burbank, Culver City, Downey, City of LA, La Habra, Monrovia, Pasadena, Santa Monica, Torrance & Underground Storage Tanks in Los Angeles County jurisdiction click here.

Los Angeles County Fire Department

Health Hazardous Materials Division

Site Administrator

County of Los Angeles
Fire Department

## LOS ANGELES COUNTY CUPA
### Inactive - FACILITY INVENTORY

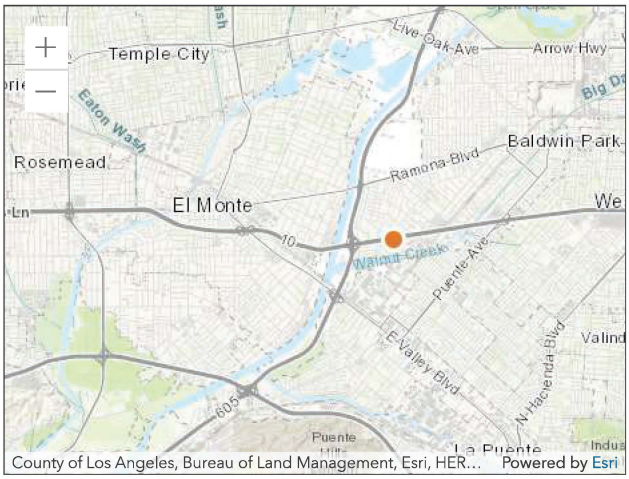
| FACILITY NAME | SITE ADDRESS | | | | | CITY | ZIP | CERS ID | Facility ID | PE |
|---|---|---|---|---|---|---|---|---|---|---|
| INDUSTRIAL ELECTRONICS ENGIN | 7740 | | LEMONA | AVE | | VAN NUYS | 91405 | 10251730 | FA0016054 | 1003 |
| TECHNO COMPONENTS CORP | 7803 | | LEMONA | AVE | | VAN NUYS | 91405 | 0 | FA0016052 | 1003 |
| ANY KAR AUTO WRECKERS | 150 | | LENNON | ST | | GARDENA | 90248 | 0 | FA0016055 | 3001 |
| AMERICAN BLENDING CO INC | 2001 | S | LEO | ST | | COMMERCE | 90040 | 0 | FA0016058 | 3003 |
| AMERICAN BLENDING CO INC | 2001 | S | LEO | ST | | COMMERCE | 90040 | 0 | FA0016058 | 1002 |
| AMERICAN BLENDING CO INC | 2001 | S | LEO | ST | | COMMERCE | 90040 | 0 | FA0016058 | 3500 |
| KASSIR IMPORT EXPORT CO INC | 2027 | | LEO | AVE | | COMMERCE | 90040 | 10441495 | FA0045506 | 3001 |
| SAMSON PHARMACEUTICALS INC | 2027 | | LEO | AVE | A | COMMERCE | 90040 | 10441306 | FA0045507 | 1002 |
| ARTCRAFT BEDSPREAD | 2121 | | LEO | ST | | COMMERCE | 90040 | 10796851 | FA0016060 | 3001 |
| ARTCRAFT BEDSPREAD | 2121 | | LEO | ST | | COMMERCE | 90040 | 10796851 | FA0016060 | 1300 |
| US FILTER/WESTATES | 2130 | | LEO | AVE | | COMMERCE | 90040 | 0 | FA0016059 | 3001 |
| US FILTER/WESTATES | 2130 | | LEO | AVE | | COMMERCE | 90040 | 0 | FA0016059 | 1003 |
| AT&T CALIFORNIA - KC326 | 9000 | | LEONA | AVE | | LEONA VALLEY | 93551 | 10267498 | FA0016061 | 3700 |
| MARIA'S SILVER SHOP | 1026 | | LEORITA | ST | | BALDWIN PARK | 91706 | 0 | FA0016062 | 1001 |
| PRODUCTION MOLD INC | 2112 | | LEOTA | ST | | HUNTINGTON PARK | 90255 | 10801933 | FA0016064 | 1001 |
| PRODUCTION MOLD INC | 2112 | | LEOTA | ST | | HUNTINGTON PARK | 90255 | 10801933 | FA0016064 | 3001 |
| LUXURY COACH LINE CORP | 2301 | | LEOTA | ST | A | HUNTINGTON PARK | 90255 | 0 | FA0038164 | 3001 |
| LUXURY COACH LINE CORP | 2301 | | LEOTA | ST | A | HUNTINGTON PARK | 90255 | 0 | FA0038164 | 1001 |
| AVANTE COACHWORKS | 2301 | | LEOTA | ST | | HUNTINGTON PARK | 90255 | 10801873 | FA0038037 | 1002 |
| AVANTE COACHWORKS | 2301 | | LEOTA | ST | | HUNTINGTON PARK | 90255 | 10801873 | FA0038037 | 3000 |
| SYMBOLIC SPECIALTY VEHICLES | 920 | S | LESLIE | ST | | LA HABRA | 90631 | 10564318 | FA0036504 | 3001 |
| SHEPARD-THOMASON CO | 951 | S | LESLIE | ST | | LA HABRA | 90631 | 0 | FA0036505 | 3001 |
| FULLERTON JOINT UNION DISTRICT | 1000 | S | LESLIE | ST | A | LA HABRA | 90631 | 10580839 | FA0045648 | 3001 |
| M J B TRANSPORT REFRIGERANT | 1000 | S | LESLIE | ST | C | LA HABRA | 90631 | 10750585 | FA0047627 | 3001 |
| FULLERTON JOINT UNION HS DISTRICT | 1021 | S | LESLIE | ST | | LA HABRA | 90631 | 0 | FA0036506 | 3002 |
| FULLERTON JOINT UNION HS DISTRICT | 1027 | S | LESLIE | ST | | LA HABRA | 90631 | 10421737 | FA0036507 | 3002 |
| DIVISION OF FUMIGATION | 2428 | N | LEWIS | AVE | | SIGNAL HILL | 90755 | 0 | FA0016066 | 3001 |
| PACIFIC COAST CYCLE | 2430 | | LEWIS | AVE | | SIGNAL HILL | 90755 | 0 | FA0035596 | 1000 |
| PACIFIC COAST CYCLE | 2430 | | LEWIS | AVE | | SIGNAL HILL | 90755 | 0 | FA0035596 | 3001 |
| T & T IRON WORKS | 2453 | N | LEWIS | AVE | | SIGNAL HILL | 90755 | 0 | FA0016065 | 3001 |
| COX INDUSTRIAL SERVICES | 2457 | | LEWIS | AVE | | SIGNAL HILL | 90755 | 10268074 | FA0038343 | 3001 |
| COX INDUSTRIAL SERVICES | 2457 | | LEWIS | AVE | | SIGNAL HILL | 90755 | 10268074 | FA0038343 | 1001 |
| PETROLEUM SOLIDS CONTROL INC | 2457 | | LEWIS | AVE | B | SIGNAL HILL | 90755 | 0 | FA0038348 | 3001 |

# Groundwater Level Report

## Station 340659N1179899W001

**Station Data** | Groundwater Level Data

| | |
|---|---|
| State Well Number: | |
| Local Well Name: | PZ3-1BD |
| Site Code: | 340659N1179899W001 |
| Latitude (NAD83): | 34.0659 |
| Longitude (NAD83): | -117.9899 |
| Basin Subbasin Name (Code): | San Gabriel Valley (4-013) |
| Well Use Type: | Observation |
| Well Status: | Inactive |
| WCR Number: | |
| Reference Point Elevation (NAVD88 ft): | 314.850 |
| Ground Surface Elevation (NAVD88 ft): | 315.000 |
| Well Depth (feet bgs): | 875 |
| Perforated Interval Depths (feet bgs): | 825.000 875.000 |



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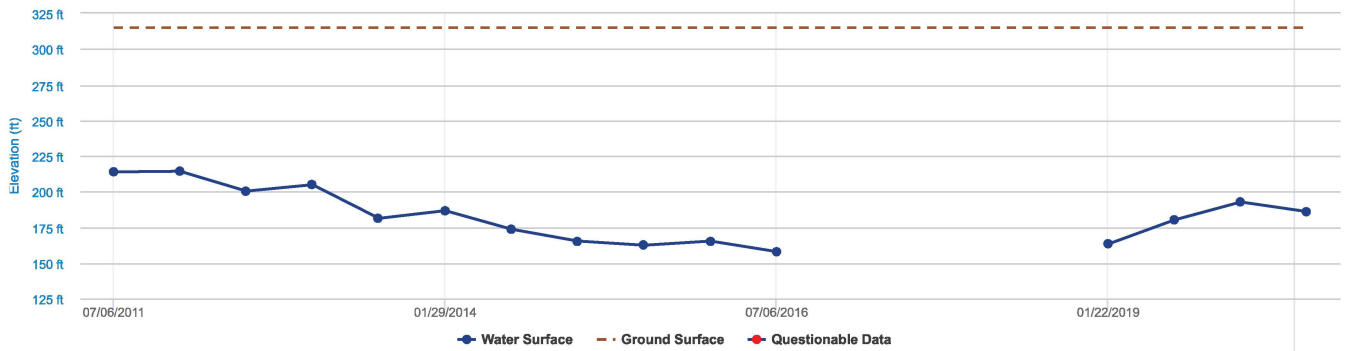
# Groundwater Level Report

Station 340659N1179899W001

Station Data | **Groundwater Level Data**

## Groundwater Levels for Well 340659N1179899W001




Download Data

| Measurement Date (PST) | Reference Point Elevation | Ground Surface Elevation | Distance from RP to WS | Groundwater Elevation | Ground Surface to Water Surface | Measurement Issue | Collecting Agency | Water Level Measurement Comments |
|---|---|---|---|---|---|---|---|---|
| 07/28/2020 00:00:00 | 314.850 | 315.000 | 128.93 | 185.92 | 129.08 | | Main San Gabriel Basin Wa... | |
| 01/27/2020 00:00:00 | 314.850 | 315.000 | 122.03 | 192.82 | 122.18 | | Main San Gabriel Basin Wa... | |
| 07/25/2019 00:00:00 | 314.850 | 315.000 | 134.67 | 180.18 | 134.82 | | Main San Gabriel Basin Wa... | |
| 01/22/2019 00:00:00 | 314.850 | 315.000 | 151.67 | 163.18 | 151.82 | | Main San Gabriel Basin Wa... | Well measurement reinstated. Well currently accessible. |
| 07/01/2018 00:00:00 | 314.850 | 315.000 | | | | NM:Measurement Discontinued | Main San Gabriel Basin Wa... | Measurement discontinued. |
| 01/01/2018 00:00:00 | 314.850 | 315.000 | | | | NM:Special/Other | Main San Gabriel Basin Wa... | Inaccessible due to safety concerns. The well is located on public street with ongoing vehicular traffic. |
| 07/01/2017 00:00:00 | 314.850 | 315.000 | | | | NM:Temporarily inaccessible | Main San Gabriel Basin Wa... | NOT AVAILABLE |
| 01/01/2017 00:00:00 | 314.850 | 315.000 | | | | NM:Temporarily inaccessible | Main San Gabriel Basin Wa... | NOT AVAILABLE |
| 07/06/2016 00:00:00 | 314.850 | 315.000 | 157.03 | 157.82 | 157.18 | | Main San Gabriel Basin Wa... | |
| 01/12/2016 00:00:00 | 314.850 | 315.000 | 149.47 | 165.38 | 149.62 | | Main San Gabriel Basin Wa... | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 00:00:00 | 314.850 | 315.000 | 152.47 | 162.38 | 152.62 | | Gabriel Basin Wa... |
| 01/06/2015 00:00:00 | 314.850 | 315.000 | 149.5 | 165.35 | 149.65 | | Main San Gabriel Basin Wa... |
| 07/24/2014 00:00:00 | 314.850 | 315.000 | 141.28 | 173.57 | 141.43 | | Main San Gabriel Basin Wa... |
| 01/29/2014 00:00:00 | 314.850 | 315.000 | 128.29 | 186.56 | 128.44 | | Main San Gabriel Basin Wa... |
| 07/08/2013 00:00:00 | 314.850 | 315.000 | 133.57 | 181.28 | 133.72 | | Main San Gabriel Basin Wa... |
| 01/09/2013 00:00:00 | 314.850 | 315.000 | 109.86 | 204.99 | 110.01 | | Main San Gabriel Basin Wa... |
| 07/12/2012 00:00:00 | 314.850 | 315.000 | 114.56 | 200.29 | 114.71 | | Main San Gabriel Basin Wa... |
| 01/12/2012 00:00:00 | 314.850 | 315.000 | 100.42 | 214.43 | 100.57 | | Main San Gabriel Basin Wa... |
| 07/06/2011 00:00:00 | 314.850 | 315.000 | 100.9 | 213.95 | 101.05 | | Main San Gabriel Basin Wa... |

19 records

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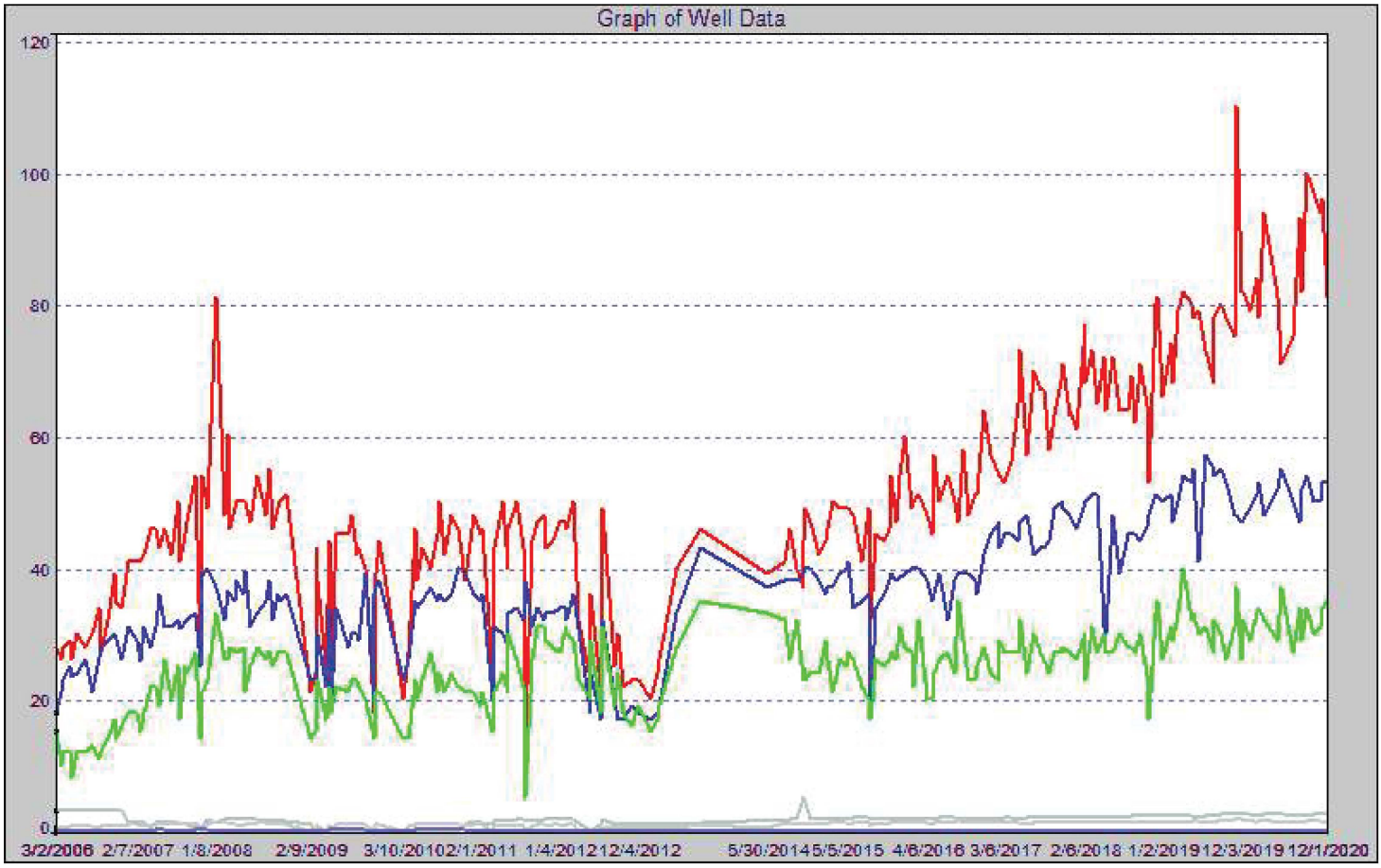
text

# Well Report

**SAN GABRIEL VALLEY WATER CO.-EL MONTE (EL MONTE)**
**WELL B25A**
11142 GARVEY AVENUE
EL MONTE , CA 91734734

**State Well #:** 1910039-112
**Well Source:** Groundwater
**Well Status:** Active Raw

Detailed Well Information | Water Quality Data




| Chemical | Color | Visible? |
|---|---|---|
| TRICHLOROETHYLENE | Red | Visible?: ☑ |
| PERCHLORATE | Blue | Visible?: ☑ |
| TETRACHLOROETHYLENE | Green | Visible?: ☑ |
| 1,4-DIOXANE | Light Blue | Visible?: ☑ |
| 1,2-DICHLOROETHANE | Grey | Visible?: ☑ |
| N-NITROSODIMETHYLAMINE (NDMA) | Dark Yellow | Visible?: ☑ |

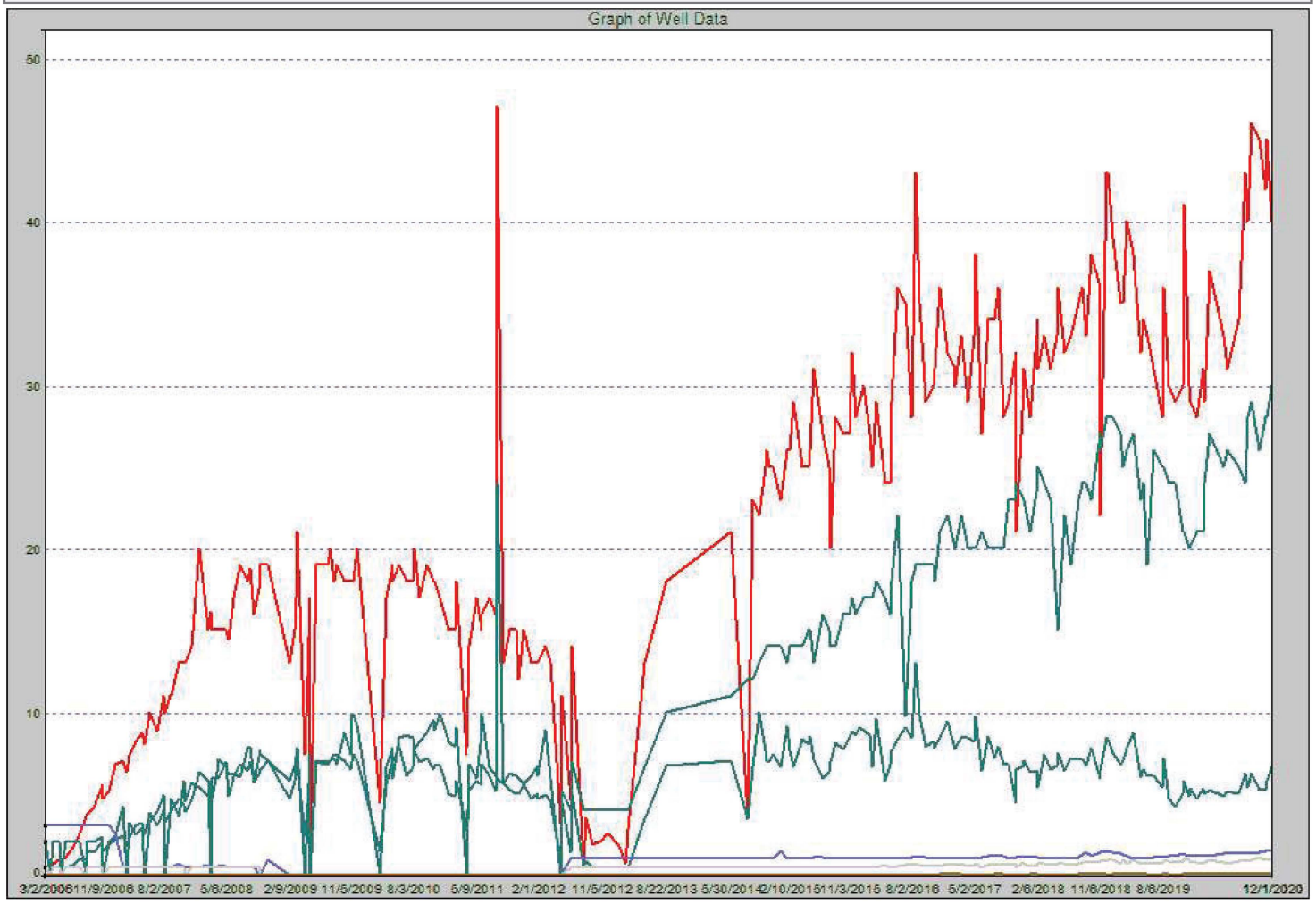
**FROM DATE:** **TO DATE:** **GRAPH SIZE** Medium **NORMALIZED** ☐ Redraw

# Well Report

**SAN GABRIEL VALLEY WATER CO.-EL MONTE (EL MONTE)**
**WELL B25B**
11142 GARVEY AVENUE
EL MONTE , CA 91734734

**State Well #:** 1910039-113
**Well Source:** Groundwater
**Well Status:** Active Raw

Detailed Well Information | Water Quality Data




| Chemical | Color | Visible? |
|---|---|---|
| TRICHLOROETHYLENE | Red | Visible?: ☑ |
| PERCHLORATE | Blue | Visible?: ☑ |
| TETRACHLOROETHYLENE | Green | Visible?: ☑ |
| 1,4-DIOXANE | Light Blue | Visible?: ☑ |
| 1,2-DICHLOROETHANE | Grey | Visible?: ☑ |
| N-NITROSODIMETHYLAMINE (NDMA) | Dark Yellow | Visible?: ☑ |

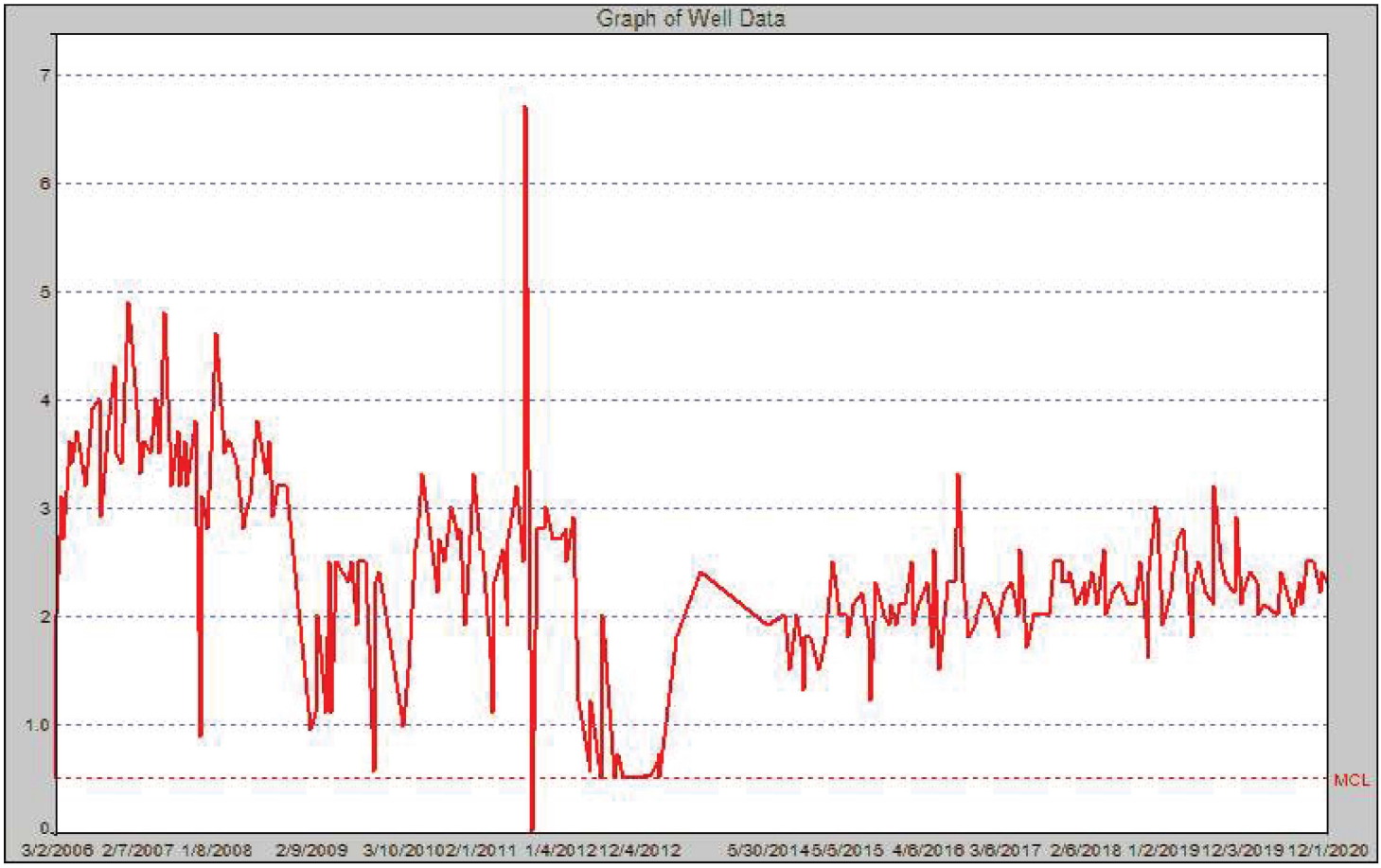
FROM DATE: TO DATE: GRAPH SIZE: Large NORMALIZED: ☐ Redraw

# Well Report

**SAN GABRIEL VALLEY WATER CO.-EL MONTE (EL MONTE)**
**WELL B25A**
11142 GARVEY AVENUE
EL MONTE , CA 91734734

**State Well #:** 1910039-112
**Well Source:** Groundwater
**Well Status:** Active Raw

Detailed Well Information | Water Quality Data




| DATE | PARAMETER | RESULT | UNITS | MCL |
|---|---|---|---|---|
| 12/1/2020 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 11/10/2020 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 11/3/2020 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 10/6/2020 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 9/1/2020 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 8/17/2020 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 8/4/2020 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 7/7/2020 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 5/18/2020 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 5/5/2020 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 3/3/2020 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 2/11/2020 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 2/4/2020 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 1/7/2020 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 12/10/2019 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 12/3/2019 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 11/14/2019 | CARBON TETRACHLORIDE | 2.9 | UG/L | 0.5 |
| 11/6/2019 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 10/1/2019 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 9/3/2019 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 8/12/2019 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 8/6/2019 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 7/1/2019 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 6/4/2019 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 5/14/2019 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 5/7/2019 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 4/2/2019 | CARBON TETRACHLORIDE | 2.8 | UG/L | 0.5 |
| 3/5/2019 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 2/14/2019 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 2/7/2019 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 1/2/2019 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |

| | | | | |
|---|---|---|---|---|
| 12/10/2018 | CARBON TETRACHLORIDE | 2.9 | UG/L | 0.5 |
| 12/4/2018 | CARBON TETRACHLORIDE | 3 | UG/L | 0.5 |
| 11/7/2018 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 11/6/2018 | CARBON TETRACHLORIDE | 1.6 | UG/L | 0.5 |
| 10/2/2018 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 9/5/2018 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 8/21/2018 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 8/7/2018 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 7/3/2018 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 6/5/2018 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 5/9/2018 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 5/1/2018 | CARBON TETRACHLORIDE | 2.6 | UG/L | 0.5 |
| 4/3/2018 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 3/6/2018 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 2/6/2018 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 2/6/2018 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 1/3/2018 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 12/5/2017 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 12/5/2017 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 11/6/2017 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 11/6/2017 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 10/3/2017 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 9/6/2017 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 8/16/2017 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 8/3/2017 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 7/5/2017 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 6/6/2017 | CARBON TETRACHLORIDE | 1.7 | UG/L | 0.5 |
| 5/10/2017 | CARBON TETRACHLORIDE | 2.6 | UG/L | 0.5 |
| 5/2/2017 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 4/4/2017 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 3/6/2017 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 2/8/2017 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 2/8/2017 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 1/4/2017 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 12/6/2016 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 11/9/2016 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 11/3/2016 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |
| 10/4/2016 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 9/7/2016 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 8/17/2016 | CARBON TETRACHLORIDE | 3.3 | UG/L | 0.5 |
| 8/2/2016 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 7/5/2016 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 6/1/2016 | CARBON TETRACHLORIDE | 1.5 | UG/L | 0.5 |
| 5/5/2016 | CARBON TETRACHLORIDE | 2.6 | UG/L | 0.5 |
| 5/2/2016 | CARBON TETRACHLORIDE | 1.7 | UG/L | 0.5 |
| 4/6/2016 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 3/1/2016 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 2/10/2016 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |
| 2/2/2016 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 1/5/2016 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 12/16/2015 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 12/1/2015 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |
| 11/12/2015 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 11/3/2015 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |
| 10/7/2015 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 9/2/2015 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 8/10/2015 | CARBON TETRACHLORIDE | 1.2 | UG/L | 0.5 |
| 8/4/2015 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 7/6/2015 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 6/1/2015 | CARBON TETRACHLORIDE | 2.1 | UG/L | 0.5 |
| 5/12/2015 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 5/5/2015 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 4/7/2015 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 3/3/2015 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 2/10/2015 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 2/3/2015 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 1/6/2015 | CARBON TETRACHLORIDE | 1.5 | UG/L | 0.5 |
| 12/1/2014 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 11/13/2014 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 11/5/2014 | CARBON TETRACHLORIDE | 1.3 | UG/L | 0.5 |
| 10/30/2014 | CARBON TETRACHLORIDE | 1.6 | UG/L | 0.5 |
| 10/1/2014 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 9/5/2014 | CARBON TETRACHLORIDE | 1.5 | UG/L | 0.5 |
| 8/14/2014 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 5/30/2014 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |
| 8/22/2013 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 5/16/2013 | CARBON TETRACHLORIDE | 1.8 | UG/L | 0.5 |
| 3/4/2013 | CARBON TETRACHLORIDE | 0.72 | UG/L | 0.5 |
| 3/4/2013 | CARBON TETRACHLORIDE | < 0.5 | UG/L | 0.5 |
| 2/21/2013 | CARBON TETRACHLORIDE | 0.64 | UG/L | 0.5 |
| 1/23/2013 | CARBON TETRACHLORIDE | 0.52 | UG/L | 0.5 |
| 12/4/2012 | CARBON TETRACHLORIDE | < 0.5 | UG/L | 0.5 |
| 11/5/2012 | CARBON TETRACHLORIDE | < 0.5 | UG/L | 0.5 |

| | | | | |
|---|---|---|---|---|
| 10/2/2012 | CARBON TETRACHLORIDE | < 0.5 | UG/L | 0.5 |
| 9/4/2012 | CARBON TETRACHLORIDE | 0.72 | UG/L | 0.5 |
| 8/21/2012 | CARBON TETRACHLORIDE | 0.5 | UG/L | 0.5 |
| 7/2/2012 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 6/25/2012 | CARBON TETRACHLORIDE | 0.5 | UG/L | 0.5 |
| 5/16/2012 | CARBON TETRACHLORIDE | 1.2 | UG/L | 0.5 |
| 5/11/2012 | CARBON TETRACHLORIDE | 0.55 | UG/L | 0.5 |
| 3/27/2012 | CARBON TETRACHLORIDE | 1.2 | UG/L | 0.5 |
| 3/5/2012 | CARBON TETRACHLORIDE | 2.9 | UG/L | 0.5 |
| 2/2/2012 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 2/1/2012 | CARBON TETRACHLORIDE | 2.8 | UG/L | 0.5 |
| 1/4/2012 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 12/5/2011 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 11/8/2011 | CARBON TETRACHLORIDE | 3 | UG/L | 0.5 |
| 11/1/2011 | CARBON TETRACHLORIDE | 2.8 | UG/L | 0.5 |
| 10/4/2011 | CARBON TETRACHLORIDE | 2.8 | UG/L | 0.5 |
| 9/6/2011 | CARBON TETRACHLORIDE | < 0 | UG/L | 0.5 |
| 8/9/2011 | CARBON TETRACHLORIDE | 6.7 | UG/L | 0.5 |
| 8/1/2011 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 7/6/2011 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 6/2/2011 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 6/1/2011 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |
| 5/9/2011 | CARBON TETRACHLORIDE | 2.6 | UG/L | 0.5 |
| 4/4/2011 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 3/25/2011 | CARBON TETRACHLORIDE | 1.4 | UG/L | 0.5 |
| 3/25/2011 | CARBON TETRACHLORIDE | 1.1 | UG/L | 0.5 |
| 2/8/2011 | CARBON TETRACHLORIDE | 2.6 | UG/L | 0.5 |
| 2/1/2011 | CARBON TETRACHLORIDE | 2.6 | UG/L | 0.5 |
| 1/6/2011 | CARBON TETRACHLORIDE | 3.3 | UG/L | 0.5 |
| 12/1/2010 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |
| 11/9/2010 | CARBON TETRACHLORIDE | 2.8 | UG/L | 0.5 |
| 11/2/2010 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 10/5/2010 | CARBON TETRACHLORIDE | 3 | UG/L | 0.5 |
| 9/2/2010 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 8/11/2010 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 8/3/2010 | CARBON TETRACHLORIDE | 2.2 | UG/L | 0.5 |
| 7/8/2010 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 6/2/2010 | CARBON TETRACHLORIDE | 3.3 | UG/L | 0.5 |
| 5/6/2010 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 5/4/2010 | CARBON TETRACHLORIDE | 2.6 | UG/L | 0.5 |
| 4/6/2010 | CARBON TETRACHLORIDE | 1.5 | UG/L | 0.5 |
| 3/10/2010 | CARBON TETRACHLORIDE | 0.97 | UG/L | 0.5 |
| 12/2/2009 | CARBON TETRACHLORIDE | 2.4 | UG/L | 0.5 |
| 11/12/2009 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 11/5/2009 | CARBON TETRACHLORIDE | 0.55 | UG/L | 0.5 |
| 10/6/2009 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 9/2/2009 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 8/24/2009 | CARBON TETRACHLORIDE | 1.9 | UG/L | 0.5 |
| 8/5/2009 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 7/24/2009 | CARBON TETRACHLORIDE | 2.3 | UG/L | 0.5 |
| 6/2/2009 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 5/7/2009 | CARBON TETRACHLORIDE | 1.1 | UG/L | 0.5 |
| 5/5/2009 | CARBON TETRACHLORIDE | 2.5 | UG/L | 0.5 |
| 4/17/2009 | CARBON TETRACHLORIDE | 1.1 | UG/L | 0.5 |
| 3/12/2009 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 3/12/2009 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |
| 3/4/2009 | CARBON TETRACHLORIDE | 1.1 | UG/L | 0.5 |
| 2/9/2009 | CARBON TETRACHLORIDE | 0.93 | UG/L | 0.5 |
| 11/5/2008 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 10/2/2008 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 9/29/2008 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 9/4/2008 | CARBON TETRACHLORIDE | 2.9 | UG/L | 0.5 |
| 8/20/2008 | CARBON TETRACHLORIDE | 3.61 | UG/L | 0.5 |
| 8/6/2008 | CARBON TETRACHLORIDE | 3.3 | UG/L | 0.5 |
| 7/2/2008 | CARBON TETRACHLORIDE | 3.8 | UG/L | 0.5 |
| 6/4/2008 | CARBON TETRACHLORIDE | 3.1 | UG/L | 0.5 |
| 5/13/2008 | CARBON TETRACHLORIDE | 2.9 | UG/L | 0.5 |
| 5/6/2008 | CARBON TETRACHLORIDE | 2.8 | UG/L | 0.5 |
| 4/2/2008 | CARBON TETRACHLORIDE | 3.4 | UG/L | 0.5 |
| 3/4/2008 | CARBON TETRACHLORIDE | 3.6 | UG/L | 0.5 |
| 2/26/2008 | CARBON TETRACHLORIDE | 3.6 | UG/L | 0.5 |
| 2/13/2008 | CARBON TETRACHLORIDE | 3.5 | UG/L | 0.5 |
| 1/8/2008 | CARBON TETRACHLORIDE | 4.6 | UG/L | 0.5 |
| 12/4/2007 | CARBON TETRACHLORIDE | 2.8 | UG/L | 0.5 |
| 11/8/2007 | CARBON TETRACHLORIDE | 3.1 | UG/L | 0.5 |
| 11/2/2007 | CARBON TETRACHLORIDE | 0.88 | UG/L | 0.5 |
| 10/11/2007 | CARBON TETRACHLORIDE | 3.8 | UG/L | 0.5 |
| 9/6/2007 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 8/31/2007 | CARBON TETRACHLORIDE | 3.6 | UG/L | 0.5 |
| 8/9/2007 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 8/2/2007 | CARBON TETRACHLORIDE | 3.7 | UG/L | 0.5 |
| 7/5/2007 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 6/5/2007 | CARBON TETRACHLORIDE | 4.8 | UG/L | 0.5 |

| | | | | |
|---|---|---|---|---|
| 5/10/2007 | CARBON TETRACHLORIDE | 3.5 | UG/L | 0.5 |
| 5/1/2007 | CARBON TETRACHLORIDE | 4 | UG/L | 0.5 |
| 4/3/2007 | CARBON TETRACHLORIDE | 3.5 | UG/L | 0.5 |
| 3/7/2007 | CARBON TETRACHLORIDE | 3.6 | UG/L | 0.5 |
| 2/22/2007 | CARBON TETRACHLORIDE | 3.3 | UG/L | 0.5 |
| 2/7/2007 | CARBON TETRACHLORIDE | 3.9 | UG/L | 0.5 |
| 1/2/2007 | CARBON TETRACHLORIDE | 4.9 | UG/L | 0.5 |
| 12/5/2006 | CARBON TETRACHLORIDE | 3.4 | UG/L | 0.5 |
| 11/9/2006 | CARBON TETRACHLORIDE | 3.5 | UG/L | 0.5 |
| 11/6/2006 | CARBON TETRACHLORIDE | 4.3 | UG/L | 0.5 |
| 10/3/2006 | CARBON TETRACHLORIDE | 3.7 | UG/L | 0.5 |
| 9/5/2006 | CARBON TETRACHLORIDE | 2.9 | UG/L | 0.5 |
| 8/29/2006 | CARBON TETRACHLORIDE | 4 | UG/L | 0.5 |
| 8/1/2006 | CARBON TETRACHLORIDE | 3.9 | UG/L | 0.5 |
| 7/5/2006 | CARBON TETRACHLORIDE | 3.2 | UG/L | 0.5 |
| 6/1/2006 | CARBON TETRACHLORIDE | 3.7 | UG/L | 0.5 |
| 5/10/2006 | CARBON TETRACHLORIDE | 3.4 | UG/L | 0.5 |
| 5/2/2006 | CARBON TETRACHLORIDE | 3.6 | UG/L | 0.5 |
| 4/3/2006 | CARBON TETRACHLORIDE | 2.7 | UG/L | 0.5 |
| 3/23/2006 | CARBON TETRACHLORIDE | 3.1 | UG/L | 0.5 |
| 3/2/2006 | CARBON TETRACHLORIDE | 2 | UG/L | 0.5 |

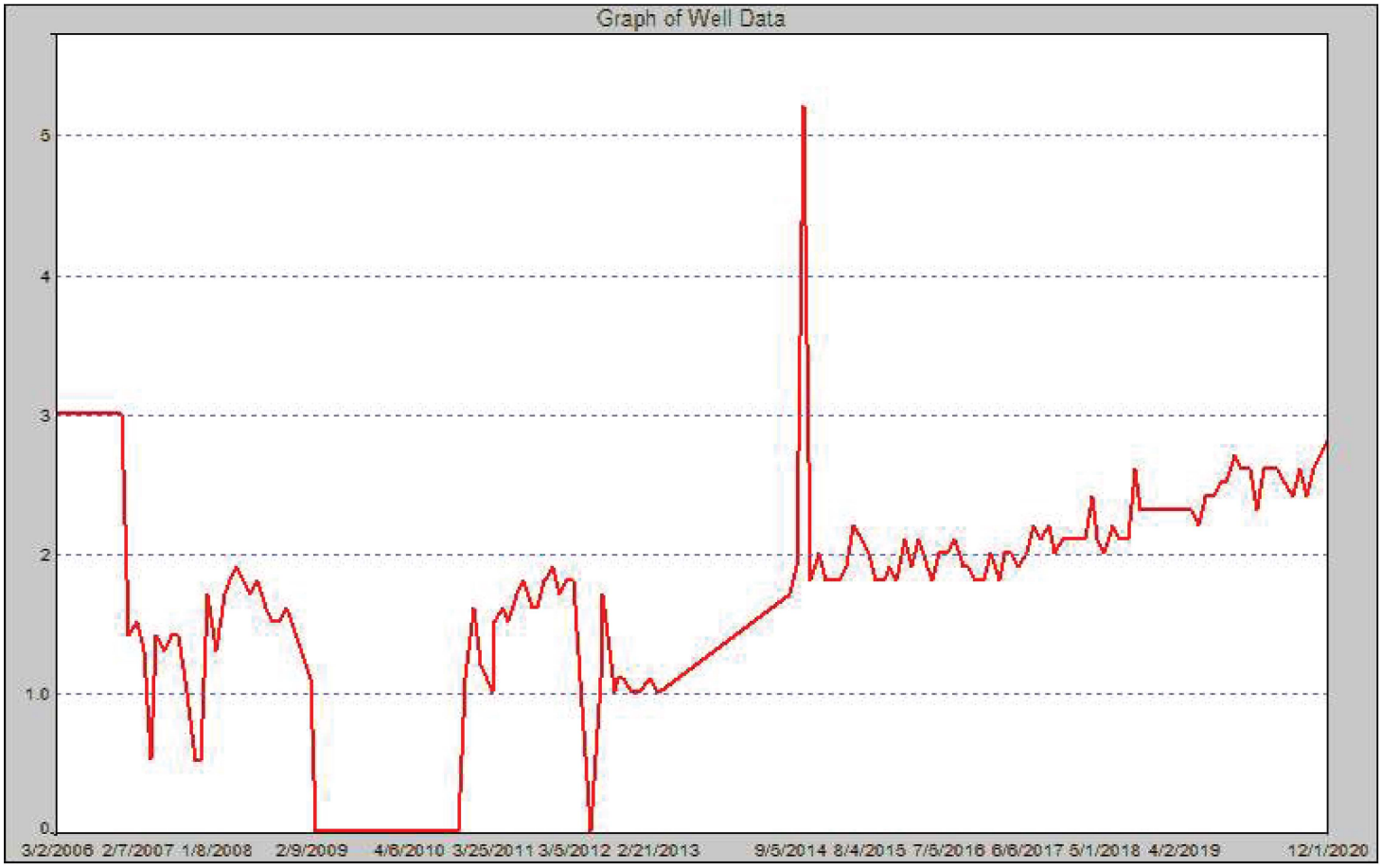
**FROM DATE:** **TO DATE:** **GRAPH SIZE** Medium **NORMALIZED** Redraw

# Well Report

**SAN GABRIEL VALLEY WATER CO.-EL MONTE (EL MONTE)**
**WELL B25A**
11142 GARVEY AVENUE
EL MONTE , CA 91734734

**State Well #:** 1910039-112
**Well Source:** Groundwater
**Well Status:** Active Raw

Detailed Well Information | Water Quality Data




| DATE | PARAMETER | RESULT | UNITS | MCL |
|---|---|---|---|---|
| 12/1/2020 | 1,4-DIOXANE | 2.8 | UG/L | NA |
| 11/3/2020 | 1,4-DIOXANE | 2.7 | UG/L | NA |
| 10/6/2020 | 1,4-DIOXANE | 2.6 | UG/L | NA |
| 9/1/2020 | 1,4-DIOXANE | 2.4 | UG/L | NA |
| 8/4/2020 | 1,4-DIOXANE | 2.6 | UG/L | NA |
| 7/7/2020 | 1,4-DIOXANE | 2.4 | UG/L | NA |
| 6/2/2020 | 1,4-DIOXANE | 2.5 | UG/L | NA |
| 5/5/2020 | 1,4-DIOXANE | 2.6 | UG/L | NA |
| 3/3/2020 | 1,4-DIOXANE | 2.6 | UG/L | NA |
| 2/4/2020 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 1/7/2020 | 1,4-DIOXANE | 2.6 | UG/L | NA |
| 12/3/2019 | 1,4-DIOXANE | 2.6 | UG/L | NA |
| 11/6/2019 | 1,4-DIOXANE | 2.7 | UG/L | NA |
| 10/1/2019 | 1,4-DIOXANE | 2.5 | UG/L | NA |
| 9/3/2019 | 1,4-DIOXANE | 2.5 | UG/L | NA |
| 8/6/2019 | 1,4-DIOXANE | 2.4 | UG/L | NA |
| 7/1/2019 | 1,4-DIOXANE | 2.4 | UG/L | NA |
| 6/4/2019 | 1,4-DIOXANE | 2.2 | UG/L | NA |
| 5/7/2019 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 4/2/2019 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 3/5/2019 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 2/7/2019 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 1/2/2019 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 12/4/2018 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 11/6/2018 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 10/2/2018 | 1,4-DIOXANE | 2.3 | UG/L | NA |
| 9/5/2018 | 1,4-DIOXANE | 2.6 | UG/L | NA |
| 8/7/2018 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 7/3/2018 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 6/5/2018 | 1,4-DIOXANE | 2.2 | UG/L | NA |
| 5/1/2018 | 1,4-DIOXANE | 2 | UG/L | NA |

| | | | | |
|---|---|---|---|---|
| 4/3/2018 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 3/6/2018 | 1,4-DIOXANE | 2.4 | UG/L | NA |
| 2/6/2018 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 1/3/2018 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 12/5/2017 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 11/6/2017 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 10/3/2017 | 1,4-DIOXANE | 2 | UG/L | NA |
| 9/6/2017 | 1,4-DIOXANE | 2.2 | UG/L | NA |
| 8/3/2017 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 7/5/2017 | 1,4-DIOXANE | 2.2 | UG/L | NA |
| 6/6/2017 | 1,4-DIOXANE | 2 | UG/L | NA |
| 5/2/2017 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 4/4/2017 | 1,4-DIOXANE | 2 | UG/L | NA |
| 3/6/2017 | 1,4-DIOXANE | 2 | UG/L | NA |
| 2/8/2017 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 1/4/2017 | 1,4-DIOXANE | 2 | UG/L | NA |
| 12/6/2016 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 11/3/2016 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 10/4/2016 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 9/7/2016 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 8/2/2016 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 7/5/2016 | 1,4-DIOXANE | 2 | UG/L | NA |
| 6/1/2016 | 1,4-DIOXANE | 2 | UG/L | NA |
| 5/2/2016 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 4/6/2016 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 3/1/2016 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 2/2/2016 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 1/5/2016 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 12/1/2015 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 11/3/2015 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 10/7/2015 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 9/2/2015 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 8/4/2015 | 1,4-DIOXANE | 2 | UG/L | NA |
| 7/6/2015 | 1,4-DIOXANE | 2.1 | UG/L | NA |
| 6/1/2015 | 1,4-DIOXANE | 2.2 | UG/L | NA |
| 5/5/2015 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 4/7/2015 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 3/3/2015 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 2/3/2015 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 1/6/2015 | 1,4-DIOXANE | 2 | UG/L | NA |
| 12/1/2014 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 11/5/2014 | 1,4-DIOXANE | 5.2 | UG/L | NA |
| 10/1/2014 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 9/5/2014 | 1,4-DIOXANE | 1.7 | UG/L | NA |
| 3/4/2013 | 1,4-DIOXANE | 1 | UG/L | NA |
| 2/21/2013 | 1,4-DIOXANE | 1 | UG/L | NA |
| 1/23/2013 | 1,4-DIOXANE | 1.1 | UG/L | NA |
| 12/4/2012 | 1,4-DIOXANE | < 1 | UG/L | NA |
| 11/5/2012 | 1,4-DIOXANE | 1 | UG/L | NA |
| 10/2/2012 | 1,4-DIOXANE | 1.1 | UG/L | NA |
| 9/4/2012 | 1,4-DIOXANE | 1.1 | UG/L | NA |
| 8/21/2012 | 1,4-DIOXANE | 1 | UG/L | NA |
| 7/2/2012 | 1,4-DIOXANE | 1.7 | UG/L | NA |
| 6/25/2012 | 1,4-DIOXANE | 1.1 | UG/L | NA |
| 5/11/2012 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 3/5/2012 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 2/1/2012 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 1/4/2012 | 1,4-DIOXANE | 1.7 | UG/L | NA |
| 12/5/2011 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 11/8/2011 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 11/1/2011 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 10/4/2011 | 1,4-DIOXANE | 1.6 | UG/L | NA |
| 9/6/2011 | 1,4-DIOXANE | 1.6 | UG/L | NA |
| 8/1/2011 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 7/6/2011 | 1,4-DIOXANE | 1.7 | UG/L | NA |
| 6/1/2011 | 1,4-DIOXANE | 1.5 | UG/L | NA |
| 5/9/2011 | 1,4-DIOXANE | 1.6 | UG/L | NA |
| 4/4/2011 | 1,4-DIOXANE | 1.5 | UG/L | NA |
| 3/25/2011 | 1,4-DIOXANE | 1 | UG/L | NA |
| 2/1/2011 | 1,4-DIOXANE | 1.2 | UG/L | NA |
| 1/6/2011 | 1,4-DIOXANE | 1.6 | UG/L | NA |
| 12/1/2010 | 1,4-DIOXANE | 1.1 | UG/L | NA |
| 11/2/2010 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 10/5/2010 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 9/2/2010 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 8/3/2010 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 7/8/2010 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 6/2/2010 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 5/4/2010 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 4/6/2010 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 12/2/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 11/5/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 10/6/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |

| | | | | |
|---|---|---|---|---|
| 9/2/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 8/5/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 7/24/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 6/2/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 5/5/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 4/17/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 3/4/2009 | 1,4-DIOXANE | < 0 | UG/L | NA |
| 2/9/2009 | 1,4-DIOXANE | 1.1 | UG/L | NA |
| 11/5/2008 | 1,4-DIOXANE | 1.6 | UG/L | NA |
| 10/2/2008 | 1,4-DIOXANE | 1.5 | UG/L | NA |
| 9/4/2008 | 1,4-DIOXANE | 1.5 | UG/L | NA |
| 8/6/2008 | 1,4-DIOXANE | 1.6 | UG/L | NA |
| 7/2/2008 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 6/4/2008 | 1,4-DIOXANE | 1.7 | UG/L | NA |
| 5/6/2008 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 4/2/2008 | 1,4-DIOXANE | 1.9 | UG/L | NA |
| 3/4/2008 | 1,4-DIOXANE | 1.8 | UG/L | NA |
| 2/13/2008 | 1,4-DIOXANE | 1.7 | UG/L | NA |
| 1/8/2008 | 1,4-DIOXANE | 1.3 | UG/L | NA |
| 12/4/2007 | 1,4-DIOXANE | 1.7 | UG/L | NA |
| 11/2/2007 | 1,4-DIOXANE | < 0.5 | UG/L | NA |
| 10/11/2007 | 1,4-DIOXANE | < 0.5 | UG/L | NA |
| 9/6/2007 | 1,4-DIOXANE | 1 | UG/L | NA |
| 8/2/2007 | 1,4-DIOXANE | 1.4 | UG/L | NA |
| 7/5/2007 | 1,4-DIOXANE | 1.4 | UG/L | NA |
| 6/5/2007 | 1,4-DIOXANE | 1.3 | UG/L | NA |
| 5/1/2007 | 1,4-DIOXANE | 1.4 | UG/L | NA |
| 4/3/2007 | 1,4-DIOXANE | 0.52 | UG/L | NA |
| 3/7/2007 | 1,4-DIOXANE | 1.3 | UG/L | NA |
| 2/7/2007 | 1,4-DIOXANE | 1.5 | UG/L | NA |
| 1/2/2007 | 1,4-DIOXANE | 1.4 | UG/L | NA |
| 12/5/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 11/6/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 10/3/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 9/5/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 8/1/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 7/5/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 6/1/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 5/2/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 4/3/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |
| 3/2/2006 | 1,4-DIOXANE | < 3 | UG/L | NA |

**FROM DATE:** **TO DATE:** **GRAPH SIZE** **NORMALIZED**

Medium

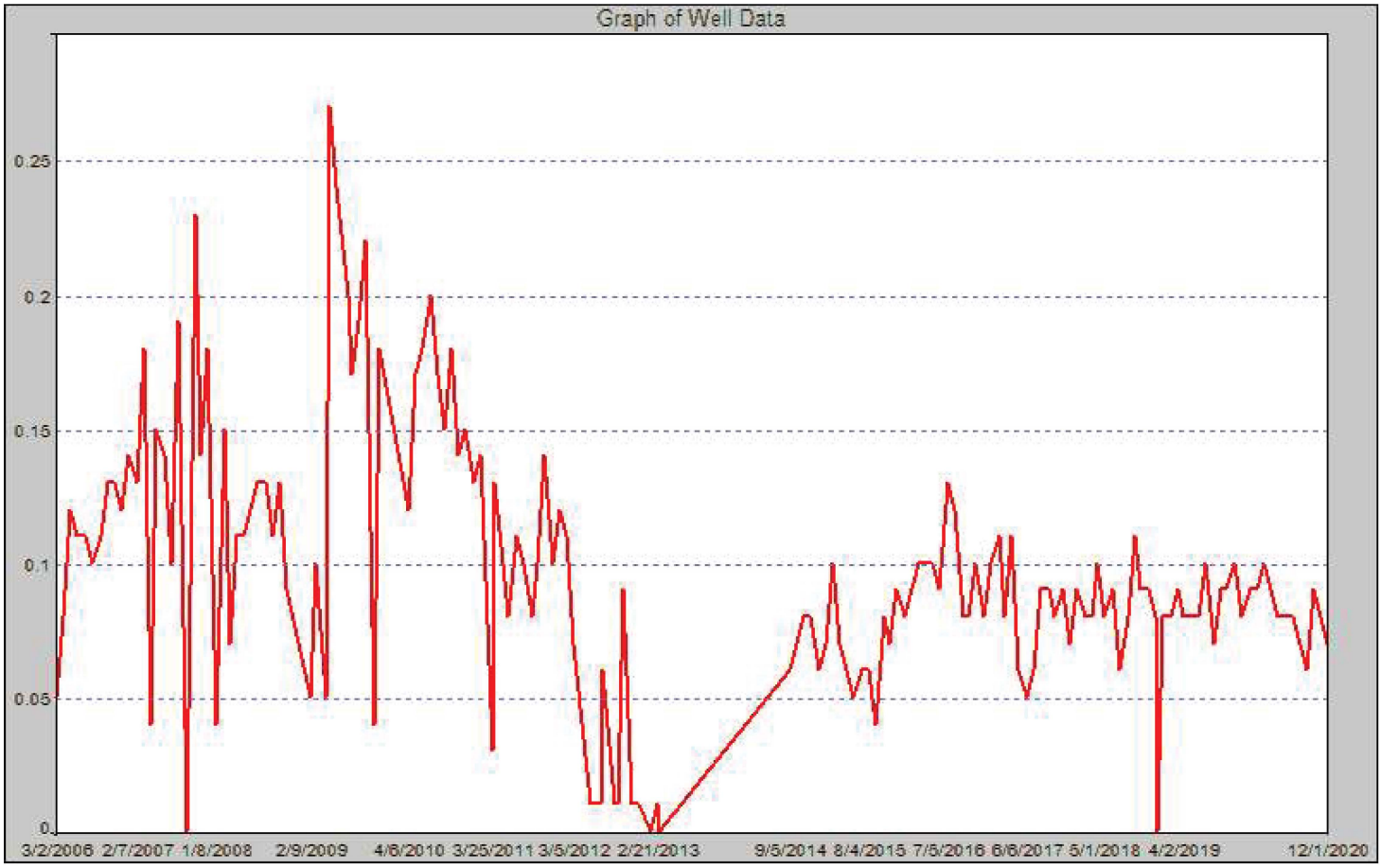
Redraw

# Well Report

**SAN GABRIEL VALLEY WATER CO.-EL MONTE (EL MONTE)**
**WELL B25A**
11142 GARVEY AVENUE
EL MONTE , CA 91734734

**State Well #:** 1910039-112
**Well Source:** Groundwater
**Well Status:** Active Raw

Detailed Well Information | Water Quality Data




| DATE | PARAMETER | RESULT | UNITS | MCL |
|---|---|---|---|---|
| 12/1/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.069 | UG/L | NA |
| 11/3/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.076 | UG/L | NA |
| 10/6/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.086 | UG/L | NA |
| 9/1/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.062 | UG/L | NA |
| 8/4/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.067 | UG/L | NA |
| 7/7/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.075 | UG/L | NA |
| 5/5/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.078 | UG/L | NA |
| 3/3/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.096 | UG/L | NA |
| 2/4/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.086 | UG/L | NA |
| 1/7/2020 | N-NITROSODIMETHYLAMINE (NDMA) | 0.086 | UG/L | NA |
| 12/3/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.082 | UG/L | NA |
| 11/6/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.099 | UG/L | NA |
| 10/1/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.087 | UG/L | NA |
| 9/3/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.086 | UG/L | NA |
| 8/6/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.066 | UG/L | NA |
| 7/1/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.1 | UG/L | NA |
| 6/4/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.085 | UG/L | NA |
| 5/7/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.085 | UG/L | NA |
| 4/2/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.081 | UG/L | NA |
| 3/5/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.087 | UG/L | NA |
| 2/7/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.085 | UG/L | NA |
| 1/2/2019 | N-NITROSODIMETHYLAMINE (NDMA) | 0.076 | UG/L | NA |
| 12/10/2018 | N-NITROSODIMETHYLAMINE (NDMA) | < 0 | UG/L | NA |
| 12/4/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.078 | UG/L | NA |
| 11/6/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.086 | UG/L | NA |
| 10/2/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.092 | UG/L | NA |
| 9/5/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 8/7/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.081 | UG/L | NA |
| 7/3/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.059 | UG/L | NA |
| 6/5/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.089 | UG/L | NA |
| 5/1/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.077 | UG/L | NA |

| | | | | |
|---|---|---|---|---|
| 4/3/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.096 | UG/L | NA |
| 3/6/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.075 | UG/L | NA |
| 2/6/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.075 | UG/L | NA |
| 1/3/2018 | N-NITROSODIMETHYLAMINE (NDMA) | 0.093 | UG/L | NA |
| 12/5/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.071 | UG/L | NA |
| 11/6/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.092 | UG/L | NA |
| 10/3/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.079 | UG/L | NA |
| 9/6/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.087 | UG/L | NA |
| 8/3/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.089 | UG/L | NA |
| 7/5/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.056 | UG/L | NA |
| 6/6/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.049 | UG/L | NA |
| 5/2/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.064 | UG/L | NA |
| 4/4/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 3/6/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.082 | UG/L | NA |
| 2/8/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 1/4/2017 | N-NITROSODIMETHYLAMINE (NDMA) | 0.1 | UG/L | NA |
| 12/6/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.083 | UG/L | NA |
| 11/3/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.095 | UG/L | NA |
| 10/4/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.079 | UG/L | NA |
| 9/7/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.084 | UG/L | NA |
| 8/2/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.12 | UG/L | NA |
| 7/5/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 6/1/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.091 | UG/L | NA |
| 5/2/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.099 | UG/L | NA |
| 4/6/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.099 | UG/L | NA |
| 3/1/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.099 | UG/L | NA |
| 2/2/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.093 | UG/L | NA |
| 1/5/2016 | N-NITROSODIMETHYLAMINE (NDMA) | 0.08 | UG/L | NA |
| 12/1/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.089 | UG/L | NA |
| 11/3/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.066 | UG/L | NA |
| 10/7/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.077 | UG/L | NA |
| 9/2/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.037 | UG/L | NA |
| 8/4/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.061 | UG/L | NA |
| 7/6/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.055 | UG/L | NA |
| 6/1/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.054 | UG/L | NA |
| 5/5/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.062 | UG/L | NA |
| 4/7/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.07 | UG/L | NA |
| 3/3/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.096 | UG/L | NA |
| 2/3/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.066 | UG/L | NA |
| 1/6/2015 | N-NITROSODIMETHYLAMINE (NDMA) | 0.063 | UG/L | NA |
| 12/1/2014 | N-NITROSODIMETHYLAMINE (NDMA) | 0.075 | UG/L | NA |
| 11/5/2014 | N-NITROSODIMETHYLAMINE (NDMA) | 0.082 | UG/L | NA |
| 10/1/2014 | N-NITROSODIMETHYLAMINE (NDMA) | 0.072 | UG/L | NA |
| 9/5/2014 | N-NITROSODIMETHYLAMINE (NDMA) | 0.061 | UG/L | NA |
| 3/4/2013 | N-NITROSODIMETHYLAMINE (NDMA) | < 0 | UG/L | NA |
| 3/4/2013 | N-NITROSODIMETHYLAMINE (NDMA) | 0.005 | UG/L | NA |
| 2/21/2013 | N-NITROSODIMETHYLAMINE (NDMA) | 0.006 | UG/L | NA |
| 1/23/2013 | N-NITROSODIMETHYLAMINE (NDMA) | 0.005 | UG/L | NA |
| 12/4/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.008 | UG/L | NA |
| 11/5/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.008 | UG/L | NA |
| 10/2/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.09 | UG/L | NA |
| 9/4/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.011 | UG/L | NA |
| 8/21/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.012 | UG/L | NA |
| 7/2/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.06 | UG/L | NA |
| 6/25/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.014 | UG/L | NA |
| 5/11/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.011 | UG/L | NA |
| 3/5/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.074 | UG/L | NA |
| 2/1/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 1/4/2012 | N-NITROSODIMETHYLAMINE (NDMA) | 0.12 | UG/L | NA |
| 12/5/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.097 | UG/L | NA |
| 11/1/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.14 | UG/L | NA |
| 10/4/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.1 | UG/L | NA |
| 9/6/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.084 | UG/L | NA |
| 8/1/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.097 | UG/L | NA |
| 7/6/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 6/1/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.083 | UG/L | NA |
| 5/9/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.098 | UG/L | NA |
| 4/4/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 3/25/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.028 | UG/L | NA |
| 2/1/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.14 | UG/L | NA |
| 1/6/2011 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 12/1/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.15 | UG/L | NA |
| 11/2/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.14 | UG/L | NA |
| 10/5/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.18 | UG/L | NA |
| 9/2/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.15 | UG/L | NA |
| 8/3/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.17 | UG/L | NA |
| 7/8/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.2 | UG/L | NA |
| 6/2/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.18 | UG/L | NA |
| 5/4/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.17 | UG/L | NA |
| 4/6/2010 | N-NITROSODIMETHYLAMINE (NDMA) | 0.12 | UG/L | NA |
| 12/2/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.18 | UG/L | NA |
| 11/5/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.041 | UG/L | NA |
| 10/6/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.22 | UG/L | NA |

| | | | | |
|---|---|---|---|---|
| 9/2/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.19 | UG/L | NA |
| 8/5/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.17 | UG/L | NA |
| 7/24/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.2 | UG/L | NA |
| 6/2/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.24 | UG/L | NA |
| 5/5/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.27 | UG/L | NA |
| 4/17/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.048 | UG/L | NA |
| 3/4/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.097 | UG/L | NA |
| 2/9/2009 | N-NITROSODIMETHYLAMINE (NDMA) | 0.047 | UG/L | NA |
| 11/5/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.094 | UG/L | NA |
| 10/2/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 9/4/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 8/6/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 7/2/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 6/4/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.12 | UG/L | NA |
| 5/6/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 4/2/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 3/4/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.071 | UG/L | NA |
| 2/13/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.15 | UG/L | NA |
| 1/8/2008 | N-NITROSODIMETHYLAMINE (NDMA) | 0.036 | UG/L | NA |
| 12/4/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.18 | UG/L | NA |
| 11/2/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.14 | UG/L | NA |
| 10/11/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.23 | UG/L | NA |
| 9/6/2007 | N-NITROSODIMETHYLAMINE (NDMA) | < 0.002 | UG/L | NA |
| 8/2/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.19 | UG/L | NA |
| 7/5/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.1 | UG/L | NA |
| 6/5/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.14 | UG/L | NA |
| 5/1/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.15 | UG/L | NA |
| 4/3/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.04 | UG/L | NA |
| 3/7/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.18 | UG/L | NA |
| 2/7/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 1/2/2007 | N-NITROSODIMETHYLAMINE (NDMA) | 0.14 | UG/L | NA |
| 12/5/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.12 | UG/L | NA |
| 11/6/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 10/3/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.13 | UG/L | NA |
| 9/5/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 8/1/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.1 | UG/L | NA |
| 7/5/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 6/1/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.11 | UG/L | NA |
| 5/2/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.12 | UG/L | NA |
| 4/3/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.083 | UG/L | NA |
| 3/2/2006 | N-NITROSODIMETHYLAMINE (NDMA) | 0.049 | UG/L | NA |

**FROM DATE:** **TO DATE:** **GRAPH SIZE** **NORMALIZED**

Medium

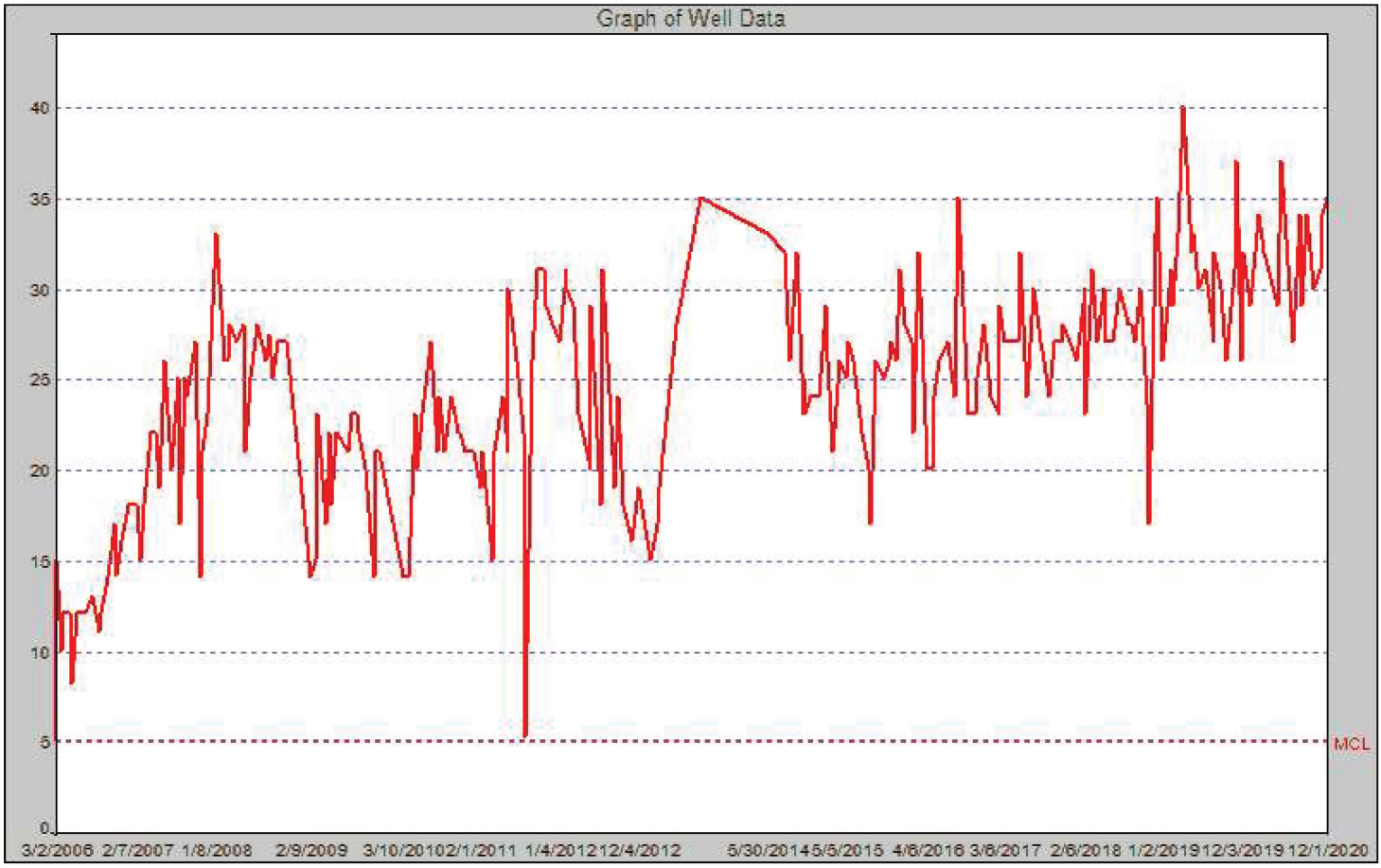
Redraw

# Well Report

**SAN GABRIEL VALLEY WATER CO.-EL MONTE (EL MONTE)**
**WELL B25A**
11142 GARVEY AVENUE
EL MONTE , CA 91734734

**State Well #:** 1910039-112
**Well Source:** Groundwater
**Well Status:** Active Raw

Detailed Well Information | Water Quality Data




| DATE | PARAMETER | RESULT | UNITS | MCL |
|---|---|---|---|---|
| 12/1/2020 | TETRACHLOROETHYLENE | 35 | UG/L | 5 |
| 11/10/2020 | TETRACHLOROETHYLENE | 34 | UG/L | 5 |
| 11/3/2020 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 10/6/2020 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 9/1/2020 | TETRACHLOROETHYLENE | 34 | UG/L | 5 |
| 8/17/2020 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 8/4/2020 | TETRACHLOROETHYLENE | 34 | UG/L | 5 |
| 7/7/2020 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 5/18/2020 | TETRACHLOROETHYLENE | 37 | UG/L | 5 |
| 5/5/2020 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 3/3/2020 | TETRACHLOROETHYLENE | 32 | UG/L | 5 |
| 2/11/2020 | TETRACHLOROETHYLENE | 34 | UG/L | 5 |
| 2/4/2020 | TETRACHLOROETHYLENE | 33 | UG/L | 5 |
| 1/7/2020 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 12/10/2019 | TETRACHLOROETHYLENE | 32 | UG/L | 5 |
| 12/3/2019 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 11/14/2019 | TETRACHLOROETHYLENE | 37 | UG/L | 5 |
| 11/6/2019 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 10/1/2019 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 9/3/2019 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 8/12/2019 | TETRACHLOROETHYLENE | 32 | UG/L | 5 |
| 8/6/2019 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 7/1/2019 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 6/4/2019 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 5/14/2019 | TETRACHLOROETHYLENE | 33 | UG/L | 5 |
| 5/7/2019 | TETRACHLOROETHYLENE | 32 | UG/L | 5 |
| 4/2/2019 | TETRACHLOROETHYLENE | 40 | UG/L | 5 |
| 3/5/2019 | TETRACHLOROETHYLENE | 33 | UG/L | 5 |
| 2/14/2019 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 2/7/2019 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 1/2/2019 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |

| | | | | |
|---|---|---|---|---|
| 12/10/2018 | TETRACHLOROETHYLENE | 35 | UG/L | 5 |
| 12/4/2018 | TETRACHLOROETHYLENE | 33 | UG/L | 5 |
| 11/7/2018 | TETRACHLOROETHYLENE | 17 | UG/L | 5 |
| 11/6/2018 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 10/2/2018 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 9/5/2018 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 8/21/2018 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 8/7/2018 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 7/3/2018 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 6/5/2018 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 5/9/2018 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 5/1/2018 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 4/3/2018 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 3/6/2018 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 2/6/2018 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 2/6/2018 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 1/3/2018 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 12/5/2017 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 12/5/2017 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 11/6/2017 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 11/6/2017 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 10/3/2017 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 9/6/2017 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 8/16/2017 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 8/3/2017 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 7/5/2017 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 6/6/2017 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 5/10/2017 | TETRACHLOROETHYLENE | 32 | UG/L | 5 |
| 5/2/2017 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 4/4/2017 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 3/6/2017 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 2/8/2017 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 2/8/2017 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 1/4/2017 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 12/6/2016 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 11/9/2016 | TETRACHLOROETHYLENE | 25 | UG/L | 5 |
| 11/3/2016 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 10/4/2016 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 9/7/2016 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 8/17/2016 | TETRACHLOROETHYLENE | 35 | UG/L | 5 |
| 8/2/2016 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 7/5/2016 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 6/1/2016 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 5/5/2016 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 5/2/2016 | TETRACHLOROETHYLENE | 20 | UG/L | 5 |
| 4/6/2016 | TETRACHLOROETHYLENE | 20 | UG/L | 5 |
| 3/1/2016 | TETRACHLOROETHYLENE | 32 | UG/L | 5 |
| 2/10/2016 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 2/2/2016 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 1/5/2016 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 12/16/2015 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 12/1/2015 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 11/12/2015 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 11/3/2015 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 10/7/2015 | TETRACHLOROETHYLENE | 25 | UG/L | 5 |
| 9/2/2015 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 8/10/2015 | TETRACHLOROETHYLENE | 17 | UG/L | 5 |
| 8/4/2015 | TETRACHLOROETHYLENE | 20 | UG/L | 5 |
| 7/6/2015 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 6/1/2015 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 5/12/2015 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 5/5/2015 | TETRACHLOROETHYLENE | 25 | UG/L | 5 |
| 4/7/2015 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 3/3/2015 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 2/10/2015 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 2/3/2015 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 1/6/2015 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 12/1/2014 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 11/13/2014 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 11/5/2014 | TETRACHLOROETHYLENE | 25 | UG/L | 5 |
| 10/30/2014 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 10/1/2014 | TETRACHLOROETHYLENE | 32 | UG/L | 5 |
| 9/5/2014 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 8/14/2014 | TETRACHLOROETHYLENE | 32 | UG/L | 5 |
| 5/30/2014 | TETRACHLOROETHYLENE | 33 | UG/L | 5 |
| 8/22/2013 | TETRACHLOROETHYLENE | 35 | UG/L | 5 |
| 5/16/2013 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 3/4/2013 | TETRACHLOROETHYLENE | 18 | UG/L | 5 |
| 3/4/2013 | TETRACHLOROETHYLENE | 19 | UG/L | 5 |
| 2/21/2013 | TETRACHLOROETHYLENE | 17 | UG/L | 5 |
| 1/23/2013 | TETRACHLOROETHYLENE | 15 | UG/L | 5 |
| 12/4/2012 | TETRACHLOROETHYLENE | 19 | UG/L | 5 |
| 11/5/2012 | TETRACHLOROETHYLENE | 16 | UG/L | 5 |

| | | | | |
|---|---|---|---|---|
| 10/2/2012 | TETRACHLOROETHYLENE | 18 | UG/L | 5 |
| 9/4/2012 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 8/21/2012 | TETRACHLOROETHYLENE | 19 | UG/L | 5 |
| 7/2/2012 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 6/25/2012 | TETRACHLOROETHYLENE | 18 | UG/L | 5 |
| 5/16/2012 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 5/11/2012 | TETRACHLOROETHYLENE | 20 | UG/L | 5 |
| 3/27/2012 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 3/5/2012 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 2/2/2012 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 2/1/2012 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 1/4/2012 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 12/5/2011 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 11/8/2011 | TETRACHLOROETHYLENE | 29 | UG/L | 5 |
| 11/1/2011 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 10/4/2011 | TETRACHLOROETHYLENE | 31 | UG/L | 5 |
| 9/6/2011 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 8/9/2011 | TETRACHLOROETHYLENE | 5.2 | UG/L | 5 |
| 8/1/2011 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 7/6/2011 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 6/2/2011 | TETRACHLOROETHYLENE | 30 | UG/L | 5 |
| 6/1/2011 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 5/9/2011 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 4/4/2011 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 3/25/2011 | TETRACHLOROETHYLENE | 15 | UG/L | 5 |
| 3/25/2011 | TETRACHLOROETHYLENE | 15 | UG/L | 5 |
| 2/8/2011 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 2/1/2011 | TETRACHLOROETHYLENE | 19 | UG/L | 5 |
| 1/6/2011 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 12/1/2010 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 11/9/2010 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 11/2/2010 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 10/5/2010 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 9/2/2010 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 8/11/2010 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 8/3/2010 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 7/8/2010 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 6/2/2010 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 5/6/2010 | TETRACHLOROETHYLENE | 20 | UG/L | 5 |
| 5/4/2010 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 4/6/2010 | TETRACHLOROETHYLENE | 14 | UG/L | 5 |
| 3/10/2010 | TETRACHLOROETHYLENE | 14 | UG/L | 5 |
| 12/2/2009 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 11/12/2009 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 11/5/2009 | TETRACHLOROETHYLENE | 14 | UG/L | 5 |
| 10/6/2009 | TETRACHLOROETHYLENE | 20 | UG/L | 5 |
| 9/2/2009 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 8/24/2009 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 8/5/2009 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 7/24/2009 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 6/2/2009 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 5/7/2009 | TETRACHLOROETHYLENE | 18 | UG/L | 5 |
| 5/5/2009 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 4/17/2009 | TETRACHLOROETHYLENE | 17 | UG/L | 5 |
| 3/12/2009 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 3/12/2009 | TETRACHLOROETHYLENE | 20 | UG/L | 5 |
| 3/4/2009 | TETRACHLOROETHYLENE | 15 | UG/L | 5 |
| 2/9/2009 | TETRACHLOROETHYLENE | 14 | UG/L | 5 |
| 11/5/2008 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 10/2/2008 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 9/29/2008 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 9/4/2008 | TETRACHLOROETHYLENE | 25 | UG/L | 5 |
| 8/20/2008 | TETRACHLOROETHYLENE | 27.4 | UG/L | 5 |
| 8/6/2008 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 7/2/2008 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 6/4/2008 | TETRACHLOROETHYLENE | 25 | UG/L | 5 |
| 5/13/2008 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 5/6/2008 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 4/2/2008 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 3/4/2008 | TETRACHLOROETHYLENE | 28 | UG/L | 5 |
| 2/26/2008 | TETRACHLOROETHYLENE | 26.1 | UG/L | 5 |
| 2/13/2008 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |
| 1/8/2008 | TETRACHLOROETHYLENE | 33 | UG/L | 5 |
| 12/4/2007 | TETRACHLOROETHYLENE | 23 | UG/L | 5 |
| 11/8/2007 | TETRACHLOROETHYLENE | 21 | UG/L | 5 |
| 11/2/2007 | TETRACHLOROETHYLENE | 14 | UG/L | 5 |
| 10/11/2007 | TETRACHLOROETHYLENE | 27 | UG/L | 5 |
| 9/6/2007 | TETRACHLOROETHYLENE | 24 | UG/L | 5 |
| 8/31/2007 | TETRACHLOROETHYLENE | 25 | UG/L | 5 |
| 8/9/2007 | TETRACHLOROETHYLENE | 17 | UG/L | 5 |
| 8/2/2007 | TETRACHLOROETHYLENE | 25 | UG/L | 5 |
| 7/5/2007 | TETRACHLOROETHYLENE | 20 | UG/L | 5 |
| 6/5/2007 | TETRACHLOROETHYLENE | 26 | UG/L | 5 |

| | | | | |
|---|---|---|---|---|
| 5/10/2007 | TETRACHLOROETHYLENE | 19 | UG/L | 5 |
| 5/1/2007 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 4/3/2007 | TETRACHLOROETHYLENE | 22 | UG/L | 5 |
| 3/7/2007 | TETRACHLOROETHYLENE | 18 | UG/L | 5 |
| 2/22/2007 | TETRACHLOROETHYLENE | 15 | UG/L | 5 |
| 2/7/2007 | TETRACHLOROETHYLENE | 18 | UG/L | 5 |
| 1/2/2007 | TETRACHLOROETHYLENE | 18 | UG/L | 5 |
| 12/5/2006 | TETRACHLOROETHYLENE | 16 | UG/L | 5 |
| 11/9/2006 | TETRACHLOROETHYLENE | 14.1 | UG/L | 5 |
| 11/6/2006 | TETRACHLOROETHYLENE | 17 | UG/L | 5 |
| 10/3/2006 | TETRACHLOROETHYLENE | 14 | UG/L | 5 |
| 9/5/2006 | TETRACHLOROETHYLENE | 12 | UG/L | 5 |
| 8/29/2006 | TETRACHLOROETHYLENE | 11 | UG/L | 5 |
| 8/1/2006 | TETRACHLOROETHYLENE | 13 | UG/L | 5 |
| 7/5/2006 | TETRACHLOROETHYLENE | 12 | UG/L | 5 |
| 6/1/2006 | TETRACHLOROETHYLENE | 12 | UG/L | 5 |
| 5/10/2006 | TETRACHLOROETHYLENE | 8.2 | UG/L | 5 |
| 5/2/2006 | TETRACHLOROETHYLENE | 12 | UG/L | 5 |
| 4/3/2006 | TETRACHLOROETHYLENE | 12 | UG/L | 5 |
| 3/23/2006 | TETRACHLOROETHYLENE | 10 | UG/L | 5 |
| 3/2/2006 | TETRACHLOROETHYLENE | 15 | UG/L | 5 |

**FROM DATE:** **TO DATE:** **GRAPH SIZE** **NORMALIZED**

Medium

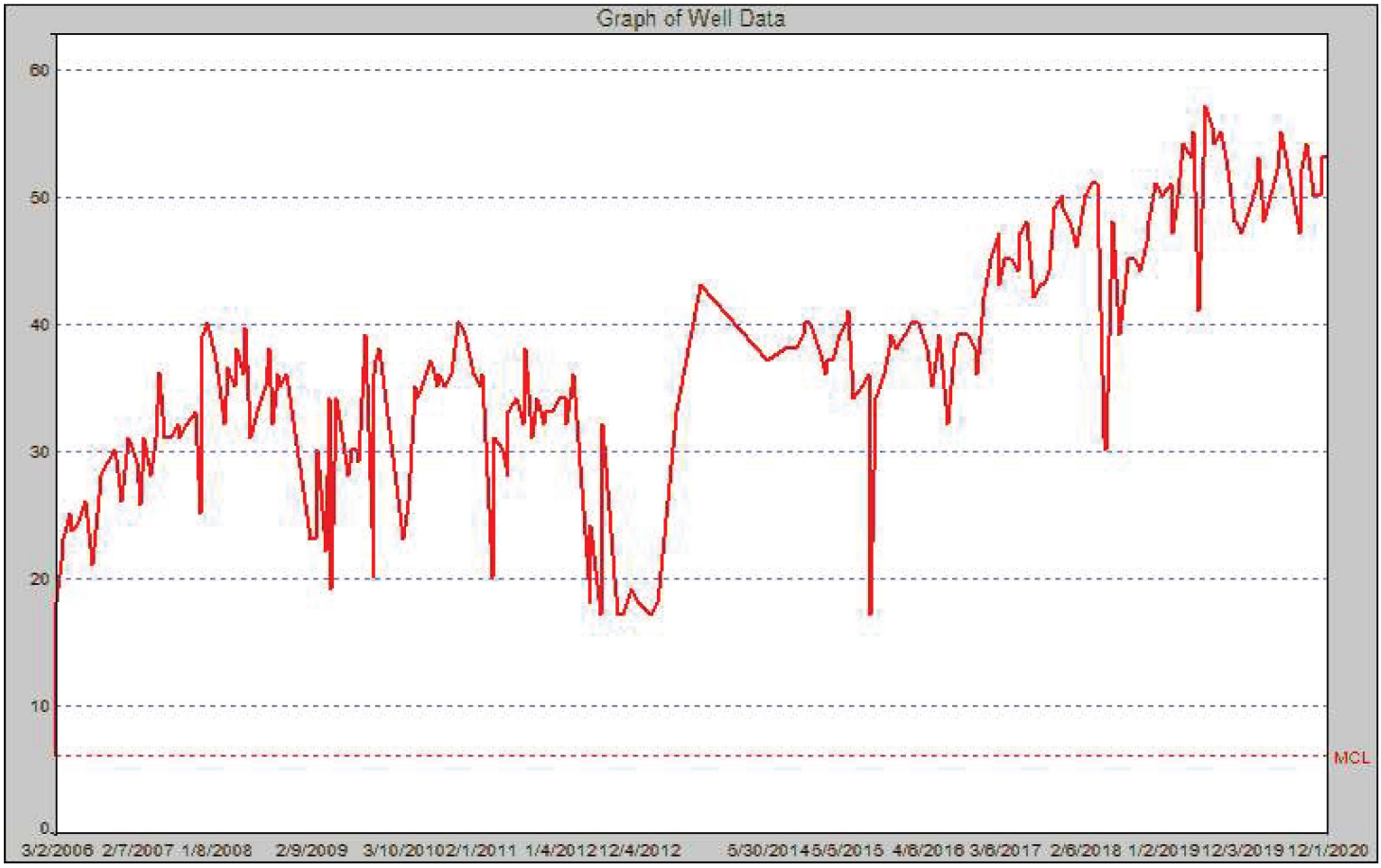
Redraw

# Well Report

**SAN GABRIEL VALLEY WATER CO.-EL MONTE (EL MONTE)**
**WELL B25A**
11142 GARVEY AVENUE
EL MONTE , CA 91734734

**State Well #:** 1910039-112
**Well Source:** Groundwater
**Well Status:** Active Raw

Detailed Well Information | Water Quality Data




| DATE | PARAMETER | RESULT | UNITS | MCL |
|---|---|---|---|---|
| 12/1/2020 | PERCHLORATE | 53 | UG/L | 6 |
| 11/10/2020 | PERCHLORATE | 53 | UG/L | 6 |
| 11/3/2020 | PERCHLORATE | 50 | UG/L | 6 |
| 10/6/2020 | PERCHLORATE | 50 | UG/L | 6 |
| 9/1/2020 | PERCHLORATE | 54 | UG/L | 6 |
| 8/17/2020 | PERCHLORATE | 52 | UG/L | 6 |
| 8/4/2020 | PERCHLORATE | 47 | UG/L | 6 |
| 7/7/2020 | PERCHLORATE | 50 | UG/L | 6 |
| 5/18/2020 | PERCHLORATE | 55 | UG/L | 6 |
| 5/5/2020 | PERCHLORATE | 52 | UG/L | 6 |
| 3/3/2020 | PERCHLORATE | 48 | UG/L | 6 |
| 2/11/2020 | PERCHLORATE | 53 | UG/L | 6 |
| 2/4/2020 | PERCHLORATE | 51 | UG/L | 6 |
| 1/7/2020 | PERCHLORATE | 49 | UG/L | 6 |
| 12/3/2019 | PERCHLORATE | 47 | UG/L | 6 |
| 11/14/2019 | PERCHLORATE | 48 | UG/L | 6 |
| 11/6/2019 | PERCHLORATE | 48 | UG/L | 6 |
| 10/1/2019 | PERCHLORATE | 53 | UG/L | 6 |
| 9/3/2019 | PERCHLORATE | 55 | UG/L | 6 |
| 8/12/2019 | PERCHLORATE | 54 | UG/L | 6 |
| 8/6/2019 | PERCHLORATE | 55 | UG/L | 6 |
| 7/1/2019 | PERCHLORATE | 57 | UG/L | 6 |
| 6/4/2019 | PERCHLORATE | 41 | UG/L | 6 |
| 5/14/2019 | PERCHLORATE | 55 | UG/L | 6 |
| 5/7/2019 | PERCHLORATE | 53 | UG/L | 6 |
| 4/2/2019 | PERCHLORATE | 54 | UG/L | 6 |
| 3/5/2019 | PERCHLORATE | 50 | UG/L | 6 |
| 2/14/2019 | PERCHLORATE | 47 | UG/L | 6 |
| 2/7/2019 | PERCHLORATE | 51 | UG/L | 6 |
| 1/2/2019 | PERCHLORATE | 50 | UG/L | 6 |
| 12/4/2018 | PERCHLORATE | 51 | UG/L | 6 |

| | | | | |
|---|---|---|---|---|
| 11/7/2018 | PERCHLORATE | 48 | UG/L | 6 |
| 11/6/2018 | PERCHLORATE | 47 | UG/L | 6 |
| 10/2/2018 | PERCHLORATE | 44 | UG/L | 6 |
| 9/5/2018 | PERCHLORATE | 45 | UG/L | 6 |
| 8/21/2018 | PERCHLORATE | 45 | UG/L | 6 |
| 8/7/2018 | PERCHLORATE | 45 | UG/L | 6 |
| 7/3/2018 | PERCHLORATE | 39 | UG/L | 6 |
| 6/5/2018 | PERCHLORATE | 48 | UG/L | 6 |
| 5/9/2018 | PERCHLORATE | 30 | UG/L | 6 |
| 5/1/2018 | PERCHLORATE | 31 | UG/L | 6 |
| 4/3/2018 | PERCHLORATE | 51 | UG/L | 6 |
| 3/6/2018 | PERCHLORATE | 51 | UG/L | 6 |
| 2/6/2018 | PERCHLORATE | 50 | UG/L | 6 |
| 2/6/2018 | PERCHLORATE | 50 | UG/L | 6 |
| 1/3/2018 | PERCHLORATE | 46 | UG/L | 6 |
| 12/5/2017 | PERCHLORATE | 48 | UG/L | 6 |
| 11/6/2017 | PERCHLORATE | 49 | UG/L | 6 |
| 11/6/2017 | PERCHLORATE | 50 | UG/L | 6 |
| 10/3/2017 | PERCHLORATE | 49 | UG/L | 6 |
| 9/6/2017 | PERCHLORATE | 44 | UG/L | 6 |
| 8/16/2017 | PERCHLORATE | 43 | UG/L | 6 |
| 8/3/2017 | PERCHLORATE | 43 | UG/L | 6 |
| 7/5/2017 | PERCHLORATE | 42 | UG/L | 6 |
| 6/6/2017 | PERCHLORATE | 48 | UG/L | 6 |
| 5/10/2017 | PERCHLORATE | 47 | UG/L | 6 |
| 5/2/2017 | PERCHLORATE | 44 | UG/L | 6 |
| 4/4/2017 | PERCHLORATE | 45 | UG/L | 6 |
| 3/6/2017 | PERCHLORATE | 45 | UG/L | 6 |
| 2/8/2017 | PERCHLORATE | 47 | UG/L | 6 |
| 2/8/2017 | PERCHLORATE | 43 | UG/L | 6 |
| 1/4/2017 | PERCHLORATE | 45 | UG/L | 6 |
| 12/6/2016 | PERCHLORATE | 42 | UG/L | 6 |
| 11/9/2016 | PERCHLORATE | 36 | UG/L | 6 |
| 11/3/2016 | PERCHLORATE | 38 | UG/L | 6 |
| 10/4/2016 | PERCHLORATE | 39 | UG/L | 6 |
| 9/7/2016 | PERCHLORATE | 39 | UG/L | 6 |
| 8/17/2016 | PERCHLORATE | 39 | UG/L | 6 |
| 8/2/2016 | PERCHLORATE | 38 | UG/L | 6 |
| 7/5/2016 | PERCHLORATE | 32 | UG/L | 6 |
| 6/1/2016 | PERCHLORATE | 39 | UG/L | 6 |
| 5/5/2016 | PERCHLORATE | 36 | UG/L | 6 |
| 5/2/2016 | PERCHLORATE | 35 | UG/L | 6 |
| 4/6/2016 | PERCHLORATE | 38 | UG/L | 6 |
| 3/1/2016 | PERCHLORATE | 40 | UG/L | 6 |
| 2/10/2016 | PERCHLORATE | 40 | UG/L | 6 |
| 2/2/2016 | PERCHLORATE | 40 | UG/L | 6 |
| 1/5/2016 | PERCHLORATE | 39 | UG/L | 6 |
| 12/1/2015 | PERCHLORATE | 38 | UG/L | 6 |
| 11/12/2015 | PERCHLORATE | 39 | UG/L | 6 |
| 11/3/2015 | PERCHLORATE | 38 | UG/L | 6 |
| 10/7/2015 | PERCHLORATE | 36 | UG/L | 6 |
| 9/2/2015 | PERCHLORATE | 34 | UG/L | 6 |
| 8/10/2015 | PERCHLORATE | 17 | UG/L | 6 |
| 8/4/2015 | PERCHLORATE | 36 | UG/L | 6 |
| 7/6/2015 | PERCHLORATE | 35 | UG/L | 6 |
| 6/1/2015 | PERCHLORATE | 34 | UG/L | 6 |
| 5/12/2015 | PERCHLORATE | 41 | UG/L | 6 |
| 5/5/2015 | PERCHLORATE | 40 | UG/L | 6 |
| 4/7/2015 | PERCHLORATE | 39 | UG/L | 6 |
| 3/3/2015 | PERCHLORATE | 37 | UG/L | 6 |
| 2/10/2015 | PERCHLORATE | 37 | UG/L | 6 |
| 2/3/2015 | PERCHLORATE | 36 | UG/L | 6 |
| 1/6/2015 | PERCHLORATE | 38 | UG/L | 6 |
| 12/1/2014 | PERCHLORATE | 40 | UG/L | 6 |
| 11/13/2014 | PERCHLORATE | 40 | UG/L | 6 |
| 11/5/2014 | PERCHLORATE | 39 | UG/L | 6 |
| 10/1/2014 | PERCHLORATE | 38 | UG/L | 6 |
| 9/5/2014 | PERCHLORATE | 38 | UG/L | 6 |
| 8/14/2014 | PERCHLORATE | 38 | UG/L | 6 |
| 5/30/2014 | PERCHLORATE | 37 | UG/L | 6 |
| 8/22/2013 | PERCHLORATE | 43 | UG/L | 6 |
| 5/16/2013 | PERCHLORATE | 33 | UG/L | 6 |
| 3/4/2013 | PERCHLORATE | 19 | UG/L | 6 |
| 2/21/2013 | PERCHLORATE | 18 | UG/L | 6 |
| 1/23/2013 | PERCHLORATE | 17 | UG/L | 6 |
| 12/4/2012 | PERCHLORATE | 18 | UG/L | 6 |
| 11/5/2012 | PERCHLORATE | 19 | UG/L | 6 |
| 10/2/2012 | PERCHLORATE | 17 | UG/L | 6 |
| 9/4/2012 | PERCHLORATE | 17 | UG/L | 6 |
| 8/21/2012 | PERCHLORATE | 20 | UG/L | 6 |
| 7/2/2012 | PERCHLORATE | 32 | UG/L | 6 |
| 6/25/2012 | PERCHLORATE | 17 | UG/L | 6 |
| 5/16/2012 | PERCHLORATE | 24 | UG/L | 6 |

| | | | | |
|---|---|---|---|---|
| 5/11/2012 | PERCHLORATE | 18 | UG/L | 6 |
| 3/5/2012 | PERCHLORATE | 36 | UG/L | 6 |
| 2/2/2012 | PERCHLORATE | 32 | UG/L | 6 |
| 2/1/2012 | PERCHLORATE | 34 | UG/L | 6 |
| 1/4/2012 | PERCHLORATE | 34 | UG/L | 6 |
| 12/5/2011 | PERCHLORATE | 33 | UG/L | 6 |
| 11/8/2011 | PERCHLORATE | 33 | UG/L | 6 |
| 11/1/2011 | PERCHLORATE | 32 | UG/L | 6 |
| 10/4/2011 | PERCHLORATE | 34 | UG/L | 6 |
| 9/6/2011 | PERCHLORATE | 31 | UG/L | 6 |
| 8/9/2011 | PERCHLORATE | 38 | UG/L | 6 |
| 8/1/2011 | PERCHLORATE | 32 | UG/L | 6 |
| 7/6/2011 | PERCHLORATE | 34 | UG/L | 6 |
| 6/2/2011 | PERCHLORATE | 33 | UG/L | 6 |
| 6/1/2011 | PERCHLORATE | 28 | UG/L | 6 |
| 5/9/2011 | PERCHLORATE | 30 | UG/L | 6 |
| 4/4/2011 | PERCHLORATE | 31 | UG/L | 6 |
| 3/25/2011 | PERCHLORATE | 20 | UG/L | 6 |
| 2/8/2011 | PERCHLORATE | 36 | UG/L | 6 |
| 2/1/2011 | PERCHLORATE | 35 | UG/L | 6 |
| 1/6/2011 | PERCHLORATE | 36 | UG/L | 6 |
| 12/1/2010 | PERCHLORATE | 39 | UG/L | 6 |
| 11/9/2010 | PERCHLORATE | 40 | UG/L | 6 |
| 11/2/2010 | PERCHLORATE | 40 | UG/L | 6 |
| 10/5/2010 | PERCHLORATE | 36 | UG/L | 6 |
| 9/2/2010 | PERCHLORATE | 35 | UG/L | 6 |
| 8/11/2010 | PERCHLORATE | 36 | UG/L | 6 |
| 8/3/2010 | PERCHLORATE | 35 | UG/L | 6 |
| 7/8/2010 | PERCHLORATE | 37 | UG/L | 6 |
| 6/2/2010 | PERCHLORATE | 35 | UG/L | 6 |
| 5/6/2010 | PERCHLORATE | 34 | UG/L | 6 |
| 5/4/2010 | PERCHLORATE | 35 | UG/L | 6 |
| 4/6/2010 | PERCHLORATE | 26 | UG/L | 6 |
| 3/10/2010 | PERCHLORATE | 23 | UG/L | 6 |
| 12/2/2009 | PERCHLORATE | 38 | UG/L | 6 |
| 11/12/2009 | PERCHLORATE | 37 | UG/L | 6 |
| 11/10/2009 | PERCHLORATE | 36 | UG/L | 6 |
| 11/5/2009 | PERCHLORATE | 20 | UG/L | 6 |
| 10/6/2009 | PERCHLORATE | 39 | UG/L | 6 |
| 9/2/2009 | PERCHLORATE | 29 | UG/L | 6 |
| 8/24/2009 | PERCHLORATE | 30 | UG/L | 6 |
| 8/5/2009 | PERCHLORATE | 30 | UG/L | 6 |
| 7/24/2009 | PERCHLORATE | 28 | UG/L | 6 |
| 6/2/2009 | PERCHLORATE | 34 | UG/L | 6 |
| 5/7/2009 | PERCHLORATE | 19 | UG/L | 6 |
| 5/5/2009 | PERCHLORATE | 34 | UG/L | 6 |
| 4/17/2009 | PERCHLORATE | 22 | UG/L | 6 |
| 3/12/2009 | PERCHLORATE | 30 | UG/L | 6 |
| 3/4/2009 | PERCHLORATE | 23 | UG/L | 6 |
| 2/9/2009 | PERCHLORATE | 23 | UG/L | 6 |
| 11/5/2008 | PERCHLORATE | 36 | UG/L | 6 |
| 10/2/2008 | PERCHLORATE | 35 | UG/L | 6 |
| 9/29/2008 | PERCHLORATE | 36 | UG/L | 6 |
| 9/4/2008 | PERCHLORATE | 32 | UG/L | 6 |
| 8/20/2008 | PERCHLORATE | 38 | UG/L | 6 |
| 8/6/2008 | PERCHLORATE | 35 | UG/L | 6 |
| 7/2/2008 | PERCHLORATE | 33 | UG/L | 6 |
| 6/4/2008 | PERCHLORATE | 31 | UG/L | 6 |
| 5/13/2008 | PERCHLORATE | 39.6 | UG/L | 6 |
| 5/6/2008 | PERCHLORATE | 36 | UG/L | 6 |
| 4/2/2008 | PERCHLORATE | 38 | UG/L | 6 |
| 3/25/2008 | PERCHLORATE | 35 | UG/L | 6 |
| 3/4/2008 | PERCHLORATE | 36 | UG/L | 6 |
| 2/26/2008 | PERCHLORATE | 36.5 | UG/L | 6 |
| 2/13/2008 | PERCHLORATE | 32 | UG/L | 6 |
| 1/8/2008 | PERCHLORATE | 37 | UG/L | 6 |
| 12/4/2007 | PERCHLORATE | 40 | UG/L | 6 |
| 11/8/2007 | PERCHLORATE | 38.9 | UG/L | 6 |
| 11/2/2007 | PERCHLORATE | 25 | UG/L | 6 |
| 10/11/2007 | PERCHLORATE | 33 | UG/L | 6 |
| 9/6/2007 | PERCHLORATE | 32 | UG/L | 6 |
| 8/9/2007 | PERCHLORATE | 30.9 | UG/L | 6 |
| 8/2/2007 | PERCHLORATE | 32 | UG/L | 6 |
| 7/5/2007 | PERCHLORATE | 31 | UG/L | 6 |
| 6/5/2007 | PERCHLORATE | 31 | UG/L | 6 |
| 5/10/2007 | PERCHLORATE | 36.1 | UG/L | 6 |
| 5/1/2007 | PERCHLORATE | 31 | UG/L | 6 |
| 4/3/2007 | PERCHLORATE | 28 | UG/L | 6 |
| 3/7/2007 | PERCHLORATE | 31 | UG/L | 6 |
| 2/22/2007 | PERCHLORATE | 25.7 | UG/L | 6 |
| 2/7/2007 | PERCHLORATE | 29 | UG/L | 6 |
| 1/2/2007 | PERCHLORATE | 31 | UG/L | 6 |
| 12/5/2006 | PERCHLORATE | 26 | UG/L | 6 |

| | | | | |
|---|---|---|---|---|
| 11/9/2006 | PERCHLORATE | 29.3 | UG/L | 6 |
| 11/6/2006 | PERCHLORATE | 30 | UG/L | 6 |
| 10/3/2006 | PERCHLORATE | 29 | UG/L | 6 |
| 9/5/2006 | PERCHLORATE | 28 | UG/L | 6 |
| 8/29/2006 | PERCHLORATE | 26.3 | UG/L | 6 |
| 8/1/2006 | PERCHLORATE | 21 | UG/L | 6 |
| 7/5/2006 | PERCHLORATE | 26 | UG/L | 6 |
| 6/1/2006 | PERCHLORATE | 24 | UG/L | 6 |
| 5/10/2006 | PERCHLORATE | 23.6 | UG/L | 6 |
| 5/2/2006 | PERCHLORATE | 25 | UG/L | 6 |
| 4/3/2006 | PERCHLORATE | 23 | UG/L | 6 |
| 3/23/2006 | PERCHLORATE | 21.2 | UG/L | 6 |
| 3/2/2006 | PERCHLORATE | 18 | UG/L | 6 |

**FROM DATE:** **TO DATE:** **GRAPH SIZE** **NORMALIZED**

Medium

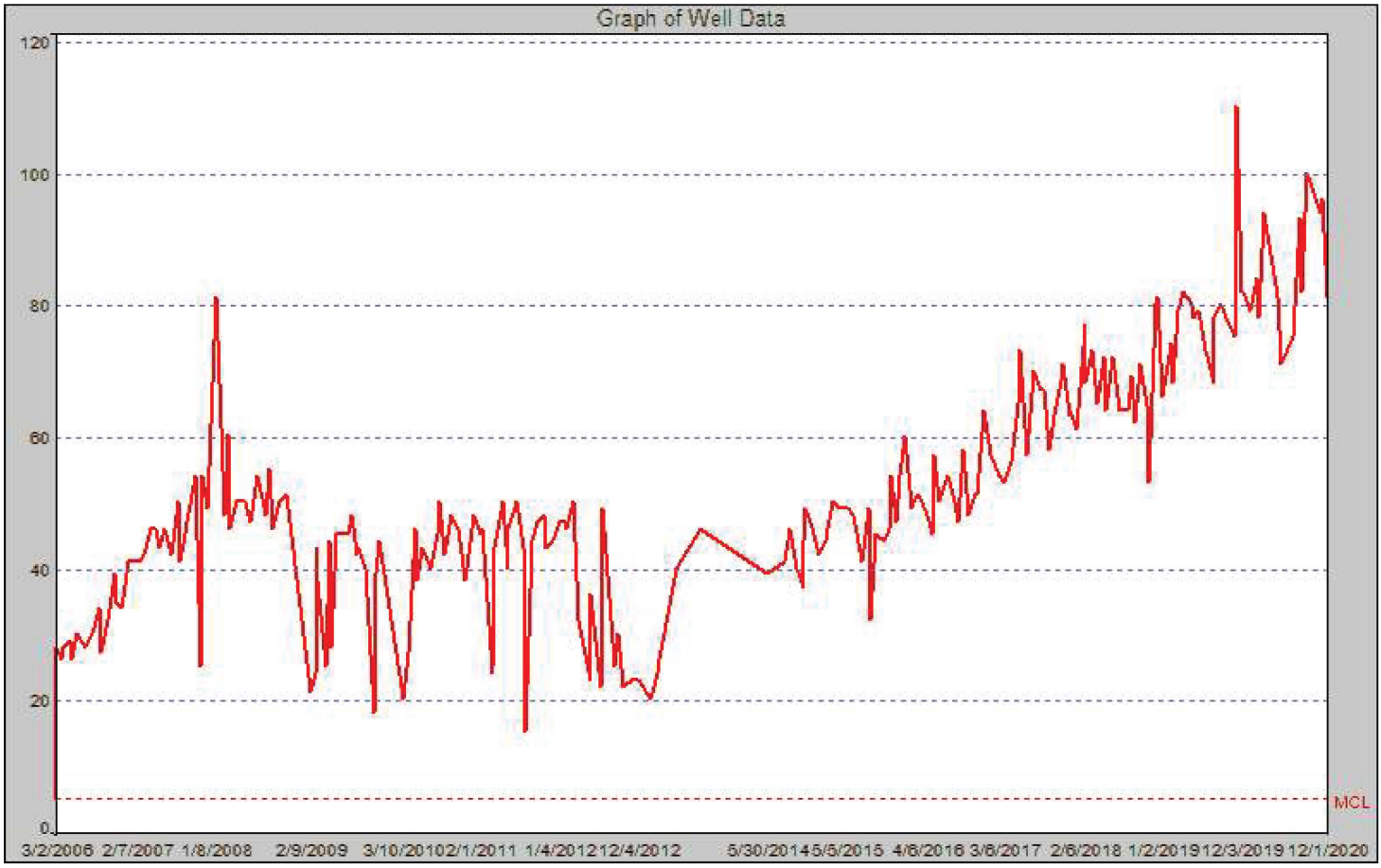
Redraw

# Well Report

**SAN GABRIEL VALLEY WATER CO.-EL MONTE (EL MONTE)**
**WELL B25A**
11142 GARVEY AVENUE
EL MONTE , CA 91734734

**State Well #:** 1910039-112
**Well Source:** Groundwater
**Well Status:** Active Raw

Detailed Well Information | Water Quality Data




| DATE | PARAMETER | RESULT | UNITS | MCL |
|---|---|---|---|---|
| 12/1/2020 | TRICHLOROETHYLENE | 81 | UG/L | 5 |
| 11/10/2020 | TRICHLOROETHYLENE | 96 | UG/L | 5 |
| 11/3/2020 | TRICHLOROETHYLENE | 94 | UG/L | 5 |
| 10/6/2020 | TRICHLOROETHYLENE | 97 | UG/L | 5 |
| 9/1/2020 | TRICHLOROETHYLENE | 100 | UG/L | 5 |
| 8/17/2020 | TRICHLOROETHYLENE | 82 | UG/L | 5 |
| 8/4/2020 | TRICHLOROETHYLENE | 93 | UG/L | 5 |
| 7/7/2020 | TRICHLOROETHYLENE | 75 | UG/L | 5 |
| 5/18/2020 | TRICHLOROETHYLENE | 71 | UG/L | 5 |
| 5/5/2020 | TRICHLOROETHYLENE | 81 | UG/L | 5 |
| 3/3/2020 | TRICHLOROETHYLENE | 94 | UG/L | 5 |
| 2/11/2020 | TRICHLOROETHYLENE | 78 | UG/L | 5 |
| 2/4/2020 | TRICHLOROETHYLENE | 84 | UG/L | 5 |
| 1/7/2020 | TRICHLOROETHYLENE | 79 | UG/L | 5 |
| 12/10/2019 | TRICHLOROETHYLENE | 82 | UG/L | 5 |
| 12/3/2019 | TRICHLOROETHYLENE | 82 | UG/L | 5 |
| 11/14/2019 | TRICHLOROETHYLENE | 110 | UG/L | 5 |
| 11/6/2019 | TRICHLOROETHYLENE | 75 | UG/L | 5 |
| 10/1/2019 | TRICHLOROETHYLENE | 78 | UG/L | 5 |
| 9/3/2019 | TRICHLOROETHYLENE | 80 | UG/L | 5 |
| 8/12/2019 | TRICHLOROETHYLENE | 78 | UG/L | 5 |
| 8/6/2019 | TRICHLOROETHYLENE | 68 | UG/L | 5 |
| 7/1/2019 | TRICHLOROETHYLENE | 73 | UG/L | 5 |
| 6/4/2019 | TRICHLOROETHYLENE | 79 | UG/L | 5 |
| 5/14/2019 | TRICHLOROETHYLENE | 78 | UG/L | 5 |
| 5/7/2019 | TRICHLOROETHYLENE | 80 | UG/L | 5 |
| 4/2/2019 | TRICHLOROETHYLENE | 82 | UG/L | 5 |
| 3/5/2019 | TRICHLOROETHYLENE | 79 | UG/L | 5 |
| 2/14/2019 | TRICHLOROETHYLENE | 68 | UG/L | 5 |
| 2/7/2019 | TRICHLOROETHYLENE | 74 | UG/L | 5 |
| 1/2/2019 | TRICHLOROETHYLENE | 66 | UG/L | 5 |

| | | | | |
|---|---|---|---|---|
| 12/10/2018 | TRICHLOROETHYLENE | 81 | UG/L | 5 |
| 12/4/2018 | TRICHLOROETHYLENE | 80 | UG/L | 5 |
| 11/7/2018 | TRICHLOROETHYLENE | 53 | UG/L | 5 |
| 11/6/2018 | TRICHLOROETHYLENE | 63 | UG/L | 5 |
| 10/2/2018 | TRICHLOROETHYLENE | 71 | UG/L | 5 |
| 9/5/2018 | TRICHLOROETHYLENE | 62 | UG/L | 5 |
| 8/21/2018 | TRICHLOROETHYLENE | 69 | UG/L | 5 |
| 8/7/2018 | TRICHLOROETHYLENE | 64 | UG/L | 5 |
| 7/3/2018 | TRICHLOROETHYLENE | 64 | UG/L | 5 |
| 6/5/2018 | TRICHLOROETHYLENE | 72 | UG/L | 5 |
| 5/9/2018 | TRICHLOROETHYLENE | 64 | UG/L | 5 |
| 5/1/2018 | TRICHLOROETHYLENE | 72 | UG/L | 5 |
| 4/3/2018 | TRICHLOROETHYLENE | 65 | UG/L | 5 |
| 3/6/2018 | TRICHLOROETHYLENE | 73 | UG/L | 5 |
| 2/6/2018 | TRICHLOROETHYLENE | 68 | UG/L | 5 |
| 2/6/2018 | TRICHLOROETHYLENE | 77 | UG/L | 5 |
| 1/3/2018 | TRICHLOROETHYLENE | 61 | UG/L | 5 |
| 12/5/2017 | TRICHLOROETHYLENE | 63 | UG/L | 5 |
| 12/5/2017 | TRICHLOROETHYLENE | 64 | UG/L | 5 |
| 11/6/2017 | TRICHLOROETHYLENE | 71 | UG/L | 5 |
| 11/6/2017 | TRICHLOROETHYLENE | 70 | UG/L | 5 |
| 10/3/2017 | TRICHLOROETHYLENE | 63 | UG/L | 5 |
| 9/6/2017 | TRICHLOROETHYLENE | 58 | UG/L | 5 |
| 8/16/2017 | TRICHLOROETHYLENE | 67 | UG/L | 5 |
| 8/3/2017 | TRICHLOROETHYLENE | 67 | UG/L | 5 |
| 7/5/2017 | TRICHLOROETHYLENE | 70 | UG/L | 5 |
| 6/6/2017 | TRICHLOROETHYLENE | 57 | UG/L | 5 |
| 5/10/2017 | TRICHLOROETHYLENE | 73 | UG/L | 5 |
| 5/2/2017 | TRICHLOROETHYLENE | 65 | UG/L | 5 |
| 4/4/2017 | TRICHLOROETHYLENE | 56 | UG/L | 5 |
| 3/6/2017 | TRICHLOROETHYLENE | 53 | UG/L | 5 |
| 2/8/2017 | TRICHLOROETHYLENE | 54 | UG/L | 5 |
| 2/8/2017 | TRICHLOROETHYLENE | 54 | UG/L | 5 |
| 1/4/2017 | TRICHLOROETHYLENE | 57 | UG/L | 5 |
| 12/6/2016 | TRICHLOROETHYLENE | 64 | UG/L | 5 |
| 11/9/2016 | TRICHLOROETHYLENE | 51 | UG/L | 5 |
| 11/3/2016 | TRICHLOROETHYLENE | 51 | UG/L | 5 |
| 10/4/2016 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 9/7/2016 | TRICHLOROETHYLENE | 58 | UG/L | 5 |
| 8/17/2016 | TRICHLOROETHYLENE | 47 | UG/L | 5 |
| 8/2/2016 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 7/5/2016 | TRICHLOROETHYLENE | 54 | UG/L | 5 |
| 6/1/2016 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 5/5/2016 | TRICHLOROETHYLENE | 57 | UG/L | 5 |
| 5/2/2016 | TRICHLOROETHYLENE | 45 | UG/L | 5 |
| 4/6/2016 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 3/1/2016 | TRICHLOROETHYLENE | 51 | UG/L | 5 |
| 2/10/2016 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 2/2/2016 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 1/5/2016 | TRICHLOROETHYLENE | 60 | UG/L | 5 |
| 12/16/2015 | TRICHLOROETHYLENE | 54 | UG/L | 5 |
| 12/1/2015 | TRICHLOROETHYLENE | 47 | UG/L | 5 |
| 11/12/2015 | TRICHLOROETHYLENE | 54 | UG/L | 5 |
| 11/3/2015 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 10/7/2015 | TRICHLOROETHYLENE | 44 | UG/L | 5 |
| 9/2/2015 | TRICHLOROETHYLENE | 45 | UG/L | 5 |
| 8/10/2015 | TRICHLOROETHYLENE | 32 | UG/L | 5 |
| 8/4/2015 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 7/6/2015 | TRICHLOROETHYLENE | 41 | UG/L | 5 |
| 6/1/2015 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 5/12/2015 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 5/5/2015 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 4/7/2015 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 3/3/2015 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 2/10/2015 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 2/3/2015 | TRICHLOROETHYLENE | 44 | UG/L | 5 |
| 1/6/2015 | TRICHLOROETHYLENE | 42 | UG/L | 5 |
| 12/1/2014 | TRICHLOROETHYLENE | 47 | UG/L | 5 |
| 11/13/2014 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 11/5/2014 | TRICHLOROETHYLENE | 44 | UG/L | 5 |
| 10/30/2014 | TRICHLOROETHYLENE | 37 | UG/L | 5 |
| 10/1/2014 | TRICHLOROETHYLENE | 40 | UG/L | 5 |
| 9/5/2014 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 8/14/2014 | TRICHLOROETHYLENE | 41 | UG/L | 5 |
| 5/30/2014 | TRICHLOROETHYLENE | 39 | UG/L | 5 |
| 8/22/2013 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 5/16/2013 | TRICHLOROETHYLENE | 40 | UG/L | 5 |
| 3/4/2013 | TRICHLOROETHYLENE | 25 | UG/L | 5 |
| 3/4/2013 | TRICHLOROETHYLENE | 26 | UG/L | 5 |
| 2/21/2013 | TRICHLOROETHYLENE | 24 | UG/L | 5 |
| 1/23/2013 | TRICHLOROETHYLENE | 20 | UG/L | 5 |
| 12/4/2012 | TRICHLOROETHYLENE | 23 | UG/L | 5 |
| 11/5/2012 | TRICHLOROETHYLENE | 23 | UG/L | 5 |

| | | | | |
|---|---|---|---|---|
| 10/2/2012 | TRICHLOROETHYLENE | 22 | UG/L | 5 |
| 9/4/2012 | TRICHLOROETHYLENE | 30 | UG/L | 5 |
| 8/21/2012 | TRICHLOROETHYLENE | 25 | UG/L | 5 |
| 7/2/2012 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 6/25/2012 | TRICHLOROETHYLENE | 22 | UG/L | 5 |
| 5/16/2012 | TRICHLOROETHYLENE | 36 | UG/L | 5 |
| 5/11/2012 | TRICHLOROETHYLENE | 23 | UG/L | 5 |
| 3/27/2012 | TRICHLOROETHYLENE | 32 | UG/L | 5 |
| 3/5/2012 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 2/2/2012 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 2/1/2012 | TRICHLOROETHYLENE | 47 | UG/L | 5 |
| 1/4/2012 | TRICHLOROETHYLENE | 47 | UG/L | 5 |
| 12/5/2011 | TRICHLOROETHYLENE | 44 | UG/L | 5 |
| 11/8/2011 | TRICHLOROETHYLENE | 43 | UG/L | 5 |
| 11/1/2011 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 10/4/2011 | TRICHLOROETHYLENE | 47 | UG/L | 5 |
| 9/6/2011 | TRICHLOROETHYLENE | 44 | UG/L | 5 |
| 8/9/2011 | TRICHLOROETHYLENE | 15 | UG/L | 5 |
| 8/1/2011 | TRICHLOROETHYLENE | 43 | UG/L | 5 |
| 7/6/2011 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 6/2/2011 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 6/1/2011 | TRICHLOROETHYLENE | 40 | UG/L | 5 |
| 5/9/2011 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 4/4/2011 | TRICHLOROETHYLENE | 43 | UG/L | 5 |
| 3/25/2011 | TRICHLOROETHYLENE | 24 | UG/L | 5 |
| 3/25/2011 | TRICHLOROETHYLENE | 25 | UG/L | 5 |
| 2/8/2011 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 2/1/2011 | TRICHLOROETHYLENE | 45 | UG/L | 5 |
| 1/6/2011 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 12/1/2010 | TRICHLOROETHYLENE | 38 | UG/L | 5 |
| 11/9/2010 | TRICHLOROETHYLENE | 44 | UG/L | 5 |
| 11/2/2010 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 10/5/2010 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 9/2/2010 | TRICHLOROETHYLENE | 42 | UG/L | 5 |
| 8/11/2010 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 8/3/2010 | TRICHLOROETHYLENE | 45 | UG/L | 5 |
| 7/8/2010 | TRICHLOROETHYLENE | 40 | UG/L | 5 |
| 6/2/2010 | TRICHLOROETHYLENE | 43 | UG/L | 5 |
| 5/6/2010 | TRICHLOROETHYLENE | 38 | UG/L | 5 |
| 5/4/2010 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 4/6/2010 | TRICHLOROETHYLENE | 27 | UG/L | 5 |
| 3/10/2010 | TRICHLOROETHYLENE | 20 | UG/L | 5 |
| 12/2/2009 | TRICHLOROETHYLENE | 44 | UG/L | 5 |
| 11/12/2009 | TRICHLOROETHYLENE | 39 | UG/L | 5 |
| 11/5/2009 | TRICHLOROETHYLENE | 18 | UG/L | 5 |
| 10/6/2009 | TRICHLOROETHYLENE | 40 | UG/L | 5 |
| 9/2/2009 | TRICHLOROETHYLENE | 43 | UG/L | 5 |
| 8/24/2009 | TRICHLOROETHYLENE | 42 | UG/L | 5 |
| 8/5/2009 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 7/24/2009 | TRICHLOROETHYLENE | 45 | UG/L | 5 |
| 6/2/2009 | TRICHLOROETHYLENE | 45 | UG/L | 5 |
| 5/7/2009 | TRICHLOROETHYLENE | 28 | UG/L | 5 |
| 5/5/2009 | TRICHLOROETHYLENE | 44 | UG/L | 5 |
| 4/17/2009 | TRICHLOROETHYLENE | 25 | UG/L | 5 |
| 3/12/2009 | TRICHLOROETHYLENE | 43 | UG/L | 5 |
| 3/12/2009 | TRICHLOROETHYLENE | 38 | UG/L | 5 |
| 3/4/2009 | TRICHLOROETHYLENE | 24 | UG/L | 5 |
| 2/9/2009 | TRICHLOROETHYLENE | 21 | UG/L | 5 |
| 11/5/2008 | TRICHLOROETHYLENE | 51 | UG/L | 5 |
| 10/2/2008 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 9/29/2008 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 9/4/2008 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 8/20/2008 | TRICHLOROETHYLENE | 55.1 | UG/L | 5 |
| 8/6/2008 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 7/2/2008 | TRICHLOROETHYLENE | 54 | UG/L | 5 |
| 6/4/2008 | TRICHLOROETHYLENE | 47 | UG/L | 5 |
| 5/13/2008 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 5/6/2008 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 4/2/2008 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 3/4/2008 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 2/26/2008 | TRICHLOROETHYLENE | 60.3 | UG/L | 5 |
| 2/13/2008 | TRICHLOROETHYLENE | 48 | UG/L | 5 |
| 1/8/2008 | TRICHLOROETHYLENE | 81 | UG/L | 5 |
| 12/4/2007 | TRICHLOROETHYLENE | 49 | UG/L | 5 |
| 11/8/2007 | TRICHLOROETHYLENE | 54 | UG/L | 5 |
| 11/2/2007 | TRICHLOROETHYLENE | 25 | UG/L | 5 |
| 10/11/2007 | TRICHLOROETHYLENE | 54 | UG/L | 5 |
| 9/6/2007 | TRICHLOROETHYLENE | 47 | UG/L | 5 |
| 8/31/2007 | TRICHLOROETHYLENE | 45 | UG/L | 5 |
| 8/9/2007 | TRICHLOROETHYLENE | 41 | UG/L | 5 |
| 8/2/2007 | TRICHLOROETHYLENE | 50 | UG/L | 5 |
| 7/5/2007 | TRICHLOROETHYLENE | 42 | UG/L | 5 |
| 6/5/2007 | TRICHLOROETHYLENE | 46 | UG/L | 5 |

| | | | | |
|---|---|---|---|---|
| 5/10/2007 | TRICHLOROETHYLENE | 43 | UG/L | 5 |
| 5/1/2007 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 4/3/2007 | TRICHLOROETHYLENE | 46 | UG/L | 5 |
| 3/7/2007 | TRICHLOROETHYLENE | 42 | UG/L | 5 |
| 2/22/2007 | TRICHLOROETHYLENE | 41 | UG/L | 5 |
| 2/7/2007 | TRICHLOROETHYLENE | 41 | UG/L | 5 |
| 1/2/2007 | TRICHLOROETHYLENE | 41 | UG/L | 5 |
| 12/5/2006 | TRICHLOROETHYLENE | 34 | UG/L | 5 |
| 11/9/2006 | TRICHLOROETHYLENE | 34.7 | UG/L | 5 |
| 11/6/2006 | TRICHLOROETHYLENE | 39 | UG/L | 5 |
| 10/3/2006 | TRICHLOROETHYLENE | 32 | UG/L | 5 |
| 9/5/2006 | TRICHLOROETHYLENE | 27 | UG/L | 5 |
| 8/29/2006 | TRICHLOROETHYLENE | 34 | UG/L | 5 |
| 8/1/2006 | TRICHLOROETHYLENE | 30 | UG/L | 5 |
| 7/5/2006 | TRICHLOROETHYLENE | 28 | UG/L | 5 |
| 6/1/2006 | TRICHLOROETHYLENE | 30 | UG/L | 5 |
| 5/10/2006 | TRICHLOROETHYLENE | 26 | UG/L | 5 |
| 5/2/2006 | TRICHLOROETHYLENE | 29 | UG/L | 5 |
| 4/3/2006 | TRICHLOROETHYLENE | 28 | UG/L | 5 |
| 3/23/2006 | TRICHLOROETHYLENE | 26 | UG/L | 5 |
| 3/2/2006 | TRICHLOROETHYLENE | 28 | UG/L | 5 |

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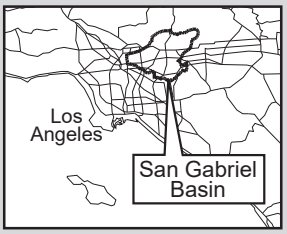
San Gabriel Valley
Superfund Sites /
Baldwin Park Operable Unit




U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • May 1999

# EPA Updates Cleanup Plan for the Azusa-Irwindale-Baldwin Park Area

*Los Angeles County, California*

The United States Environmental Protection Agency (EPA) is updating the Superfund cleanup plan for the Baldwin Park area of the San Gabriel Valley in response to the discovery, in 1997 and 1998, of several new pollutants in the groundwater. The EPA adopted the cleanup plan in 1994, after extensive public comment. The newly discovered chemicals include perchlorate, N-nitrosodimethylamine (NDMA), and 1,4-dioxane. Perchlorate is used in solid rocket fuel; NDMA has been found in liquid rocket fuel; and 1,4-dioxane has been used as a stabilizer in chlorinated solvents. Discharges of these chemicals to the ground are believed to have stopped many years ago, but a significant amount of contamination has reached the groundwater basin and requires cleanup. In addition to perchlorate, NDMA, and 1,4-dioxane, groundwater in the Baldwin Park area is contaminated with perchloroethylene (PCE), trichloroethene (TCE), and other chlorinated solvents. Chlorinated solvents are sometimes referred to as *volatile organic compounds* or VOCs.

The discovery of perchlorate, NDMA, and 1,4-dioxane will change the cleanup project, known as the Baldwin Park Operable Unit (OU), in three ways:

1) Additional treatment processes must be used to reduce perchlorate, NDMA, and 1,4-dioxane concentrations in the groundwater to safe levels. The technologies typically used to remove chlorinated solvents from water (air stripping and carbon adsorption) will not effectively remove perchlorate, NDMA, or 1,4-dioxane. Final decisions on treatment processes will be made during remedial design, later this year or early next year.

2) More of the treated groundwater is expected to be used locally, to replace water supplies lost when perchlorate and NDMA forced local water companies to shut down some groundwater wells. Previously, local agencies were advocating the export of most of the treated groundwater to communities outside of the San Gabriel Valley.

3) Some of the groundwater extraction wells will be located further south than previously planned to prevent the spread of perchlorate and NDMA, as well as VOCs, to clean portions of the groundwater basin.

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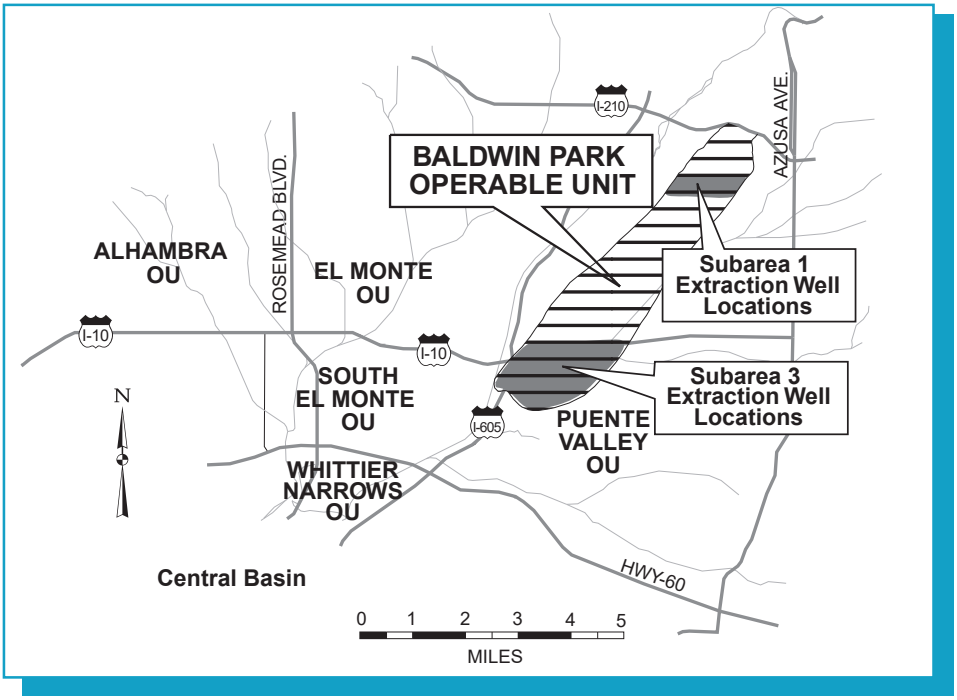


**Figure 1:** Location map of the Baldwin Park Operable Unit and other San Gabriel Valley Superfund Site Projects

These changes have delayed construction of the cleanup facilities by about two years while tests of perchlorate treatment technologies and changes to the groundwater extraction plan are completed. The treatment studies and updated extraction plan are almost complete. The changes will significantly increase the cost of cleanup, as described below.

If and when significant changes are needed in a Superfund cleanup plan, the EPA informs the community through an Explanation of Significant Differences. This fact sheet is intended to fulfill that requirement. We welcome comments on new aspects of the cleanup highlighted in this fact sheet and on other issues raised by the discovery of perchlorate, NDMA, and 1,4-dioxane in the Baldwin Park area. We will, if appropriate, make additional changes in the cleanup plan in response to comments. EPA previously requested and considered comments on other aspects of the cleanup in 1993. The State of California, through its Department of Toxic Substances Control, supports the changes described in this fact sheet.

The remainder of the fact sheet provides a brief history of the Baldwin Park cleanup, summarizes the 1994 cleanup plan, and describes the changes to the 1994 plan in more detail.

# The Baldwin Park Cleanup: A Brief History

### 1994: EPA Adopts Cleanup Plan

On March 31, 1994, the EPA adopted a cleanup plan for the Azusa-Irwindale-Baldwin Park area known as the *Baldwin Park Operable Unit Record of Decision*. The plan addresses a several-mile-long area of groundwater contamination in the San Gabriel Valley. The contamination results from the use and improper handling and disposal of carbon tetrachloride (CTC), PCE, TCE, and other chemicals. These chemicals were used in large quantities at industrial facilities in Azusa and surrounding areas as early as the 1940s, and by hundreds of businesses in the 1960s, 1970s and 1980s for degreasing, metal cleaning, and other purposes. The chemicals were probably released to the ground by a combination of onsite disposal, careless handling, leaking tanks and pipes, and other means.

The groundwater contamination was discovered in 1979. In 1984, the EPA added four portions of the San Gabriel Valley to the national Superfund list. The Baldwin Park area is officially known as the *San Gabriel Valley Area 2* Superfund site. Subsequent investigation by the EPA and others revealed the tremendous extent of groundwater contamination. During the past 15 years, more than one-quarter of the approximately 366 water supply wells in the San Gabriel Valley have been found to be contaminated. In response to the contamination, water companies have shut down contaminated wells, installed new treatment facilities, and taken other steps to ensure that they can continue to supply water meeting State and Federal drinking water standards.

The EPA's 1994 cleanup plan calls for the extraction and treatment of contaminated groundwater from two broad subareas of contamination. The northernmost of the two subareas is termed *Subarea 1*. Subarea 1 includes most of the known sources of the groundwater contamination, where contaminant concentrations in groundwater are hundreds of times drinking water standards. The southernmost subarea is termed *Subarea 3*, where contaminant concentrations are lower but still

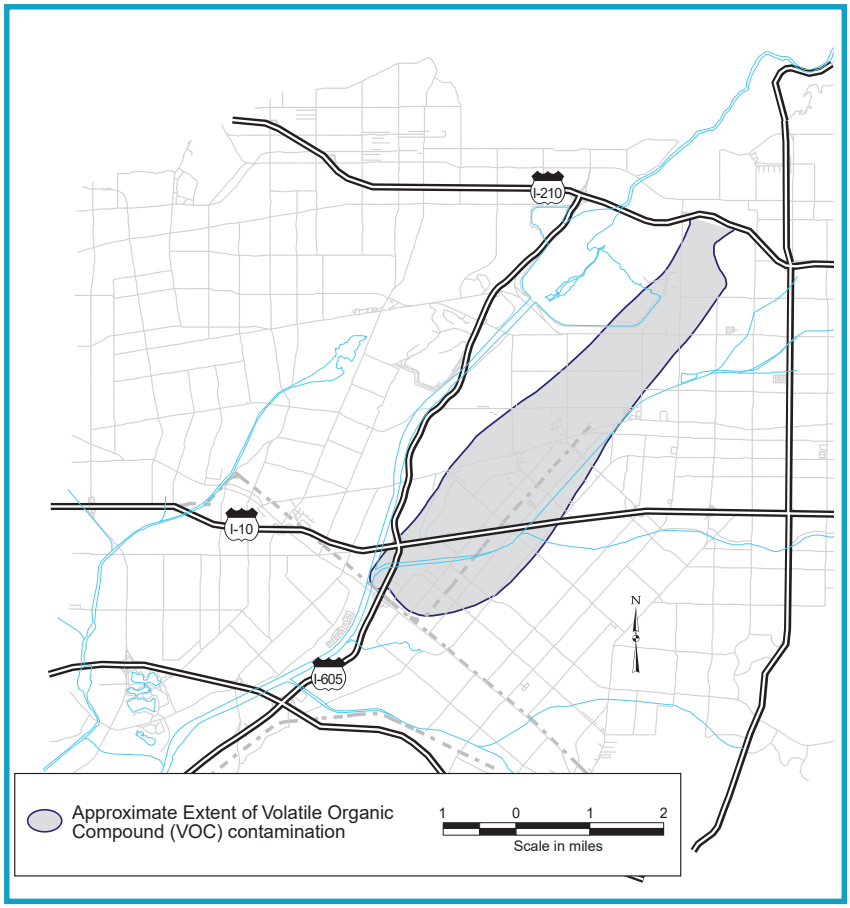


**Figure 2:** Approximate extent of VOC contamination in groundwater in the Azusa-Irwindale-Baldwin Park area.

exceed drinking water standards (see Figure 1).

The goals of the 1994 cleanup plan are to limit the movement of contaminated groundwater to clean or less contaminated areas and depths, remove a significant mass of contamination from the groundwater, and provide the data necessary to determine final clean up standards for the area. The plan calls for the construction and operation of groundwater extraction wells, treatment facilities, and conveyance facilities capable of pumping and treating approximately 19,000 gallons per minute of contaminated groundwater. The plan recommends the use of existing water supply wells, treatment systems, and pipelines to the extent possible, and the construction of new facilities where needed. Final decisions on extraction rates and locations were to be made during remedial design. In 1994, the EPA estimated the cost of the cleanup at $47 million in capital costs and $4 million/year for operation and maintenance. EPA's revised cost estimate is $85 million in capital costs and $10 million/year for operation and maintenance

### 1995 - 1997: Potentially Responsible Parties (PRPs) Complete Pre-Design Work

In January 1995, the EPA began to name the companies responsible for the groundwater contamination. To date, the EPA has named 19 companies and property owners as Potentially Responsible Parties, also known as PRPs. In late 1995, a majority of these companies organized themselves into a group named the Baldwin Park Operable Unit Steering Committee. From 1995 to early 1997, the Steering Committee funded more than $2 million of *pre-design* work needed as part of the cleanup. The Steering Committee installed and sampled a network of eight deep groundwater monitoring wells to improve our understanding of the extent of contamination and developed a detailed groundwater extraction plan. During this period, negotia-

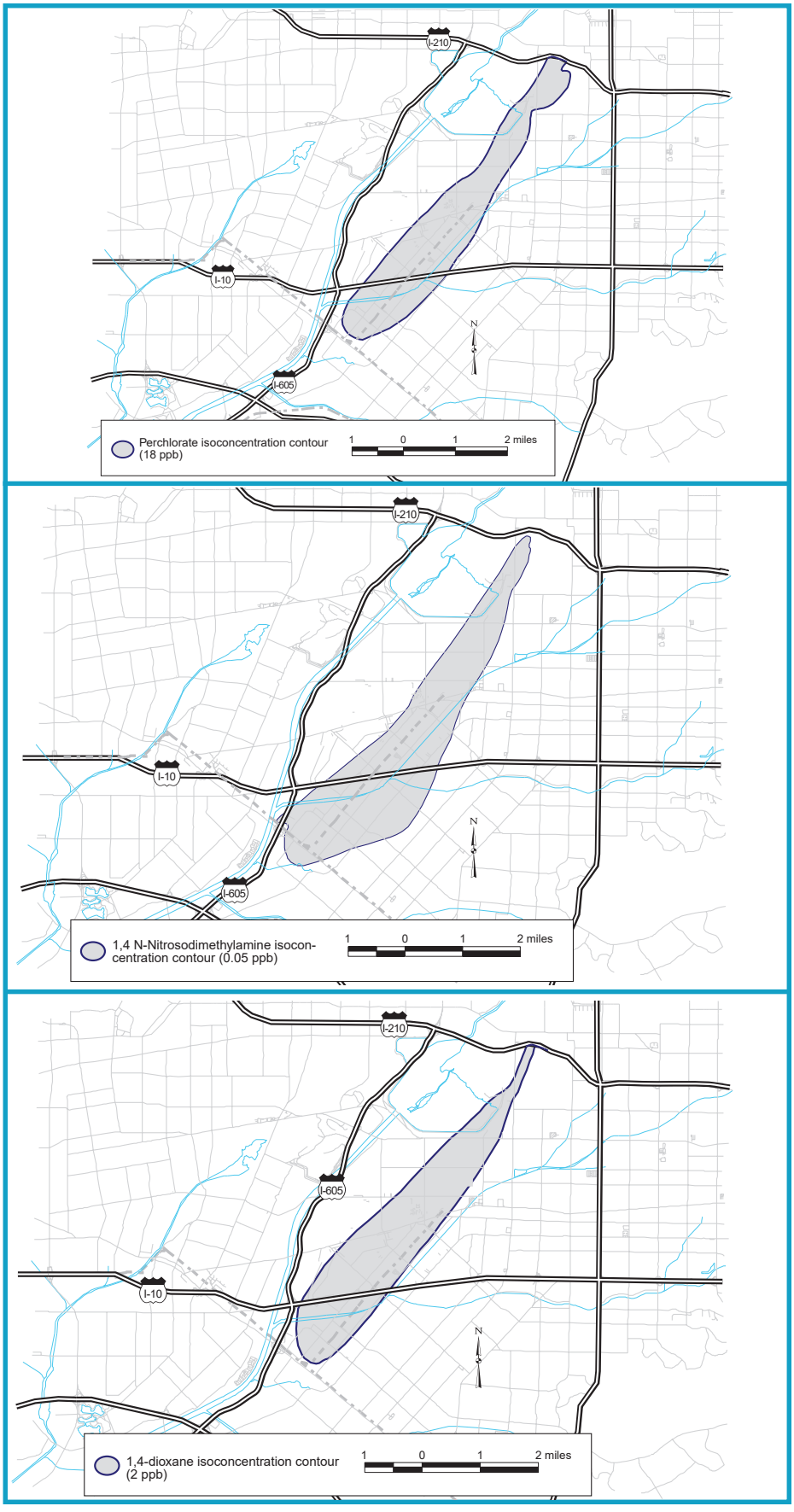


**Figure 3:** Approximate extent of perchlorate, NDMA and 1,4-dioxane contamination in groundwater

tions with water agencies continued, and a tentative water distribution and use plan was developed which called for delivery of the treated groundwater to the Metropolitan Water District of Southern California. The plan, labeled the *Consensus Plan*, called for export of the treated groundwater to areas now dependent on more expensive and less dependable imported water, in order to reduce the region's dependence on imported water supplies and raise revenue through sales of the treated water.

### 1997 - 1999: Discovery of Perchlorate Extends Negotiations and Triggers Need for Additional Pre-Design Work

In May 1997, the EPA sent *Special Notice* letters to 19 PRPs to begin formal EPA-PRP negotiations. The EPA's purpose in initiating the negotiations was to obtain a binding commitment from the PRPs to carry out the Baldwin Park cleanup plan (i.e., to design, construct, and operate the groundwater extraction, treatment, and delivery facilities). The negotiations were expected to conclude in late 1997, but the discovery in June 1997 of perchlorate at levels above 18 parts per billion (ppb) in groundwater forced an extension in the negotiations. At that time, no one knew the extent of perchlorate contamination in the Baldwin Park area and little was known about the cost, effectiveness, and reliability of possible treatment methods.

The discovery of perchlorate occurred soon after the California Department of Health Services developed an improved analytical method capable of detecting perchlorate at concentrations as low as 4 ppb in groundwater. The EPA had attempted to determine whether perchlorate was present in the groundwater in the mid 1980s, but the analytical methods available at the time were not capable of determining with certainty whether perchlorate was present. NDMA and 1,4-dioxane were discovered in the Baldwin Park area in 1998.

The highest concentrations of perchlorate, NDMA, and 1,4-dioxane are found in the groundwater in Azusa, in Subarea 1. Maximum concentrations of perchlorate and NDMA are more than 100 times the State drinking water action levels of 18 and 0.002 ppb respectively. The maximum concentration of 1,4-dioxane is more than 20 times the State drinking water action level of 3 ppb. Up to six miles downgradient of the industrial source area in Azusa, at the likely groundwater extraction locations in Subarea 3, perchlorate and NDMA concentrations remain above State action levels. The concentration of 1,4-dioxane in this area has, to date, been below the State action level. Figure 3 depicts the approximate extent of perchlorate, NDMA and 1,4-dioxane contamination in groundwater in the Baldwin Park OU.

In response to the discovery of perchlorate, the EPA extended its formal negotiations with the PRPs until July 1999. In exchange for the extension, the Steering Committee agreed to immediately proceed to complete additional predesign work. The additional work included completion of a pilot-scale study of one perchlorate-removal technology (biological treatment); support for studies of a second perchlorate-removal technology (ion exchange); installation of four additional groundwater monitoring wells to help define the extent of perchlorate, NDMA, and 1,4-dioxane contamination; and revisions to the groundwater extraction plan. The ion exchange studies have been funded largely by the Main San Gabriel Basin Watermaster.

The treatment studies have successfully demonstrated that both technologies can remove perchlorate from groundwater down to non-detectable levels. Pilot-scale studies were not needed for NDMA or 1,4-dioxane removal, because experience at other sites has demonstrated that NDMA and 1,4-dioxane can be removed down to non-detectable levels using commercially-available treatment systems. See page 6 for a more detailed description of perchlorate, NDMA, and 1,4-dioxane treatment technologies. The additional treatment technologies needed to remove the new contaminants are responsible for most of the increase in the estimated cost of the cleanup.

At the same time that the treatment studies have been underway, the EPA, the PRPs, and local water agencies have continued efforts to determine the best use of the treated groundwater. Although no final decisions have been made, there has been a renewed interest in recent months in using the treated groundwater *within* the San Gabriel Basin, rather than exporting the water out of the Basin. This change in interest resulted in part because perchlorate and NDMA have forced water companies to shut down several water supply wells in the San Gabriel Basin, prompting water companies to look for additional supplies of clean water to replace the lost production. Ultimately, it is likely that much of the treated water will be used locally, but some may still be exported outside of the San Gabriel Basin. Since late 1998, discussions have been underway between the EPA, the PRPs, the Main San Gabriel Basin Watermaster, and affected water companies. The Watermaster and the affected water companies are interested in taking responsibility for building and operating some or all of the Baldwin Park cleanup facilities.

There are also multiple efforts underway to reduce the PRPs' share of the cleanup costs by securing other sources of funding. A Federal grant provided through the U. S. Bureau of Reclamation has paid for more than $1 million in predesign costs and is expected to provide additional money for

## Table 1. Comparison of Cleanup Plans - Most Aspects of the 1994 Plan Have Not Changed

| | ORIGINAL CLEANUP PLAN | UPDATED CLEANUP PLAN |
|---|---|---|
| **Remedial Objectives** | Limit further migration of contaminated groundwater, begin to remove contamination from the groundwater, and provide data necessary to determine final clean up standards | Same |
| **Groundwater Extraction Areas** | Extract groundwater from two broad areas of contamination (Subareas 1 and 3) | Same, except Subarea 3 is extended further south |
| **Groundwater Extraction Rates** | Extract contaminated groundwater at rates needed to meet remedial objectives. Determine final rates during remedial design. Initial estimate was 19,000 gpm | Same. Revised estimate is 20,000-21,000 gpm |
| **Groundwater Treatment Technologies** | Use air stripping, carbon treatment, and/or oxidation technologies to remove VOCs from the groundwater. Select technologies during remedial design | Use same technologies to remove VOCs. Also use ion exchange or biological treatment to remove perchlorate, UV light to remove NDMA, and UV oxidation to remove 1,4-dioxane. Select technologies during remedial design |
| **Groundwater Treatment Standards** | Design treatment systems to reduce contaminant concentrations to below MCLs | Reduce contaminant concentrations to below MCLs and reduce perchlorate, NDMA, and 1,4-dioxane concentrations to below State action levels |
| **Use of Treated Groundwater** | Supply to water companies for distribution, and/or recharge into the groundwater basin. Make final decision during remedial design | Same |
| **Project Costs** | Estimated capital costs of $47 million; estimated operation and maintenance costs of $4 million/year | Estimated capital costs increase to $85 million; estimated operation and maintenance costs increase to $10 million/year |

design and construction costs (up to 25% of the project's capital costs). In March 1999, three of the San Gabriel Valley's U.S. Congressional Representatives cosponsored the San Gabriel Basin Drinking Water Initiative, which would, if it became law, provide up to $75 million in additional Federal funding for groundwater cleanup in the Baldwin Park area and other contaminated areas in the San Gabriel Valley and an additional $25 million for research on perchlorate treatment technologies.

*The cleanup plan remains protective of human health and the environment and will continue to meet all applicable or relevant and appropriate requirements identified in the 1994 Record of Decision, as required by CERCLA Section 121(d).*

### Schedule

- **Spring 1999** - Design of treatment facilities at the La Puente Valley County Water District (LPVCWD) wellfield
- **Summer 1999** - Construction of treatment facilities at the LPVCWD wellfield
- **July 1999** - Deadline for Potentially Responsible Parties to submit a *Good Faith Offer* committing to design, construct, and operate the Baldwin Park cleanup facilities
- **Fall 1999** - Deadline for negotiation of Consent Decree
- **Late 1999-2001** - Design of remaining Baldwin Park cleanup facilities
- **2001-2003** - Construction of remaining Baldwin Park cleanup facilities

# Treatment Options

### Perchlorate

Since 1997, when perchlorate was discovered in the San Gabriel Valley groundwater basin, much progress has been made in developing treatment methods capable of removing perchlorate from the groundwater. Most of the attention has been directed at two technologies: biological treatment and ion exchange.

In the biological treatment process, microbes destroy perchlorate by converting the perchlorate ion to oxygen and chloride. Oxygen and chloride are present at low levels in all drinking water. Nutrients must be added to sustain the microbes. The Steering Committee has completed a six month pilot-scale study of an anaerobic biological process, demonstrating the reduction of perchlorate from approximately 75 ppb to below detectable levels. The same process is being used in a recently-constructed full-scale treatment system at the Aerojet Superfund Site in Northern California. A similar process has also been used at a Utah facility to treat non-potable wastewaters resulting from the manufacture and maintenance of rocket motors.

Biological treatment methods are capable of producing potable water, but additional testing must be completed to determine whether a biological process can reliably and cost-effectively remove perchlorate and produce drinking quality water. The necessary tests are planned for later this year, when a 300-500 gallon per minute biological treatment system should be in operation. The treatment system is expected to include a biological reactor, followed by a biologically-active multimedia filter and granular activated carbon (GAC) *polishing treatment* (see Figure 4). The system will also include ultraviolet light treatment for removal of NDMA and VOCs. Biological treatment methods are new to many water utilities, but *biologically active* filters have been used in drinking water treatment for decades to help remove particles and biodegradable organic matter.

The second of the two perchlorate-removal technologies receiving the most attention is ion exchange, in which the perchlorate ion is replaced by chloride, a chemically similar but non-toxic ion. Ion exchange processes have been used in homes and businesses for *softening* hard water for decades. Bench- and pilot-scale studies have demonstrated that ion exchange systems can reliably reduce perchlorate concentrations in San Gabriel Valley groundwater from approximately 75 ppb to below detectable levels. The studies have also provided valuable information on resin selection and regeneration, brine volume, and cost that will guide the design and operation of full scale systems. By summer 1999, a 2500 gallon per minute ion exchange system is expected to go online, producing potable water for use in the San Gabriel Valley.

The principal disadvantage of ion exchange systems is that they produce a concentrated brine that requires disposal and/or further treatment. Research is underway to try to identify methods of reducing the volume of perchlorate-contaminated brines to reduce the high cost of disposal.

## What are Perchlorate, NDMA, and 1,4-Dioxane?

*Perchlorate* is a highly soluble inorganic molecule made of chlorine and oxygen. Its chemical formula is $ClO_4^-$. In solid form, as ammonium perchlorate, it is highly explosive. At low concentrations in water, as is found in the San Gabriel groundwater basin, perchlorate is unreactive and persistent. Ammonium perchlorate and potassium perchlorate were used at two facilities in Azusa in the 1940s in the testing of solid fuel rockets and the manufacture of photoflares. Ammonium perchlorate is still in use today - in the solid fuel rockets that launch the space shuttle, in some missiles and fireworks, and other applications.

*NDMA* (N-nitrosodimethylamine) is a highly soluble organic chemical that was used, until about 1976, in the production of the liquid rocket fuel 1,1-dimethylhydrazine (also known as unsymmetrical dimethylhydrazine [UDMH]). NDMA has reportedly been present as an impurity in UDMH, and may be formed as a result of the chemical breakdown of UDMH. NDMA has been detected at trace levels in some manufactured products and foods, and can reportedly be produced as a byproduct of a number of chemical reactions. Its chemical structure is $(CH_3)_2N\text{-}N{=}O$. Hydrazine-containing fuels were used in Azusa as early as the 1940s.

The chemical *1,4-dioxane* is a highly soluble compound used as a stabilizer in chlorinated solvents, particularly 1,1,1-trichloroethane. Its chemical formula is $C_4H_8O_2$. It belongs to a class of organic compounds known as ethers. It is a different chemical than the similar-sounding dioxins. Chlorinated solvents likely to have contained 1,4-dioxane, including 1,1,1-trichloroethane, have been used in Azusa and Baldwin Park for many years.

An added benefit of both biological treatment and ion exchange processes is that they would also remove much of the nitrate from the water. The groundwater in some parts of the San Gabriel Valley is unusable because of high levels of nitrate. The nitrate is believed to result from past agricultural practices in the Valley.

Two other technologies have also been demonstrated to be capable of removing perchlorate from water, but probably at higher cost. Reverse osmosis and nanofiltration were tested by researchers at the Metropolitan Water District of Southern California and shown to be effective in removing perchlorate, but they are likely to be much more expensive to operate than ion exchange processes or biological treatment. Liquid phase granular activated carbon (GAC) also removes perchlorate, but only for a limited period of time before regeneration or replacement of the carbon is required. Frequent carbon replacement would make relying solely on GAC for perchlorate removal very expensive. Perchlorate cannot be removed from water by conventional filtration, sedimentation, or air stripping technologies.

### NDMA and 1,4-Dioxane Treatment

NDMA can be removed from groundwater by ultraviolet (UV) light treatment. In a UV treatment system, the water passes though a tank containing high-intensity ultraviolet lamps. The NDMA molecules absorb the light energy and are broken down into smaller nontoxic molecules. The chemical 1,4-dioxane can also be removed by UV light treatment, in combination with an oxidant such as hydrogen peroxide. UV treatment systems have been successfully built and operated to remove both chemicals from water in locations throughout the United States.

## Treatment Levels

The treatment technologies used at the Baldwin Park Operable Unit will have to be capable of effectively and reliably removing VOCs, perchlorate, NDMA, and 1,4-dioxane from the groundwater. If any of the treated groundwater is to be used as drinking water, the treatment technologies must reduce the concentrations of all contaminants to below Federal and State drinking water standards in existence at the time that the water is served. These standards, known as Maximum Contaminant Levels (MCLs), must be met at the tap. There are MCLs for some but not all of the chemicals present in the groundwater in the Baldwin Park area.

Safe levels for some chemicals that lack MCLs are specified by *action levels* developed by the California Department of Health Services (DHS). There are action levels for perchlorate (at 18 ppb); NDMA (at 0.002 ppb); and 1,4-dioxane (at 3 ppb). Although not an enforceable standard, an action level is the concentration of a contaminant in drinking water that DHS has determined, based on available scientific information, provides an adequate margin of safety to prevent potential risks to human health. California Health & Safety Code Section 116455 requires that the operator of a public water system notify local government authorities when a drinking water well exceeds an action level. In addition, DHS recommends that drinking water systems provide public notification if action levels are exceeded, unless the wells in question are taken out of service. Public water systems virtually always shut down wells if action levels are exceeded.

Accordingly, in any water to be served as drinking water, the concentrations of perchlorate, NDMA, and 1,4-dioxane will be reduced to below action levels in existence at the time the water is served.

EPA's cleanup plan also allows some or all of the treated water to be recharged back into the groundwater basin instead of being delivered as drinking water. As discussed

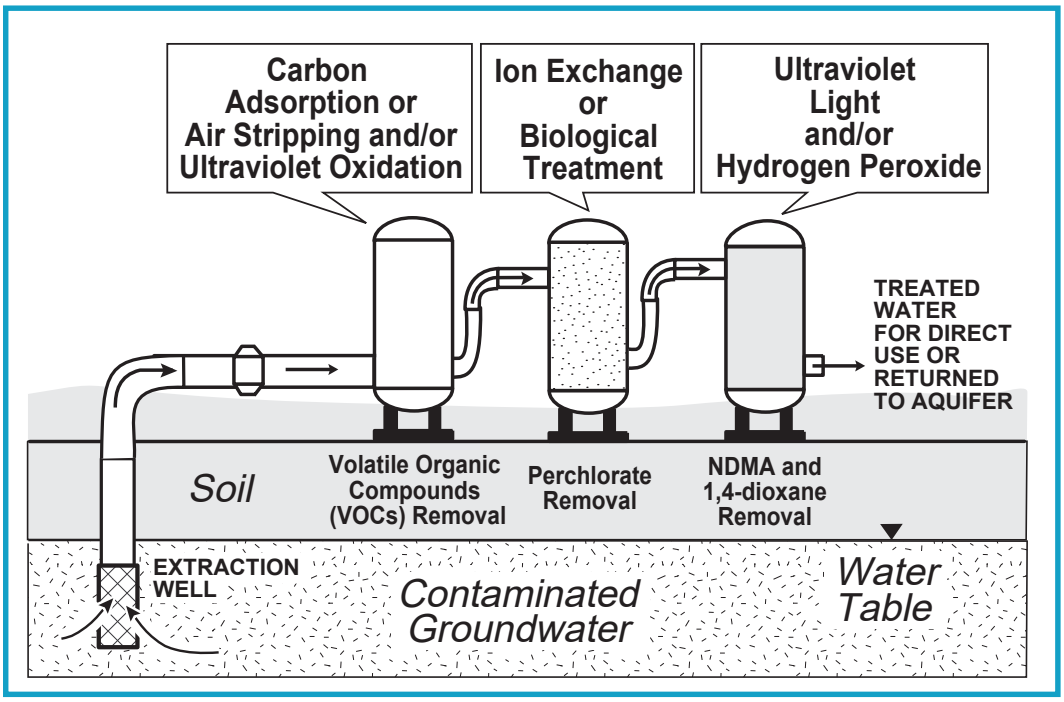


**Figure 4:** Groundwater treatment technologies

in greater detail in the Record of Decision, any water that is to be recharged must comply with the pertinent water quality objectives in the Los Angeles Regional Water Quality Control Board Basin Plan. In addition, State Water Resources Control Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," is applicable to any recharge of treated groundwater into the aquifer. Resolution No. 68-16 requires maintenance of existing State water quality unless it is demonstrated that a change will benefit the people of California, will not unreasonably affect present or potential uses, and will not result in water quality less than that prescribed by other State policies. In light of these requirements, any groundwater recharged into the aquifer will be treated to levels below action levels for perchlorate, NDMA, and 1,4-dioxane.

The treatment levels discussed above apply to the groundwater after it is pumped above ground. Neither the 1994 cleanup plan nor this update establish cleanup levels in situ (i.e., in the aquifer). EPA will propose in situ cleanup levels in a future action.

## Final Selection of Treatment Technologies

The EPA believes that a final decision to select treatment technologies for the Baldwin Park Operable Unit should be deferred until later this year or early next year. That way, the results of continuing treatment studies in the San Gabriel Valley and elsewhere can be incorporated into the decision. By the end of 1999, it is likely that full scale ion exchange and biological treatment systems will be operating in the San Gabriel Valley, providing additional cost and performance data to guide the selection of treatment technologies.

*EPA is issuing this Explanation of Significant Differences in part to satisfy its public participation responsibilities under CERCLA Section 117(c) and NCP Section 300.435(c)(2)(I).*

## Table 2. Status of the Five San Gabriel Valley Superfund Projects

| U.S. EPA PROJECT | LOCATION | STATUS | UPCOMING ACTIONS |
|---|---|---|---|
| Baldwin Park Operable Unit (OU) | Portions of the cities of Azusa, Irwindale, Baldwin Park, and West Covina | Regional investigation completed; cleanup plan adopted; 19 PRPs identified; pre-design work completed. | See remainder of fact sheet for detailed update. |
| Whittier Narrows OU | In and adjacent to the Whittier Narrows Recreation Area | New cleanup plan proposed November 1998. No PRPs named. | Record of Decision expected by mid 1999. EPA-funded pre-design activities underway. Remedial Design to be completed in 2000. |
| Puente Valley OU | Portions of the cities of Industry and La Puente | More than 70 PRPs identified; regional investigation complete; cleanup plan adopted in September 1998. | EPA-PRP Consent Decree negotiations expected to begin in late 1999. Goal is to obtain a binding commitment from the PRPs to carry out the Puente Valley cleanup plan. |
| El Monte OU | Portions of the cities of El Monte and Temple City | 20 PRPs identified; regional investigation completed; cleanup plan proposed in November 1998; seven early action monitoring wells installed | Record of Decision expected by June 1999. Formal EPA-PRP Consent Decree negotiations expected to begin later this year. |
| South El Monte OU | Portions of the cities of South El Monte, southern El Monte, and Rosemead | 50 PRPs identified; regional investigation completed | Proposed cleanup plan expected by mid-1999. |

# Who's Who?

It's difficult to keep track of the many agencies and groups with a stake in the cleanup. Here is a quick summary of seven of the most active:

**U.S. Environmental Protection Agency (EPA)** - The EPA is ultimately responsible for cleanup of the groundwater contamination in the Basin, through the Superfund program. The Superfund program remains one of the most effective means of resolving the nation's historical contamination problems. The Federal law that established the program (known as CERCLA) includes a prohibition against lawsuits to delay or stop cleanup; stringent liability provisions to ensure that responsible parties pay; a trust fund of government money to be used if responsible parties fail to carry out their cleanup responsibilities; numerous opportunities for public involvement; and flexibility to tailor cleanup projects to reduce costs, meet local water supply goals, and satisfy other local needs.

**Baldwin Park Operable Unit Steering Committee -** The Steering Committee consists of a majority of the companies named as Potentially Responsible Parties. As of May 1999, 14 of the 19 companies named as PRPs were members of the Steering Committee. To date, the Steering Committee has spent more than $3 million on investigation and treatment work needed for the cleanup.

**Main San Gabriel Basin Watermaster -** The Watermaster was created by a judgment of the California Superior Court to manage the San Gabriel groundwater basin under the jurisdiction of the Court. In 1991, the Watermaster's management responsibilities were expanded to further the cleanup and help preserve the basin's water resources. The Watermaster has been the primary sponsor of the ion exchange studies recently completed in the San Gabriel Valley, and is interested in taking responsibility for building and operating some or all of the Baldwin Park cleanup facilities.

**San Gabriel Basin Water Quality Authority (WQA) -** The WQA is a public agency created by State legislation to assist in the cleanup of the San Gabriel Basin. The WQA has offered a variety of ideas on how to carry out the Superfund cleanups in the San Gabriel Valley, and has funded construction of several interim cleanup projects in the Valley. The WQA has the authority to raise millions of dollars in funds through a tax on water production in the Valley.

**The California Department of Toxic Substances Control (DTSC) -** The DTSC is a State agency which has also funded wellhead treatment facilities in the San Gabriel Valley, and serves as the support agency for all of the San Gabriel Valley Superfund cleanups.

**The California Regional Water Quality Control Board -** The Regional Board is a State agency which has worked cooperatively with EPA to identify the sources of soil and groundwater contamination in the San Gabriel Valley.

**The California Department of Health Services (DHS) -** The DHS develops California MCLs and action levels, and regulates and monitors approximately 8500 public drinking water systems in California. DHS staff have participated in the recent testing of perchlorate treatment technologies in the San Gabriel Valley, and must approve any treatment systems used in the Baldwin Park cleanup to provide potable water.

## For Copies of Documents

This document will become part of the Administrative Record file for the Baldwin Park Operable Unit. To examine or obtain copies of this document or other documents related to this project, contact:

**EPA Region 9 Superfund Records Center**
95 Hawthorne Street
San Francisco, CA 94105 • (415) 536-2000

The Record Center's hours are 8:00 am to 5:00 p.m., Monday through Friday. The Superfund Records Center can make documents available for viewing in San Francisco, photocopy and mail requested documents, or create and send you a CD-ROM containing requested documents. A subset of documents related to the Baldwin Park Operable Unit is also available at:

**West Covina Public Library &**
1601 West Covina Parkway
West Covina, CA 91790
(626) 962-3541

**Rosemead Library**
8800 Valley Boulevard
Rosemead, CA 91770
(626) 573-5220

Call to check their hours. Documents available at all locations include:

**Perchlorate Treatment Studies (prepared by Harding Lawson Associates for the Baldwin Park Operable Unit Steering Committee, unless noted otherwise)**

09-29-1997 Draft Technology Screening for Treatability of Perchlorate in Groundwater, Baldwin Park OU
10-30-1998 Big Dalton Perchlorate Removal Pilot Study, prepared by Calgon Carbon Corporation for the Main San Gabriel Basin Watermaster (ion exchange)
02-12-1999 Final Phase 2 Treatability Study Workplan, Pilot Scale Groundwater Treatment System, Baldwin Park OU (biological treatment)
04-1999 Results of Bench-Scale and Pilot-Scale Studies of Ion Exchange for Perchlorate Removal, prepared by Montgomery Watson for the Main San Gabriel Basin Watermaster (ion exchange)
04-12-1999 Final Phase 1 Treatability Study Report, Perchlorate in Groundwater, Baldwin Park OU (biological treatment)

**Groundwater Monitoring and Groundwater Extraction Plan (prepared by Harding Lawson Associates for the Baldwin Park Operable Unit Steering Committee, unless noted otherwise)**

12-1996 Pre-Remedial Design Report..., Baldwin Park Operable Unit, prepared by Camp Dresser & McKee for the Baldwin Park Operable Unit Steering Committee
4-28-1998 Draft Phase 2A Well Installation and Groundwater Sampling Report..., Baldwin Park Operable Unit
1-21-1999 Draft Addendum to the Pre-Remedial Design Report, Baldwin Park Operable Unit

**Information on Physical, Chemical, and Toxicological Properties of Perchlorate, NDMA, and 1,4-dioxane**

7-1998 Action Level for N-NDMA (see DHS website: http://www.dhs.ca.gov/ps/ddwem/chemicals/ndma/ndmaindex.htm, updated 7/9/1998)
3-1999 Action Level for 1,4-dioxane (see DHS website: http://www.dhs.ca.gov/ps/ddwem/chemicals/mcl/mclindex.htm, updated 3/12/1999)
4-1999 Action Level for perchlorate (see DHS website: http://www.dhs.cahwnet.gov/org/ps/ddwem/chemicals/perchl/perchl_standards.htm, updated 4/23/1999)

**For more information about the EPA Superfund Program and EPA activities in the San Gabriel Valley, check**
**• EPA's national website: http://www.epa.gov**
**• EPA's Region 9 website: http://www.epa.gov/region09**

Catherine McCracken, Community Involvement Specialist
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street (SFD-3)
San Francisco, CA 94105

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**Catherine McCracken, Community Involvement Specialist**
**U.S. Environmental Protection Agency Region 9**
**75 Hawthorne Street (SFD-3)**
**San Francisco, CA 94105**

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El Monte OU _____
Puente Valley OU _____
Alhambra OU _____

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# Public Comments Welcomed

**We welcome comments on new aspects of the cleanup highlighted in this fact sheet, and on other issues raised by the discovery of perchlorate, NDMA, and 1,4-dioxane in the Baldwin Park area. Please send comments by July 2, 1999 to:**


Wayne Praskins, EPA Project Manager
75 Hawthorne Street (SFD-7)
San Francisco, CA 94105

phone: (415) 744-2256
fax: (415) 744-2180
Email: praskins.wayne@epa.gov


# For More Information

For general questions about the EPA Superfund program and the San Gabriel Valley Superfund Sites, you may contact the following U.S. EPA staff:

- **Puente Valley and Alhambra Operable Units**
  Penny McDaniel (415) 744-2407
- **Baldwin Park Operable Unit**
  Wayne Praskins (415) 744-2256
- **El Monte and South El Monte Operable Units**
  Bella Dizon (415) 744-2155
- **Whittier Narrows Operable Unit**
  Doug Frazer (415) 744-2259
- **Community Involvement**
  Catherine McCracken
  (415) 744-2182 (phone), (415) 744-1796 (fax)
  or mccracken.catherine@epa.gov
- **Media inquiries**
  Randy Wittorp, press officer
  (415) 744-1589

...or leave a message on EPA's **toll-free** line **(800) 231-3075** and your call will be returned.


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**Baldwin Park Operable Unit**
**Cooperating Respondents**

# 2019 Annual Performance Evaluation Report – Volume 1

## BALDWIN PARK OPERABLE UNIT OF THE SAN GABRIEL VALLEY SUPERFUND SITES LOS ANGELES COUNTY, CALIFORNIA

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**Figure 7-20:** **Estimated Mobile Dissolved COC Mass in Groundwater (2004-2019)**

## LIST OF APPENDICES

**Appendix A:** **Groundwater Plume Maps and Chemical Cross Sections**

**Appendix B:** **Time-Concentration Trends in Project Extraction Wells (2008 – 2019)**

**Appendix C:** **Mann-Kendall Trend Analysis for PSEP Wells (2004 – 2019)**

## LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| 1,1-DCE | 1,1-Dichloroethene |
| 1,2-DCA | 1,2-Dichloroethane |
| 1,2,3-TCP | 1,2,3-Trichloropropane |
| AJ | Aerojet |
| ALR | Azusa Land Reclamation Company, Inc. |
| AMEC | AMEC Environment and Infrastructure, Inc. (formerly AMEC Geomatrix, Inc.) |
| ARARs | Applicable or Relevant and Appropriate Requirements |
| BPOU | Baldwin Park Operable Unit |
| BPOUSC | Baldwin Park Operable Unit Steering Committee |
| CDM | Camp, Dresser, and McKee |
| CDWC | California Domestic Water Company |
| CEQA | California Environmental Quality Act |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| cis-1,2-DCE | Cis-1,2-Dichloroethene |
| COC | Chemical of Concern |
| COI | City of Industry |
| CRs | Cooperating Respondents |
| DDW | California State Water Resources Control Board, Division of Drinking Water (formerly Department of Health Services [DHS]). |
| DQO | Data Quality Objectives |
| EDB | Ethylene Dibromide |
| EPA | U.S. Environmental Protection Agency |
| ERM | ERM-West, Inc. |
| ESD | Explanation of Significant Differences |
| FSAP | Field Sampling and Analysis Plan for Air and Wastewater Discharges |
| FSP | Field Sampling Plan for Groundwater |
| f.k.a | Formerly Known As |
| GAC | Granular Activated Carbon |
| gpm | gallons per minute |
| HLA | Harding Lawson Associates |

| | |
|---|---|
| **ISEP** | **Calgon Ionic Separation Process** |
| **In/yr** | **inches per year** |
| **IX** | **Ion Exchange** |
| **LACO** | **Los Angeles County** |
| **LACDPW** | **Los Angeles County Department of Public Works** |
| **LACSD** | **Los Angeles County Sanitation Districts** |
| **lbs** | **pounds** |
| **LDC** | **Laboratory Data Consultants, Inc.** |
| **LPGAC** | **Liquid-Phase Granular Activated Carbon** |
| **LPVCWD** | **La Puente Valley County Water District** |
| **MCL** | **Maximum Contaminant Level** |
| **MICR** | **Maximum Individual Cancer Risk** |
| **msl** | **Mean Sea Level** |
| **mg/L** | **Milligrams Per Liter** |
| **MY** | **Model Year** |
| **NDMA** | **N-Nitrosodimethylamine** |
| **NL** | **Drinking Water Notification Level** |
| **ng/L** | **Nanograms Per Liter** |
| **PCE** | **Tetrachloroethene** |
| **PE** | **Performance Evaluation** |
| **PHG** | **Public Health Goal** |
| **PRP** | **Potentially Responsible Party** |
| **PSEP** | **Performance Standards Evaluation Plan** |
| **QAPP** | **Quality Assurance Project Plan** |
| **QC** | **Quality Control** |
| **RI** | **Remedial Investigation** |
| **ROD** | **Record of Decision** |
| **RMSE** | **Root-mean squared error** |
| **SA** | **Subarea** |
| **SCAQMD** | **South Coast Air Quality Management District** |

| | |
|---|---|
| **SGVWC** | **San Gabriel Valley Water Company** |
| **SOW** | **Statement of Work** |
| **SMR** | **Self-Monitoring Reports** |
| **SVOC** | **Semi-Volatile Organic Compound** |
| **SWS** | **Suburban Water Systems** |
| **TIC** | **Tentatively Identified Compound** |
| **TCE** | **Trichloroethene** |
| **UAO** | **Unilateral Administrative Order** |
| **µg/L** | **Micrograms Per Liter** |
| **UV** | **Ultraviolet** |
| **VCWD** | **Valley County Water District** |
| **VFD** | **Variable Frequency Drive** |
| **VOC** | **Volatile Organic Compound** |
| **VPGAC** | **Vapor-Phase Granulated Activated Carbon** |
| **WE** | **Water Entity** |

# 1. INTRODUCTION

This document presents the 2019 Annual Performance Evaluation (PE) Report for the Baldwin Park Operable Unit (BPOU) of the San Gabriel Valley Superfund Sites, located in the San Gabriel Basin, Los Angeles County, California. This report was prepared jointly by Geosyntec Consultants, Inc. (Geosyntec) and ERM-West, Inc. (ERM), on behalf of the BPOU Cooperating Respondents (CRs). The CRs are:

- Aerojet Rocketdyne, Inc. (formerly known as [f.k.a.] Aerojet-General Corporation);
- Azusa Land Reclamation Company, Inc. (ALR);
- Hartwell Corporation;
- Chemical Waste Management, Inc. (as successor to Oil and Solvent Process Company); and
- Winco Enterprises Inc. (f.k.a. Wynn Oil Company).

This report meets the requirements for the Annual PE Report, as required by Unilateral Administrative Order 2000-13 (UAO) and the supporting Statement of Work (SOW), issued by the U.S. Environmental Protection Agency (EPA) Region IX on June 30, 2000, and amended on February 28, 2002.

## 1.1 Background

Beginning in 1979, volatile organic compounds (VOCs) were detected in groundwater within the San Gabriel Basin (the Basin). In May 1984, four areas of groundwater contamination were listed as San Gabriel Valley Areas 1-4 on EPA's National Priorities List based on available water quality data. Subsequent investigation by EPA and others revealed widespread VOC contamination in the Basin. As a result, EPA subsequently divided the Basin into seven Remedial Investigation (RI) areas to focus characterization on the extent of contamination and plan remedial actions. EPA later designated some of these RI areas as operable units. RI Area 5 was designated as the BPOU.

Although many of the figures provided in this report depict a generalized boundary to the area of impacted groundwater in the BPOU (Figure 1-1), the precise definition of the boundary of the BPOU has not been developed. The approximate BPOU boundary provides a point of reference on the figures.

Since 1986, EPA, various Potentially Responsible Parties (PRPs), and numerous other entities have compiled and evaluated groundwater quality data from the Basin. Initial field investigations conducted by EPA in the BPOU included the installation and sampling of one multiport monitoring well and the sampling of water-supply wells. In 1990, EPA issued a Basin-

wide Technical Plan that described options for remediation of VOC plumes through the Basin. In 1992, EPA published an Interim RI Report for the Basin.

In 1993, EPA issued a Feasibility Study Report for the BPOU. This report evaluated various remedial alternatives for the remediation of groundwater in the BPOU. In 1994, EPA issued a Record of Decision (ROD) for the BPOU interim remedy. The ROD identified 17 chemicals of concern (COCs), all of which were VOCs. EPA's selected remedy consisted of pumping and treating approximately 19,000 gallons per minute (gpm) of contaminated groundwater. In approximately 1995, the Baldwin Park Operable Unit Steering Committee (BPOUSC) began to perform pre-remedial design activities, including additional characterization of the extent of VOC-contaminated groundwater and the development of a groundwater extraction plan. Eight multiport monitoring wells were installed and sampled, and 26 existing water-supply and monitoring wells were sampled to provide additional characterization of the extent of VOC contamination in the BPOU. The results of these pre-remedial design activities were submitted to EPA in the Draft Pre-Remedial Design Report, dated December 1996 (Camp, Dresser, and McKee [CDM], 1996). The groundwater extraction plan was revised on several occasions. Following review and comment by EPA, the Final Draft Pre-Remedial Design Report, dated September 1997 (CDM, 1997), was issued.

In mid-1997, and then again in 1998, certain constituents that were not previously considered as COCs in the ROD, including perchlorate, N-nitrosodimethylamine (NDMA), and 1,4-dioxane were discovered in groundwater within the BPOU. Consequently, EPA requested that the BPOUSC characterize the distribution of these constituents, as well as conduct further characterization of VOCs in groundwater within the BPOU. As a result, the BPOUSC installed and sampled four additional multiport monitoring wells and conducted additional groundwater sampling to evaluate the extent of VOCs, perchlorate, NDMA, and 1,4-dioxane in groundwater in the BPOU.

The results of these investigations and several groundwater extraction plan options were presented to EPA in the Draft Addendum to the Pre-Remedial Design Report, dated January 14, 1999 (Harding Lawson Associates [HLA], 1999). Throughout 1999, these groundwater extraction plan options were refined, and new options were formulated. These changes were made in response to comments from EPA and the Main San Gabriel Basin Watermaster (Watermaster). This resulted in a range of candidate groundwater extraction plans with total groundwater extraction rates ranging from 19,500 to 21,500 gpm.

In May 1999, EPA issued an Explanation of Significant Differences (ESD) to supplement the 1994 ROD. The ESD depicted an expanded area of the groundwater contamination in the southern portion of the BPOU to reflect the results of the additional investigations related to the characterization of perchlorate, NDMA, and 1,4-dioxane in groundwater. The ESD also added perchlorate, NDMA, and 1,4-dioxane to the list of COCs defined in the ROD. In June

2000, EPA issued the UAO, requiring various PRPs (identified in the UAO as "Respondents"), including but not limited to the CRs, to design, construct, and operate the BPOU interim remedy identified in the ROD, as revised by the ESD. In addition, beginning in the late 1990s, various water agencies, producers, and other water entities (collectively, the "Water Entities" or "WEs") with regulatory oversight and/or financial or other interests in the BPOU groundwater filed lawsuits or asserted claims against the BPOU PRPs for damages allegedly suffered as a result of contamination of the groundwater and water-supply wells in the BPOU area. Thereafter, the CRs entered into negotiations with the WEs, which culminated in March 2002 with the CRs and WEs executing the BPOU Project Agreement to implement the BPOU Project. The BPOU Project Agreement went into effect on May 9, 2002 and had a duration of 15 years terminating in May 2017. A new Project Agreement commenced on May 9, 2017 following the expiration of the 2002 BPOU Project Agreement. This new Project Agreement extends for a 10-year period ending in May 2027.

While the BPOU Project Agreement negotiations were underway, the CRs prepared the Final Remedial Design/Remedial Action Work Plan and the Draft Final Conceptual Design Report for the implementation of the remedy (HLA, 2000a and HLA, 2000b). The Preliminary Design Report was prepared by the WEs and submitted to EPA in April 2001 (Watermaster, 2001).

In January 2006, EPA's Remedial Project Manager notified the CRs that EPA was concerned about the detection of 1,2,3-trichloropropane (1,2,3-TCP) in certain wells within the BPOU. At that time this compound did not have a federal Maximum Contaminant Level (MCL) but did have a California state Drinking Water Notification Level (NL) of 5 nanograms per liter (ng/L).[1] In response, the CRs funded a further modification of the Valley County Water District (VCWD) Lante Treatment Plant to include Liquid-Phase Granular Activated Carbon (LPGAC) treatment to address EPA's concerns about the presence of 1,2,3-TCP.

In August 2006, EPA requested that the CRs include in the BPOU monitoring program additional sampling for non-COC VOCs and non-target volatile and semi-volatile compounds (Tentatively Identified Compounds, or TICs) including 1,2,3-TCP (1,2,3-TCP was subsequently added as a COC). In response to EPA's request, the CRs provided a proposal for non-COC groundwater analysis and reporting in a technical memorandum dated August 24, 2006 (Geomatrix, 2006a). This proposal included the following:

- Information on sampling and analysis of 1,2,3-TCP;

[1] In August 2009, the State of California's Office of Environmental Health Hazard Assessment adopted a final Public Health Goal (PHG) for 1,2,3-trichloropropane of 0.7 nanograms per liter, or 0.0007 parts per billion. While DPH considers a PHG in setting a state MCL, to date no final MCL has been established.

- A proposal for reporting results for non-COC VOCs in a subset of multiport monitoring wells located upgradient of each groundwater extraction and treatment facility (i.e., "early warning" wells);
- A proposal for monitoring of non-target VOCs and semi-volatile organic compounds (SVOCs) in a subset of multiport monitoring wells located upgradient of each groundwater extraction and treatment facility (i.e., "early warning" wells); and
- A proposal for periodic analysis of 1,2,3-TCP in selected wells.

EPA approved the August 24, 2006 proposal in a letter dated September 13, 2006, subject to the addition of several wells. The complete requirements for non-COC groundwater analysis and reporting were summarized in a technical memorandum dated September 29, 2006 (ERM, 2006).

On October 3, 2006, EPA provided a letter approving the BPOU Quality Assurance Project Plan (QAPP) and Field Sampling Plan (FSP) subject to submittal of final versions of these documents with the complete requirements for non-COC groundwater analysis and reporting. Final versions of the QAPP and FSP for groundwater were submitted in November 2006 (Geomatrix, 2006b; Stetson, 2006a) and were approved by EPA in a letter dated February 12, 2007. The QAPP (Rev. 5) and FSP (Rev. 7) for groundwater were most recently updated in 2013 at the request of EPA (AMEC, 2013a and AMEC, 2013b). EPA approved the updated QAPP and FSP in a letter dated May 21, 2013.

In the February 12, 2007 letter, EPA also requested that a data management plan be prepared as an addendum to the QAPP. The report, Data Management Plan for the Baldwin Park Operable Unit Performance Standards Evaluation Plan Monitoring Program, was submitted to EPA on May 17, 2007 (Laboratory Data Consultants, Inc. [LDC] 2007).

A separate Field Sampling and Analysis Plan for Off-Gas Air, Waste Brine, and Treated Water (FSAP) was submitted to EPA on August 14, 2006 (Stetson 2006b) and the corresponding QAPP for Air, Brine, and Treated Water was submitted on March 16, 2007 (Geomatrix, 2007a). The CRs submitted a revised QAPP for air and wastewater discharges to the EPA in September of 2012 (AMEC, 2012a) and an updated FSAP was issued in July 2013 (Stetson, 2013b). The CRs submitted an addendum to the QAPP and FSAP for air and wastewater discharges to the EPA on February 3, 2015 documenting a change in the analytical method for chemical oxygen demand (COD)(Geosyntec, 2015a).

Numerous minor modifications have been proposed and approved for the BPOU PSEP monitoring program since 2007. In 2010, the QAPP for Groundwater (AMEC Geomatrix, 2010a), the FSP for Groundwater (AMEC Geomatrix, 2010b), and the Revised Final Performance Standards Evaluation Plan (PSEP) were updated (AMEC Geomatrix, 2010c) to

incorporate the modifications that were approved after the previous versions of these documents were issued. An updated version of the PSEP (Rev. 3) was submitted to EPA on April 13, 2012 (AMEC, 2012b) to address comments received from EPA on July 1 and October 12, 2011. EPA provided comments and requested additional modifications to the PSEP in e-mail correspondence dated September 21, 2012, November 28, 2012, February 28, 2013, and March 8, 2013. As a result, a revised version of the PSEP (Rev. 4) was prepared to address EPA comments including the addition of 1,2,3-TCP as a COC, clarification of monitoring and reporting requirements for non-COCs such as ethylene dibromide (EDB), and the modification of remedial action objectives outlined in Sections 2.2.1 and 2.2.2 (AMEC, 2013c). EPA approved the revised PSEP in a letter dated May 21, 2013. Modifications to the various monitoring components of the PSEP are described in detail in Section 3.0 of this report.

## 1.2 Overview of Remedial Action

The UAO and SOW direct the Respondents to design, construct, and implement the remedy described in the ROD and ESD, and to achieve the Performance Standards in accordance with the UAO. In a letter to the CRs dated February 28, 2002, EPA confirmed that CR funding of the implementation of the BPOU Project Agreement described in Section 1.1 above provided the CRs with a means to satisfy the requirements of the UAO. The WEs (either directly or through contractors) designed the groundwater extraction and treatment facilities (Subprojects), and construction related to the initial design work has been completed. The WEs are now operating the Subprojects which provide for groundwater extraction and treatment in two general areas of the BPOU (Figure 1-2). The treated groundwater is supplied for direct potable use.

In 2000, the EPA approved groundwater extraction plan associated with the various Subprojects consisted of the extraction of a total of 21,000 gpm of groundwater on annualized basis: 6,000 gpm from the northern portion of the plumes (Subarea 1), and 15,000 gpm from the southern portion of the plumes (Subarea 3)(EPA, 2000). During remedial design activities, the groundwater extraction plan was refined to include an additional 750 gpm in Subarea 3 resulting in a total 15,750 gpm. In January 2015, EPA requested that the extraction plan for Subarea 3 be expanded to include an additional 8,000 gpm from the California Domestic Water Company (CDWC) Bassett Wellfield, increasing the extraction plan for Subarea 3 to 23,750 gpm (EPA, 2015) and total project extraction to 29,750 gpm.

Extracted groundwater is to be treated using a treatment train that is designed to remove all COCs to levels acceptable for direct potable use. The treatment train varies among the treatment plants but generally consists of a series of contaminant treatment processes including air stripping and/or LPGAC to remove VOCs, ion exchange (IX) to remove perchlorate, and ultraviolet (UV)/oxidation to remove 1,4-dioxane and NDMA.

## 1.3 Summary of Remedial Action Objectives and Performance Standards

The remedial objectives for groundwater in the BPOU are defined in the UAO as follows:

> *The remedial objectives of the Baldwin Park OU are to prevent future increases in, and begin to reduce concentrations of trichloroethene, tetrachloroethene, carbon tetrachloride, and other VOCs, along with perchlorate, N-nitrosodimethylamine, and 1,4-dioxane in groundwater in the Baldwin Park area (hereafter referred to as contaminants or contaminated groundwater) by limiting further migration of contaminated groundwater into clean and less contaminated areas or depths that would benefit most from additional protection and by removing contaminants from the aquifer.*

The BPOU Project involves the design, installation, operation, and maintenance of groundwater extraction systems in two areas of the BPOU. The two areas are designated in the ROD and ESD as Subarea 1 (the upper area) and Subarea 3 (the lower area). Remedial objectives for the two Subareas are described below.

### 1.3.1 Subarea 1 Remedial Objectives

In Subarea 1, the movement of COCs in groundwater will be limited by groundwater extraction at rates and locations that will establish the necessary groundwater flow field, such that the resultant capture zone limits migration from known or suspected source areas and depths and removes chemical mass. Source areas and depths include locations believed to contain a significant mass of soil contamination (i.e., vadose zone) or a subsurface source of dissolved-phase groundwater contamination. The capture zone is to include all significant depth intervals where COC concentrations exceed MCLs. As part of the groundwater extraction process, chemical mass will be removed from Subarea 1 groundwater.

### 1.3.2 Subarea 3 Remedial Objectives

In Subarea 3, the movement of COCs in groundwater will be limited by groundwater extraction at rates and locations that will establish the necessary groundwater flow field to reduce the potential for groundwater containing unacceptable concentrations of tetrachloroethene (PCE), trichloroethene (TCE), carbon tetrachloride, perchlorate, NDMA, 1,4-dioxane or other COCs from moving into areas where these chemicals are not present in unacceptable concentrations. Subarea 3 groundwater extraction is to result in a hydraulic capture zone that includes all significant depth intervals where COC concentrations exceed MCLs. As part of the groundwater extraction process, chemical mass will be removed from Subarea 3 groundwater.

### 1.3.3 Performance Standards

Two distinct performance standards have been derived from the Remedial Objectives cited above: 1) limit further migration of COCs in groundwater, and 2) remove COCs from groundwater. Achievement of these performance standards will prevent future increases in concentrations, begin to reduce concentrations, and prevent the spread of COCs from more contaminated areas to less contaminated areas. These two performance standards are described in more detail below.

#### *1.3.3.1 Performance Standard 1 - Limit Migration of Chemicals of Concern*

The BPOU extraction plan was developed using an EPA-approved three-dimensional finite-element groundwater flow model, DYNFLOW. In 2002, the model was updated using a similar code, FEFLOW. The construction and calibration of this model rely on many years of data collection activities in the BPOU, including water level measurements and water quality sampling. The model was initially calibrated using water level data from a 20-year period (1982 to 2002). Following calibration, the model was run in a forward/predictive manner to select locations and depths of groundwater extraction wells that would allow the remedy to achieve the objectives described above. Review of geophysical logs from exploratory borings at the extraction well locations as well as logs from other wells in the BPOU suggested the presence of relatively thick, fine-grained layers that can be correlated across Subarea 3 but do not extend north to Subarea 1. These layers are present at approximately -200 and -500 feet mean sea level (msl). As a result, the well-screened intervals for new extraction wells in Subarea 3 were designed so that they could capture the entire vertical extent of contaminated groundwater without creating hydraulic connections across these layers. Therefore, shallow extraction wells were screened above the layer at -500 feet msl and deep extraction wells were screened below the layer at -500 feet msl. Aquifer testing in the extraction wells confirmed that the layer at -500 feet msl acts as a confining unit that provides hydraulic separation between the shallow and deep elevation intervals. In 2005, the groundwater flow model was modified to incorporate the confining units in Subarea 3. The groundwater flow model is updated annually with quarterly pumping and recharge data that are compiled from various sources. The CR group will continue to make refinements to the groundwater model to incorporate the results of water-level monitoring and other information to ensure the model adequately simulates observed groundwater conditions in the BPOU. Updates and refinements to the groundwater model are reported in Annual PE Reports as necessary. The calibrated model is the primary tool that is utilized to assess system performance in terms of limiting the migration of COCs.

#### *1.3.3.2 Performance Standard 2 - Removal of Chemical Mass*

This performance standard will be met through extraction and treatment of groundwater from the BPOU plumes. Documentation of the removal of chemical mass will use measured flow rates from groundwater extraction wells and results of water quality sampling and analysis for these same extraction wells. Using these data, the mass removal for selected COCs will be estimated on an annual basis. Cumulative chemical mass removed from the aquifer will also be reported.

## 1.4 Approach to Performance Monitoring and Evaluation

Performance monitoring and evaluation focuses on the operation of the groundwater extraction system to meet and satisfy the perfomance standards of 1) limiting further migration of groundwater contamination into less contaminated areas, and 2) removing chemical mass from groundwater. As described in the PSEP (AMEC, 2012b), the CRs' approach to performance monitoring relies upon: 1) past and future basin-wide groundwater monitoring activities performed by the Watermaster, 2) performance monitoring data collected by the Water Entities, the CRs, or other agents acting on behalf of the CRs, and 3) the use of an EPA-approved groundwater flow model to predict the effectiveness of the groundwater extraction system. At any time, should EPA determine that Performance Standards related to migration control and mass removal are not being met, the CRs will use these same methods of data collection and modeling to modify operation of the groundwater extraction system such that Performance Standards are achieved.

Watermaster basin-wide monitoring activities have served as the baseline monitoring program from which additional monitoring needs have been defined. The Watermaster has the responsibility to ensure that comprehensive water quality monitoring meets their court-decreed mission of managing Basin water production and quality, provides for predictive vulnerability assessments, and provides for monitoring so that California State Water Resources Control Board, Division of Drinking Water [DDW; formerly the Department of Health Services (DHS)] requirements for public water supplies are met. The Watermaster performs routine basin-wide water level monitoring on a semi-annual basis.

In summary, the approach to performance monitoring and evaluation consists of the following, components:

- Potentiometric head measurements in BPOU piezometers and multiport monitoring wells. These data are used to generate potentiometric surface maps for comparison to model simulation results;

- Groundwater flow modeling and particle tracking to evaluate hydraulic performance of the extraction system as it relates to limiting further migration of groundwater contamination;
- Water quality sampling of production and multiport monitoring wells to provide information on the distribution of COCs in BPOU groundwater, specifically to produce plume maps and chemical cross sections;
- Integration of the results of groundwater modeling with current plume maps and known source locations to determine whether the groundwater extraction systems are appropriately limiting the migration of COCs;
- Water quality sampling and measurement of extraction well pumping rates and production volumes; and
- Use of flow rate and water quality data from extraction wells to calculate the mass of COCs removed from the aquifer by the extraction and treatment system.

### 1.5 Content of Performance Evaluation Reports

As outlined in the PSEP, the Annual PE Reports should generally contain the following:

- Potentiometric maps to assist in evaluating changes in groundwater flow patterns in the BPOU;
- Groundwater plume maps and chemical cross sections and an evaluation of any changes in the extent of groundwater contamination within the BPOU;
- Statistical analysis of concentration trends and time-concentration plots for selected COCs for selected monitoring wells;
- Contaminant mass removal estimates for each extraction well using average flow rates and water quality sampling results from the extraction wells;
- Results of computer model simulations of extraction system performance and a description of any refinements to groundwater flow models used to evaluate system performance;
- An overall assessment of remedial system performance compared to the Performance Standards related to the remediation of groundwater; and
- Recommendations for changes to the monitoring program described in the PSEP including changes to the monitoring frequency and monitoring locations.

As outlined in the most recent version of the PSEP (Revision 4), EPA has requested that Annual PE Reports also address the performance of the BPOU Project in relation to “Other

Performance Standards" that are not directly related to the remediation of groundwater, but rather relate to the operational performance of, or discharge requirements for, the various Subprojects following construction. These "Other Performance Standards" include the following:

- Achievement of treated-water effluent requirements in accordance with DDW domestic water supply permits, EPA Applicable or Relevant and Appropriate Requirements (ARARs), and other DDW requirements;
- Air-emission monitoring requirements in accordance with EPA ARARs and the risk limits identified in the June 15, 2009 letter from Wayne Praskins, EPA to Scott Goulart, Aerojet as further explicated in EPA's February 3, 2011 letter;
- Monitoring and reporting of brine discharges to the Los Angeles County Sanitation Districts (LACSD) system in accordance with industrial waste discharge permits;
- Demonstration of proper disposal of waste associated with treatment operations. Applicable waste streams include, but are not limited to, spent granular activated carbon (GAC) and spent IX resins. Wastes treated or disposed of offsite must comply with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) offsite rule;
- Compliance with substantive portions of the National Pollutant Discharge Elimination System (NPDES) discharge requirements for any treated water discharged to surface water;
- Compliance with the Los Angeles Regional Water Quality Control Board's Water Quality Control Plan for the Los Angeles River Basin (the "Basin Plan"), which incorporates State Water Resources Control Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," for any discharge to land, including groundwater recharge over a spreading basin or discharge to surface water;
- The installation and operation of treatment systems necessary to ensure that the nitrate concentration in any discharge to land, to a spreading basin, or to a surface water is similar to or lower than the concentration in the receiving water, except for EPA-approved CERCLA Section 104(b) activities that will result in temporary high flow, high volume discharges;
- Compliance with substantive requirements in 22 CCR Sections 66264.601-66264.603 for miscellaneous units and related substantive closure requirements in 22 CCR Sections 66264.111-66264.115 for air strippers or GAC contactors; and

- Compliance with DDW requirements for Emergency Preparedness Plans including Spill/Release Response Plans for the various subprojects.

## 2. STATUS OF REMEDIAL ACTIONS

This section presents the status of remedial actions undertaken through 2019 to implement the BPOU interim remedy. These actions include operation of the Valley County Water District (VCWD) Lante Subproject in Subarea 1, and operation of the La Puente Valley County Water District (LPVCWD) Subproject, the San Gabriel Valley Water Company (SGVWC) B6 Subproject, the SGVWC B5 Subproject, and the CDWC Treatment Plant in Subarea 3. The status of the BPOU Subprojects is also described in the monthly progress reports submitted to EPA pursuant to Paragraph 85, Section XV of the UAO.

### 2.1 Subarea 1 Remedial Action Status

Subarea 1 remedial actions currently consist of groundwater extraction from the VCWD SA1-1, SA1-3 (Lante) and Arrow wells and treatment at the VCWD Lante Treatment Plant, which is owned and operated by VCWD. The report, "Revised Draft Interim Remedial Action Report" (Stetson, 2005), prepared and submitted to EPA in March 2005, provides a summary of the VCWD Lante Subproject background, construction, and completion activities. Construction of the VCWD Lante Treatment Plant began in 2002 and was completed in 2005. The original construction activities included drilling and equipping two new extraction wells (SA1-1 and SA1-2), re-equipping the SA1-3 (Lante) well, installing associated piezometers, constructing raw and treated water pipelines, and constructing the treatment plant. Additional construction work in 2006 and 2007 included adding LPGAC treatment and replacing the resin-based vapor control system with vapor-phase granular activated carbon (VPGAC). The treatment plant currently consists of four air-stripping towers and associated VPGAC off-gas treatment units for VOC removal, LPGAC for 1,2,3-TCP removal, single pass IX for perchlorate removal, one regenerable IX carousel (Calgon Ionic Separation Process [ISEP]) for nitrate removal, and four UV/oxidation units (UVTerra) for 1,4-dioxane and NDMA removal. Treated water is conveyed via a treated water pipeline to the Suburban Water Systems (SWS) Plant 121; however, a portion of the treated water can be directed to the VCWD distribution system if desired.

On November 11, 2005, DDW issued domestic water supply Permit Amendment 1910009PA 003, authorizing VCWD to operate the VCWD Lante Treatment Plant. In January 2006, 1,2,3-TCP was detected in the VCWD extraction wells and subsequent testing confirmed the presence of 1,2,3-TCP. Beginning on February 21, 2006, VCWD began discharging treated water to Big Dalton Wash while a 1,2,3-TCP treatment technology was selected and constructed. LPGAC was selected as the treatment technology and the design and construction of a LPGAC system was completed in Spring 2007. LPGAC startup testing was completed in May 2007 and on July 18, 2007, DDW issued an amended permit to VCWD to resume delivering potable water.

As a result of operational problems, the resin-based off-gas control system was removed and replaced with VPGAC. A temporary VPGAC system was installed while a permanent system was designed and constructed. The temporary system began operation in June 2007 and the permanent system became fully operational in April 2008. The permanent VPGAC system consists of four 20,000-pound adsorbers with associated heaters operated in parallel.

The air strippers also experienced operational problems with calcium carbonate precipitation in the towers and packing. Tower cleaning was initiated in October 2007 and was completed in February 2008. A study was conducted to evaluate precipitation mitigation alternatives that included anti-scalant dosing, acid cleaning, and packing replacement. One air stripper was acid washed in December 2008 to test the efficacy and cost of this alternative. The results of the acid wash testing were summarized in a February 18, 2009 memorandum "Summary and Evaluation Air Stripper No. 4 Acid Cleaning" (Stetson 2009). Based on the pilot testing, the acid washing was not a cost-effective method to mitigate calcium carbonate precipitation problems. Air strippers are now routinely inspected, and the towers and packing cleaned and replaced as necessary.

The process to replace the ISEP with single pass IX was initiated in 2008. A request for proposal was released in January 2008 and bids were received and evaluated in April and May of 2008. The work was awarded to RC Foster and a notice to proceed was issued in August 2008. California Environmental Quality Act (CEQA) work associated with the single pass IX was completed in September 2008 and design work was completed in early 2009. As part of the ISEP replacement work, nitrate treatment alternatives were also evaluated (Malcolm Pirnie, 2008).

Design and construction of the single pass IX system was completed in 2009. The associated booster pump upgrade was completed in November 2009. In October 2010, VCWD and the CRs released a Request for Qualifications (RFQ) requesting process engineering and nitrate management qualifications to selected engineering firms. Qualifications were received, reviewed, and CDM Smith was selected to provide process treatment and nitrate management engineering expertise. CDM Smith began reviewing nitrate management alternatives in 2011 and a report with recommendations was submitted in March of 2012. Per the CRs request, CDM submitted an addendum to its report on nitrate management in November of 2012, summarizing alternatives, which include blending using the Lante two-million-gallon reservoir.

The CRs also submitted an evaluation of extraction system performance for Subarea 1 in August 2012 (CDM Smith, 2012). In a letter dated December 12, 2012, EPA approved the proposed groundwater extraction plan of 5,000 gpm extraction at the SA1-3 location (from the SA1-3 well and reactivated Arrow Well) and 1,000 gpm extraction at the SA1-1 well and concluded that this provides adequate hydraulic containment while optimizing mass removal in Subarea 1. VCWD evaluated various options to increase production at the Lante Treatment

Plant including a potential new well, reactivating the Arrow Well, and upgrading the Lante well (Civiltec Engineering Inc. [Civiltec] 2013).

On February 13, 2014, the BPOU Project Committee approved the development and construction of a monitoring well to evaluate the need for a potential new extraction well at the treatment plant site, as part of an effort to assess the best way to achieve a pumping capacity of 5,000 gpm at the Lante Treatment Plant site. Construction of the monitoring well was completed and sampled in March 2016. The new monitoring well was retested in June 2016. After evaluating the water quality results, VCWD and the CRs elected to move forward with plans to reactivate the Arrow Well instead of constructing a new extraction well. In August - October 2017, the casing in the Arrow Well was rehabilitated and redeveloped using mechanical and chemical treatment methods followed by pumping development at flow rates as high as 4,500 gpm. The final Arrow Well Startup Testing Plan was prepared in February 2018 and VCWD submitted the permit application documentation to DDW for review on March 20, 2018. The Arrow Well building was demolished in September of 2018 and rebuilt in December 2018. The SA1-1 Well and Arrow Well pump and motor equipment installation was completed in March 2019, with the exception of some valving associated with the above ground discharge piping. VCWD completed the Arrow Well start up testing in December 2019 at a flow rate of approximately 6,200 gpm. DDW inspected the Arrow Well on March 8, 2019. The permit amendment for operation of the Arrow well is currently under review by DDW and approval is expected in mid-2020.

On March 13, 2014, the BPOU Project Committee approved the Joint Proposed Conceptual Plan Relative to Nitrate Management and a Notice to Proceed was issued to the engineering contractor to proceed with the modifications at the end of March 2014. VCWD submitted all design documents to DDW for review and compliance with the Prop 84 grant funding agreement. DDW approved the submittals in the fall of 2014. Proposition 84 funding for the nitrate management work was approved in late 2014 and work began in 2015. In April 2016, the DDW approved an amended drinking water permit allowing the use of the fixed bed IX system for the treatment of perchlorate and allowing modifications to be made to the ISEP system to treat and blend nitrates. Nitrate specific resin was loaded into ISEP B in June 2016. The ISEP B modifications were completed in July 2016 and ISEP A has been taken out of service permanently. Programming and startup testing was conducted throughout 2017 and into 2018 at various flowrates as required by the startup test plan to support DDW permitting. The DDW-required startup testing of the nitrate treatment and bypass system was completed in May 2018, at flow rates as high as 6,600 gpm.

Other VCWD Lante Treatment Plant improvements or evaluations completed in 2019 included:

- Upgrades to the treatment facility controls, including PLC upgrade work at PLC-2 and Trojan system, were conducted throughout the year; and
- In July, VCWD installed the Operator Interface Terminals (OITs) at the main AUX panel.

Technical performance reports are prepared under Provision 42 of the DDW operating permit and are required to be submitted annually to DDW. The most recent of these reports, "2018 Annual Technical Performance Report for the Lante Plant" (Stetson, 2019a), was submitted in March 2019 and describes the status and performance of the VCWD Lante Treatment Plant for the period January 1 to December 31, 2018. In addition, VCWD submits monthly compliance reports to DDW; these compliance reports are included in the monthly progress reports provided to EPA. VCWD also holds regular meetings related to progress on the controls upgrades and Arrow Well re-activation.

In 2019, VCWD treated 810 acre-feet of water due to the plant being offline most of the year during the PLC upgrade and other work. Testing of the Arrow Well was completed in December and the plant was returned to normal operations using the SA1-1 and SA1-3 wells while awaiting DDW approval for operation of the Arrow Well. In December 2019, the plant achieved an average flow rate of 3,980 gpm (Table 2-1). Operation of SA1-3 accounted for approximately 68.1% of the water extracted during 2019, while SA1-1 was responsible for 22.2% and the Arrow Well accounted for 7.5%. SA1-2 was responsible for the remaining 2.3% of production. Rehabilitation of Well SA1-2 was completed in January of 2012 and redevelopment performed in March 2012; however, there are no current plans to put this well back into service due to low COC concentrations. Although the 2019 average annual production of 459 gpm was well below the 2018 average flow rate of 2,395 gpm, the average flow rate for the month of December, after completion of the PLC upgrade testing, was 3,980 gpm, which is 64.2% of the EPA-approved extraction rate of 6,200 gpm. It is anticipated that beginning in 2020, the VCWD treatment plant will be able to meet the target extraction rate, once the Arrow Well is permitted and online, and the controls upgrade and other improvements are completed.

## 2.2 Subarea 3 Remedial Action Status

Subarea 3 remedial actions consist of the operation of the LPVCWD, SGVWC B6, SGVWC B5, and CDWC Subprojects. On January 15, 2015, EPA modified the Subarea 3 extraction plan to include the requirement that a minimum of 8,000 gpm be produced from the CDWC Bassett Wellfield. The target extraction rate for these Subprojects, including CDWC, is 29,750 gpm.

### 2.2.1 La Puente Valley County Water District Subproject Status

The LPVCWD Subproject extracts, treats, and delivers water to the public under a DDW permit that was issued on February 15, 2001, and amended as Permit No. 1910060PA-000 issued on May 8, 2002 with subsequent amendments. The LPVCWD Subproject consists of extraction wells LPVCWD 2, LPVCWD 3, LPVCWD 5, two air strippers and associated off-gas treatment for VOC removal, single pass IX (replacing ISEP in July 2010) for perchlorate removal, and UV/oxidation (UVTerra) for 1,4-dioxane and NDMA removal operating at a capacity of up to 2,500 gpm (EPA approved target extraction rate is 2,250 gpm). Treated water is conveyed to LPVCWD's distribution system and, when available, a portion of the treated water is also provided to SWS.

To address sanding problems in LPVCWD 2 and 3, a new well, LPVCWD 5, was drilled and installed in 2007. The LPVCWD 5 well was equipped, developed, and tested in 2008. On December 19, 2008, DDW issued an amended permit to allow LPVCWD 5 to be used as a drinking water source. The LPVCWD 5 well installation activities are summarized in "Well No. 5 Well Completion Report" prepared by Stetson and submitted in final on July 2, 2008 (Stetson, 2008). DDW issued a permit amendment for the operation of the LPVCWD 5 well on December 19, 2008. The well became operational in January 2009 and currently serves as LPVCWD's primary water supply well, with LPVCWD 2 and 3 used as backup water supply wells when Well 5 is offline. COC concentrations in LPVCWD 2 have consistently been greater than those observed in LPVCWD 3 and LPVCWD 5. In 2015, the EPA requested the LPVCWD identify actions to increase pumping at LPVCWD 2 to capture the higher concentrations of COCs in LPVCWD 2. As of December 2019, LPVCWD has been evaluating treatment plant modifications to improve mass removal rates at LPVCWD 2 and will finalize a technical memo that documents existing conditions, desired changes to the operation scheme, and recommendations on how to effectively achieve the changes to increase pumping from Well 2.

To mitigate perchlorate-bearing brine discharges to the LACSD brine line, the LPVCWD Subproject Committee approved replacing the ISEP with single pass IX equipment. The single pass IX system was designed, and construction was completed in 2009. A draft Compliance Test Plan and Operation, Maintenance, and Monitoring Plan for the single pass IX were prepared and submitted to DDW for review. In June 2009, the EPA issued a letter supporting temporary discharges of water during startup testing of the new single-pass IX system to the Walnut Wash. The Los Angeles County Department of Public Works (LACDPW) issued a discharge permit for LPVCWD on November 17, 2009. The IX system was tested during startup activities in December 2009. The DDW issued an amended permit for the single pass IX system on June 15, 2010 and the system became operational on July 30, 2010. In February 2018, LPVCWD received a temporary approval letter from the DDW to operate Air Stripper #2 at a minimum air to water ratio of 45 to 1. The lower air to water ratio in Air Stripper 2 will

decrease backpressure in the VPGAC system and will allow the plant to operate at higher flows to achieve target extraction rates. LPVCWD submitted the final technical memorandum on Air Stripper No. 2 in March 2018. LPVCWD plans to submit a permit amendment request in June 2020 to modify the air to water ratio requirement for Air Stripper No. 2, add a nitrate treatment system, approve PSR II Plus resin for treatment of perchlorate, and provide additional updates to the OM&M plan.

Technical performance reports are prepared under Provision 33 of the DDW operating permit and are required to be submitted annually to DDW. The most recent of these reports, "Technical Performance Report for the La Puente Valley County Water District Treatment Facility, Annual Report 2018-2019" (LPVCWD, 2019), was submitted in November 2019 and describes the status and performance of the LPVCWD facility for the period August 1, 2018 to July 31, 2019. In addition, LPVCWD submits monthly compliance reports to DDW; these compliance reports are included in the monthly progress reports provided to EPA.

Treatment system improvements or evaluations initiated in 2019 included:

- LPVCWD replaced the effluent level pressure transducer in April;
- A VFD was installed on Well No. 5 in August;
- In September, repairs to the Air Stripper No. 1 water meter and hydrogen peroxide chemical feed line were performed;
- Also in September, LPVCWD distributed an air stripper inspections report. The air strippers appeared clean of calcification, however, the bottom sump for both air strippers appeared to have iron and manganese oxidation and it was recommended that the sump areas be cleaned to remove the oxidation, sand, and bacteriological growth; and
- Evaluated nitrate management options.

In 2019, the LVPCWD subproject extracted and treated approximately 3,793 acre-feet of groundwater, equating to an average annual flow rate of 2,355 gpm (Table 2-1). Groundwater extraction was primarily from Wells 2 and 3, accounting for approximately 88% of the water produced by LPVCWD during 2019 (52% from Well 2 and 36% from Well 3). LPVCWD Well 5 was down for much of 2019 due to VFD failure, producing only 425 acre-feet in 2019. The average annual extraction rate was above the EPA-approved extraction rate of 2,250 gpm and was greater than last year's average extraction rate of 2,266 gpm. As a result, the total production increased from 3,672 acre-feet in 2018 to 3,793 acre-feet in 2019. The production rate of LPVCWD has displayed an increasing trend since 2016, when the average extraction rate was 2,147 gpm. In February 2018, LPVCWD received temporary approval from the DDW to operate Air Stripper No. 2 at a minimum air to water ratio of 45 to 1, which allowed the

plant to overcome air flow issues experienced in past years and achieve the EPA annual target flow rate during 2018 and 2019. LPVCWD is currently working with DDW to permanently approve the air-to-water ratio on Air Stripper No. 2 and anticipates being able to operate at about 2,500 gpm to continue to meet the EPA annual target flow rate of 2,250 gpm.

### 2.2.2 San Gabriel Valley Water Company B6 Subproject Status

The SGVWC B6 Subproject remedial action consists of groundwater extraction from the SGVWC B25A, B25B, B26A, and B26B wells (with B6C and B6D included as backup wells) and treatment at the SGVWC B6 Treatment Plant, which is owned and operated by SGVWC. Construction of the SGVWC B6 Subproject began in 2002 and the SGVWC B6 Treatment Plant was completed in 2005. Construction activities included drilling, installing, and equipping the new extraction wells, installing associated piezometers, constructing raw and treated water pipelines, and constructing the treatment plant. The treatment plant originally consisted of four air-stripping towers and associated carbon off-gas treatment units for VOC removal, two ISEP carousels for perchlorate removal, and four UV/oxidation units (UVTerra) for 1,4-dioxane and NDMA removal. Treated water is conveyed to the SGVWC distribution system. The "Interim Remedial Action Report" (Stetson, 2004) prepared and submitted to EPA in September 2004 provides a summary of SGVWC B6 Subproject background, construction, and completion activities.

On June 8, 2005, DDW issued domestic water supply Permit Amendment No. 1910039PA-002, authorizing SGVWC to operate the SGVWC B6 Treatment Plant using the existing onsite B6C and B6D wells. SGVWC began delivering potable water from the SGVWC B6 Treatment Plant to customers on July 12, 2005. The permit was further amended by DDW with Permit Amendment No. 1910039-004 on February 17, 2006, to incorporate the operation of offsite wells B25A, B25B, B26A, and B26B.

To mitigate perchlorate-bearing brine discharges to the LACSD brine line, the SGVWC B6 Subproject Committee approved replacing the ISEP with single pass IX equipment. The single pass IX design was initiated in June 2008. Since there is limited space at the SGVWC B6 Treatment Plant, the IX equipment was constructed on three properties that were purchased on the north side of Corak Street. Geotechnical work was completed on the properties in July 2008 and existing structures were demolished in the fall of 2008. CEQA work related to the IX project was filed and the public review process closed on October 6, 2008, without any comments received. Construction of the single pass IX system was completed in November 2009. The new IX system was integrated into the treatment system in March and April of 2013 and startup testing was initiated in May 2013. SGVWC received the DDW permit for the single pass IX system on August 25, 2014 and began serving water into its distribution system on September 5, 2014.

On November 1, 2010, SGVWC issued an RFP to provide design services for an IX system to treat nitrate. SGVWC awarded the contract to Worley Parsons for the design of additional treatment for nitrates at the B6 treatment plant. The nitrate treatment system design for the B6 treatment plant was submitted to City of Baldwin Park for review in September 2011. WQA received approval for project funding under Proposition 84 in June of 2012 and coordinated with DDW to receive the contracts and finalize the funding amounts. In early 2013, SGVWC purchased the remaining parcels on Corak Street to house the nitrate IX equipment. The CEQA requirements were completed in 2013. SGVWC completed the design of the additional IX treatment system for nitrates at the B6 treatment plant and construction began in October 2014. In August 2015, construction of the additional IX treatment system for nitrates was complete, and the Southern California Edison (SCE) power supply was complete in June 2017. Testing of the new IX treatment system was performed from July to October 2017. In May 2018, the DDW issued a water supply permit amendment to operate the IX treatment system and the nitrate treatment system was put into operation, replacing the interim nitrate blending operation.

In January 2018, SGVWC received conditional funding approval from the State Water Resources Control Board (SWRCB) for a grant of up to $1.1 million to test new UV technologies at Plant B6. The 100% design plans for the B6 UV Demonstration Project was submitted for review in June of 2019 and in July of 2019 a public information workshop for the B6 UV Demonstration Project was held. The Request for Proposals for the B6 UV Demonstration Project was sent out for bidding in November 2019. SGVWC will continue to coordinate with SWRCB to satisfy the grant funding requirements.

Technical performance reports are prepared under Provision 15 of the DDW operating permit and are required to be submitted annually to DDW. The most recent report, “Technical Performance Report (2014-2015) for Plant B6 Water Treatment Facility” (Stetson, 2018), was submitted in March 2018 and describes the status and performance of the SGVWC B6 Treatment Plant for the period April 1, 2014 to March 31, 2015. Subsequent technical performance reports for the period are currently in draft and have not yet been submitted to DDW. SGVWC also submits monthly compliance reports to DDW; these compliance reports are included in the monthly progress reports provided to EPA.

No significant improvements to the Treatment system were implemented in 2019. In addition to the 100% design plans for the B6 UV Demonstration Project, discussed above, the following evaluations were completed in 2019:

- The Final Monitoring and Reporting Plan for the B6 UV Demonstration Project was submitted in July 2019; and

- The Quality Assurance Project Plan for the B6 UV Demonstration Project was submitted in July 2019.

In 2019, the SGVWC B6 Subproject extracted and treated approximately 10,554 acre-feet of water, equating to an average annual flow rate of 6,543 gpm (Table 2-1), which was similar to the production rate in 2018. The SGVWC B6 Subproject achieved the EPA-approved extraction rate of 6,500 gpm during 2019.

### 2.2.3 San Gabriel Valley Water Company B5 Subproject Status

The SGVWC B5 Subproject remedial actions consist of groundwater extraction from the SGVWC B5B, B5E, and City of Industry (COI) 5 wells and treatment at the SGVWC B5 Treatment Plant, which is owned and operated by SGVWC. In addition, the SGVWC B5D well is used as a standby water source. The treatment plant consists of LPGAC for VOC removal, single-pass IX for perchlorate removal, and UV/oxidation units (UVPhox) for 1,4-dioxane and NDMA removal. The "Interim Remedial Action Report" (Stetson, 2006c) prepared and submitted to EPA in September 2006 provides a summary of SGVWC B5 Subproject background, construction, and completion activities. Construction was largely completed in early 2007.

Startup testing conducted to support permitting was completed in March 2007 and DDW issued amended drinking water permit 1910039PA-008 for the B5 Treatment Plant on April 21, 2008. SGVWC began delivering potable water to its system on July 8, 2008. Prior to delivering potable water, extracted water was treated and discharged to the San Gabriel River. The DDW issued a permit amendment to allow for the addition of the COI 5 well in July 2009. The COI 5 well went online in July 2009.

In June 2017, SGVWC began a pilot study to evaluate the use of reactivated liquid phase granular activated carbon at Plant B5. SGVWC submitted the Final Technical Memorandum No. 2 on the reactivated/reused liquid phase granular activated carbon pilot study at Plant B5 in June 2018.

Technical performance reports are prepared under Provision 53 of the DDW operating permit and are required to be submitted annually to DDW. The annual report, "Technical Performance Report for the San Gabriel Valley Water Company Plant B5 Water Treatment Facility" (Stetson, 2019b), was submitted in May 2019 and describes the status and performance of the SGVWC B5 Treatment Plant for the period July 1, 2014 to June 30, 2015. Subsequent technical performance reports are currently in draft and have not yet been submitted to DDW. In addition, SGVWC submits monthly compliance reports to DDW; these compliance reports are included in the monthly progress reports provided to EPA.

The B5 Treatment Plant operated nearly uninterrupted in 2019. SGVWC continues to evaluate the impact on extraction rates caused by the decreasing water levels and the reason for

reduced extraction rates from Well B5E. SGVWC began rehabilitating Well B5E in April 2018 and Well B5E was placed back online on February 8, 2019. Since that time, production capacity has increased significantly (approximately 3,800 gpm when operating as a standalone well, or 2,900 gpm when operating with other wells; pre-rehab capacity was approximately 2,000 gpm when operating with other wells).

Treatment system improvements or evaluations initiated in 2019 included:

- The pump from Well B5B was pulled and repaired on November 20 due to excessive noise in the bearing.

In 2019, the SGVWC B5 Subproject extracted and treated approximately 10,418 acre-feet of water, equating to an average flow rate of 6,457 gpm (Table 2-1). This represented an increase from the 2018 production rate of 5,451 gpm and was the highest production rate since 2014. However, the extraction rate remained below the EPA-approved extraction rate of 7,000 gpm. The increase in production rate was due to the increase in groundwater extraction from Well B5E after rehabilitation of the well was completed. In addition to reduced production associated with repairs on the pump in Well B5B described above, groundwater production was affected by maintenance activities on the COI Well No. 5 which resulted in the shutdown of the well from April 5 through June 17, 2019. The overall inability to meet the EPA approved extraction rate is due to reduced pumping capacity from the B5B and B5E wells for part of the year, caused by lower water levels and/or a reduction of the specific capacity of the wells, and a decision by SGVWC to reduce pumping during winter months due to low water demand.

### 2.2.4 California Domestic Water Company Status

The CDWC Bassett Wellfield consists of groundwater extraction from six extraction wells (Wells 2, 3, 5A, 6, 8, 14). A seventh well (Well 10) has been installed and began extracting water in June 2016. Construction of an interconnection pipeline between SGVWC and CDWC was completed in November 2017 and installation of the controls was completed in April 2018. SGVWC began delivering water to CDWC on May 14, 2018. CDWC supplies water to about 400 domestic connections, a plant nursery, two schools, and three water wholesalers, which include the City of La Habra (La Habra), the City of Brea (Brea), and SWS. The CDWC provides a prescribed entitlement of water from the Main San Gabriel Basin to each of its member agencies who own or lease stock in the company.

Groundwater produced by wells within CDWC Bassett Wellfield requires treatment for VOCs, NDMA and perchlorate. On December 31, 1999, DDW issued Permit No. 04-15-99P-032 to CDWC to operate two air stripping towers to remove VOCs from wells at the Bassett Wellfield. On September 12, 2001, DDW issued Permit Amendment No. 04-15-01-PA-000 to CDWC to operate a UV/oxidation treatment facility to remove NDMA from CDWC Well No. 14. On July

17, 2002, DDW issued Permit Amendment No. 1910199PA-001 to CDWC for an IX treatment facility to remove perchlorate from wells at the Bassett Wellfield. On May 30, 2003, DDW issued Permit Amendment No. 1910199-PA-002 to CDWC to expand the VOC treatment facility at the Bassett Wellfield. On April 15, 2005, DDW issued Permit Amendment No. 1910199PA-003 to CDWC to replace the UV/oxidation treatment facility with a more efficient UV light treatment facility and install an additional 5,000 gpm UV /oxidation (UVPhox) treatment unit for Well No. 3 for the removal of NDMA.

Wells 3 and 14 receive treatment from the IX system, which removes perchlorate, and the UVPhox system, which removes NDMA. That treated water is then blended in a wet well with water from Wells 5A and 6 and VOCs are removed using air stripping towers. The treated water is then blended with water from Wells 2 and 8, which do not receive treatment, and is chlorinated and delivered to a 5 million-gallon (MG) reservoir. The wells are operated such that a lead well is operated full-time and the other wells are added in the following order to provide additional water – Well 3, 5A, 6, 14, 2, and 8. The lead well is currently Well 3. Well 14 was formerly the lead well and was capable of producing up to 4,500 gpm. Well 14 performance was hindered by sanding and it was shutdown in February 2008. It was rehabilitated and resumed operation at the end of 2010. After rehabilitation, Well 14 is only capable of producing up to 3,400 gpm. Between October 30, 2012 and November 3, 2012, Well No. 14 was operated when Well No. 3 was temporarily out of service. However, Well 14 has not been operated since that time. In 2016, CDWC constructed a pipeline from Well 10 to the IX system influent.

The IX system for perchlorate treatment consists of five sets of IX vessels, each with two vessels operating in series in a lead-lag configuration, for a total of 10 vessels. The total treatment capacity is 5,000 gpm and each set of IX vessels treats up to 1,000 gpm of flow.

The UVPhox System treats NDMA and 1,4-dioxane and consists of two independent trains. Each train consists of two reactor chambers and each chamber contains two UV reactors (UVRs). Each UVR contains 72 UV lamps and sleeves. The treatment capacity of each train is 5,000 gpm. The UVPhox is designed to treat NDMA at concentrations as high as 200 ng/L to below the detection level of 2 ng/L. Hydrogen peroxide may be injected into the water from Well No. 3 before entering the UVPhox system in the event 1, 4-dioxane is detected and requires treatment. There are three air strippers used for the removal of VOCs that are capable of treating a total of up to 15,000 gpm.

CDWC received a permit amendment from DDW to operate Well 10 in May 2016. Operation of Well 10 began in June due to motor failure on Well 6. In October 2016, CDWC completed construction of the influent pipeline connecting Well 10 to the ion exchange system.

Technical performance reports for the IX and UVPhox systems are prepared under Provision 36 of Permit Amendment No. 1910199PA-001 and Provisions 59 of the Permit Amendment 191 0199PA-003, respectively, and are required to be submitted annually to DDW. The annual report, "N-Nitrosodimethylamine (NDMA) UVPHOX Treatment Facility Technical Performance Report" (Stetson, 2020), was submitted in March 2020 and describes the status and performance of the UVPhox treatment system for the calendar year of 2019. The annual report, "Technical Performance Report California Domestic Water Company Perchlorate Treatment Facility (Stetson, 2019c) was submitted in August 2019 and describes the status and performance of the IX treatment system for the period July 1, 2018 to June 30, 2019. In addition, CDWC submits monthly compliance reports to DDW.

Treatment system improvements or evaluations initiated in 2019 included:

- Several drawdown tests were performed on Well 3 throughout the year;
- In February, the blower belts were change and SCE pump tests on pumps and motors were performed;
- Trojan Unit 2 was rebuilt in March;
- The blower motor were replaced on Air Stripper No. 2 in April;
- In September, the screen in the carbon adsorber was replaced, the Cla-Val and low pressure alarm on adsorber were serviced, and the reservoir pump was serviced; and
- The effluent valve was replaced in October.

In 2019, the CDWC Subproject extracted and treated approximately 16,827 acre-feet of water, equating to an average flow rate of 10,426 gpm (Table 2-1). Although the production rate has decreased over the last three years (13,145 gpm during 2017 and 11,709 gpm in 2019), it remains above the minimum extraction rate of 8,000 gpm for the Bassett Wellfield as requested by EPA.

## 3. PERFORMANCE MONITORING ACTIVITIES

As described in the PSEP, monitoring activities for the assessment of the interim remedy performance consist of two phases. The first phase consisted of baseline potentiometric and water quality monitoring prior to extraction well startup and was completed in April 2005. The second phase involves more frequent potentiometric and water quality monitoring during startup and initial operation of the extraction wells, followed by reduced monitoring frequencies after several years of continuous operation. The second phase of monitoring began in April 2005, although not all the extraction wells were fully operational at that time. Potentiometric monitoring was performed on an increased frequency, as required, from April 2005 through November 2006.

The FSP and QAPP describe monitoring methods and laboratory analyses of groundwater samples collected in the BPOU and were initially approved by EPA with the modifications to the PSEP in a letter dated February 12, 2007. The FSP and QAPP have been periodically updated to address modifications to the performance monitoring components of the PSEP. The most recent updates to the QAPP (Rev. 5) and the FSP (Rev. 7) were submitted to EPA in April 2013 (AMEC, 2013a and AMEC, 2013b) and approved by EPA in a letter dated May 21, 2013.

As described in Section 1.1, a revised version of the PSEP (Rev. 4) was prepared to address EPA comments received in late 2012 and early 2013. Revisions to the PSEP included the addition of 1,2,3-TCP as a COC, clarification of monitoring and reporting requirements for non-COCs such as EDB, and the modification of remedial action objectives outlined in Sections 2.2.1 and 2.2.2 (AMEC, 2013c). EPA approved the revised PSEP in a letter dated May 21, 2013.

Potentiometric monitoring, water quality monitoring, and groundwater modeling activities that were completed in support of performance evaluation activities during 2019 are discussed in the following sections.

### 3.1 Potentiometric Monitoring

Potentiometric monitoring of wells included in the PSEP monitoring program continued to be conducted by the Watermaster and CRs throughout 2019. Locations of the wells included in the BPOU potentiometric monitoring program are shown on Figure 3-1 and their monitoring schedules are presented in Table 3-1. Potentiometric monitoring completed for the PSEP monitoring program during 2019 is summarized below.

- Potentiometric data were collected semi-annually in all 11 extraction wells during the second and fourth quarters of 2019.

- Potentiometric data were collected semi-annually in 18 multiport monitoring wells and 17 piezometer clusters with the following exceptions:
    - Potentiometric data were not collected from piezometer cluster PZ3-1A in 2019. Per the 12 May 2016 email to the Watermaster, EPA approved suspension of piezometric monitoring at PZ3-1A S/D until further notice due to access considerations and infeasibility of road closure due to the hospital emergency vehicle route;
    - Potentiometric data were not collected from piezometer cluster PZ3-5EB in the fourth quarter of 2019 because of an inability to access the piezometer;
    - Potentiometric data were not collected from multiport monitoring well MW 5-19 in the second quarter of 2019 because an updated access agreement had still not been secured with Los Angeles County (LACO); and
    - Potentiometric data were not collected from multiport monitoring well MW 5-26 in the fourth quarter of 2019 due to an inability to access the well during road construction.
- Potentiometric data were collected weekly in one conventional monitoring well, the LACO Key Well, by the Main San Gabriel Basin Watermaster.

## 3.2 Water Quality Monitoring

Water quality monitoring of existing wells included in the PSEP continued to be conducted by the Watermaster and the CRs throughout 2019. Locations of wells included in the BPOU groundwater quality monitoring program are shown on Figure 3-2 and their monitoring schedules are presented in Table 3-2.

Groundwater samples were analyzed for the 21 COCs listed in PSEP Table 2-1 (AMEC, 2013c), including: 1,4-dioxane, NDMA, perchlorate, and VOCs. Although no longer required for the PSEP, groundwater samples were analyzed for nitrate and sulfate to satisfy DDW permit requirements. Groundwater quality monitoring completed for the PSEP monitoring program during 2019 is summarized below.

- Monthly DDW-required groundwater samples collected in 18 extraction wells were used to fulfill the quarterly monitoring and annual requirements for the PSEP with the following exceptions:
    - Groundwater samples were not collected from the following extraction wells because they were not operational:

        - LPVCWD 05 in the second, third and fourth quarters of 2019 due to VFD failure;
        - SA1-1 in the first and second quarters of 2019;
        - SA1-2 in all of 2019; and
        - SA1-3 in the first and second quarters of 2019.
    - Groundwater samples in most extraction wells were not analyzed for acetone and carbon disulfide because these analytes are not required by DDW.
- Annual groundwater samples were collected from all 18 multiport wells and in the MW5-28 monitoring well cluster. The PSEP sampling requirements were achieved with the following exception:
    - The uppermost sampling ports in multiport monitoring wells MW5-03 (Port 10) and WHICO MP-1 (Port 6) were dry in 2019; therefore, annual groundwater samples were not collected from these ports.
- Annual groundwater samples were collected from all eight conventional monitoring wells required by the PSEP, including AJMW-2R, AJMW-4, AJMW-6, ALRMW-1R, ALRMW-3, ALRMW-8, ALRMW-9, and the LACO Key Well, and all PSEP sampling requirements were achieved from these wells in 2019.
- Groundwater samples were collected from 10 of the 11 production wells. The PSEP sampling requirements were achieved with the following exception:
    - Production well SGVWC B6D was not in operation in 2019 so groundwater samples could not be collected.

Additional groundwater quality monitoring was also performed by the WEs to satisfy the requirements of DDW drinking water permits. Results of the water quality monitoring performed in 2019 are presented in Section 5.2.

## 3.3 Groundwater Model Updates

This section documents updates to the groundwater model performed in Model Year (MY) 2018-19 (July 1, 2018 - June 30, 2019). Model years as described in this report are consistent with water years utilized by the Watermaster. The complete timeframe for the groundwater model simulation was July 1, 2003 to June 30, 2019.

As described in the PSEP, the BPOU groundwater model is the primary tool for assessing extraction system performance. The BPOU groundwater model consists of a transient, finite element model developed using the proprietary FEFLOW software code (FEFLOW) developed by the DHI Group. The development, configuration, and systematic modifications of the BPOU

groundwater model are described in the Comprehensive Groundwater Modeling Report, dated July 29, 2005 (Geomatrix, 2005), the Addendum to the Comprehensive Groundwater Modeling Report, dated September 8, 2006, (Geomatrix, 2006c), Addendum to the 2014 Annual Performance Evaluation Report (Geosyntec, 2015b), and the 2016 Annual Performance Evaluation Report (Geosyntec & ERM, 2017).

During MY 2018-19, the extent of the model domain, vertical discretization, and hydrogeological parameterization were deemed appropriate and were unchanged. Consequently, updates to the model reported herein do not represent a reconfiguration of the model or change to the conceptual site model.

For the 2019 Annual PE Report, the BPOU groundwater model was updated with the annual dataset through the end of MY 2018-19. The model updates are described in detail below in Sections 3.3.1 through 3.3.3. The following data were updated:

- Well pumping rates (quarterly average);
- Recharge from spreading basins and rivers;
- Regional recharge from precipitation and return flows (mainly from urban irrigation);
- Water levels for boundary conditions; and
- Pumping locations that were not available in previous model years.

### 3.3.1 Groundwater Pumping Updates

For MY 2018-19, groundwater pumping was updated based on production records obtained from the Watermaster. Figure 3-4 shows the pumping wells used in the model, including new wells added to the model in 2019. Figure 3-5 shows the cumulative quarterly pumping over the simulation period.

Groundwater pumping in MY 2018-19 continued to exhibit similar seasonal trends as previous years. The largest amount of pumping in MY 2018-2019 occurred during the peak of the dry season in the third quarter of the calendar year, and the smallest amount of pumping occurred during the peak of the wet season in the first quarter of the calendar year.

### 3.3.2 Groundwater Recharge Updates

Areal recharge of groundwater in the basin is through spreading basins, river losses to the underlying aquifer, infiltration of precipitation, and irrigation return flows. For MY 2018-19, spreading basin and river recharge data were obtained from LACDPW and input into the top layer of the groundwater model. Table 3-3 summarizes the quarterly recharge volumes for spreading basins and river reaches used in the model. Additional details on the application of

recharge data to spreading basins and San Gabriel River reaches are described in the Addendum to 2014 Annual Performance Evaluation Report and the Revised Final 2015 Annual PE Report (Geosyntec, 2015b and Geosyntec & ERM, 2016, respectively).

Table 3-4 summarizes the quarterly recharge volumes from precipitation and irrigation return flows for each recharge zone used in the model. Figure 3-6 presents the quarterly recharge volumes from all simulated water conservation facilities (spreading basins and river reaches) and from regionally-distributed recharge (precipitation and irrigation return flows). Figure 3-7 presents a comparison of annual recharge and annual pumping. As shown on Figure 3-7, recharge exceeded groundwater pumping by approximately 55,800 acre-feet during MY 2018-2019. The recharge zone locations shown on Figure 3-8 were unchanged during MY 2018-2019.

Consistent with the procedures described in the Comprehensive Groundwater Modeling Report (Geomatrix, 2005), prior to MY 2018-19 regional recharge from precipitation and irrigation return flows was applied to the model as follows:

- Quarterly average precipitation data obtained from weather stations in the basin was scaled in nine recharge zones based on historical climate data so that more precipitation was applied in the higher elevation areas and less in the valley. Sixteen-percent of all precipitation was assumed to infiltrate and recharge groundwater; and
- Four inches per year (in/yr) of urban return flow recharge was added to each recharge zone as follows:
    - January to March - 0.5 inch;
    - April to June – 1 inch;
    - July to September – 1.5 inch; and
    - October to December – 1 inch.

In general, the previous recharge methodology described above appeared to significantly overestimate simulated water levels compared to observed water levels in the basin. Consequently, prior to MY 2018-19, model calibration was performed by adjusting groundwater recharge from precipitation, irrigation return flow, spreading basins, and losing streams on a trial and error basis to obtain an acceptable match between simulated and observed water levels.

To reduce the amount of adjustments made to published data for model calibration, Geosyntec reevaluated the model assumptions for recharge derived from precipitation and irrigation return flow. This reevaluation included review of the methodology for estimating recharge from precipitation and irrigation return flow for the nearby Los Angeles Basin

described in the 2016 United States Geological Survey (USGS) scientific investigation report titled "*Estimating Spatially and Temporally Varying Recharge and Runoff from Precipitation and Urban Irrigation in the Los Angeles Basin, California"* ("USGS Report"; USGS, 2016). Per the USGS Report, in the Los Angeles Basin, average precipitation and recharge from precipitation are 336 and 18 millimeters per year, respectively (recharge is approximately 5.4% of precipitation), and recharge from urban return flows is approximately 0.9 in/yr. Therefore, to evaluate the effect of these recharge estimates on BPOU model calibration, recharge from precipitation and irrigation return flows in the BPOU model was updated for the entire model simulation period using the USGS Report methodology as described below.

In order for average recharge from precipitation to equal approximately 5.4% of total precipitation, quarterly recharge from precipitation was calculated in the model as follows:

- If quarterly precipitation was between 1.8 and 15 inches, quarterly recharge to groundwater was assumed to equal 10% of quarterly precipitation;
- If quarterly precipitation was less than 1.8 inches, then quarterly recharge to groundwater was assumed to be zero, under the assumption that soils during periods of lower precipitation amounts would have the capacity to absorb this amount of moisture without deep infiltration and recharge to groundwater; and
- If quarterly precipitation was greater than 15 inches, then no additional precipitation was allowed to infiltrate in the model, under the assumption that the soils would be at or near saturation resulting in surface runoff rather than resulting in additional groundwater recharge.

To achieve an average irrigation return flow of 0.9 in/yr, quarterly return flows in the model prior to and including MY 2018-19 were uniformly reduced by a factor of 0.225.

The recharge values predicted using this methodology provided a reasonably good fit of simulated water levels to observed water levels in the San Gabriel Basin with minimal additional adjustments to achieve adequate model calibration.

### 3.3.3 Boundary Condition Updates

Boundary conditions allow for groundwater baseflow into and out of the modeled groundwater basin. For MY 2018-19, boundary conditions were updated in the same manner as during previous model updates. Water level data from MY 2018-19 were obtained from the LACDPW to update the time-variant head boundaries that were used to simulate inflows to the flow system from various locations around the perimeter of the San Gabriel Basin and groundwater outflows to Whittier Narrows. Other water flux boundaries used to allow water

to enter or exit the basin at a consistent rate at the model perimeter remained unchanged during the model update.

### 3.3.4 Model Simulations of Extraction System Performance

After completing the model update, model simulations of extraction system performance were conducted using the transient particle tracking methods within FEFLOW. As described in the Comprehensive Groundwater Modeling Report (Geomatrix, 2005) and in the PSEP (AMEC, 2013), the groundwater model simulates transient boundary conditions (both internal and external) using quarterly stress periods. Therefore, groundwater withdrawals from project extraction wells and other production wells are simulated using average quarterly pumping rates for each well. Simulated pumping rates for the five-year particle tracking simulations are summarized in Table 3-5.

Transient forward particle tracking methods were used to evaluate the hydraulic performance of the project extraction wells under actual pumping conditions for a five-year time period. Forward particle tracking was performed for this reporting period by starting particles during MY 2014-15 (exact release time was 7/1/2014) and then simulating the forward paths of the particles under the transient groundwater flow conditions through the end of MY 2018-19. The starting locations for the particles were distributed uniformly within the interpreted extent of the plume of the total concentration of the six COCs normalized to their respective MCLs or NLs. The development of this total normalized COC plume is described in detail in Section 5.3.1. The horizontal grid spacing for particle starting locations is 150 meters by 150 meters with a vertical grid spacing of 15 meters. The grid was rotated 45 degrees to orient it parallel to the general groundwater flow direction (northeast-southwest) for the BPOU. The uniformly distributed starting particle locations allows for the simulation of both captured and uncaptured particles throughout the vertical extent of contamination.

Particle tracking results used to evaluate extraction system performance are presented in Section 5.0. The simulated tracks of particles released below -600 ft msl in the vicinity of Subarea 2 wells MW5-24 and MW5-25 tend to conform to dipping FEFLOW model layers, rather than observed potentiometric head measurements and simulated potentiometric heads generated by the model. As a result, simulated particle tracks in areas with steeply dipping FEFLOW model layers were determined not to be representative of actual groundwater flow paths in the vicinity of wells MW5-24 and MW5-25. This issue was discussed with EPA representatives during a conference call held on March 11, 2019. As recommended by CR representatives during the conference call, the simulated potentiometric heads from the final day of the model year (June 30, 2019) were used to develop interpreted particle flow paths in this deeper portion of the plume. As shown on Figure 5-32, flow paths originating in the lower ports of MW5-24 were manually projected orthogonal to the simulated potentiometric head

contours until they reached the nearest downgradient project extraction wells (i.e., SGVWC B26A and B26B).

It is important to note that the particle tracks do not represent contaminant mass; rather, they solely represent the advective movement of groundwater to depict the likely zones of hydraulic capture as the particles flow downgradient during the five-year particle tracking simulation period. The resulting particle tracks cannot be utilized to infer, suggest, or demonstrate the source of any contamination. Further, since these particles do not represent contaminant mass and are not representative of solute transport, they do not incorporate processes such as retardation, diffusion, dispersion, and degradation. Given the limitations of the particle tracking results, depictions of hydraulic capture presented in this report should not be considered representative of longer-term extraction system performance.

## 4. TREATMENT PLANT MONITORING ACTIVITIES

This section summarizes methods used to monitor treatment plant performance. The performance monitoring program is described in the PSEP (AMEC, 2013c) and the QAPP (AMEC, 2013a). Treatment plant operational results are presented in Section 6.0.

### 4.1 Subarea 1 – Valley County Water District Lante Treatment Plant

The VCWD Lante Treatment Plant operated at a limited capacity for much of 2019. The 2019 annual production was 8 percent of the 6,000 gpm annual target, due to the plant being offline for most of the year during the PLC upgrade work, Arrow Well testing, and other improvements. The plant began operating in recirculation mode starting July 29, 2019 and on July 31, 2019, VCWD completed installation of the OITs at the main AUX panel, which allowed the Plant to operate again on a continuous basis. The treatment plant was started up on August 28 and was operated for testing purposes during the remainder of the year. VCWD completed the Arrow Well start-up testing in December at a flow rate of approximately 6,200 gpm. The existing Arrow Well building was completed in December 2018, with the exception of a security grate over the skylight. By March 2019, both SA1-1 Well and Arrow Well pump and motor equipment installation were essentially completed with the exception of some valving associated with the above ground discharge piping. DDW inspected the Arrow Well on March 8, 2019. In April, DDW approved VCWD's startup testing plan including initial sampling/testing of Arrow Well and allowing delivery of treated water from Arrow Well to customers during startup testing if initial water quality testing shows treated water quality is compliant with DDW requirements. In August, water quality testing showed results were within acceptable range. Results were provided to DDW on August 26 and verbal approval for discharge during startup testing was provided by DDW on the same day. VCWD is currently awaiting DDW approval to operate the Arrow Well on a continuous basis.

Raw water, partially treated water, and fully treated water were sampled monthly after startup commenced in August 2019, and analyzed for COCs including 1,2,3-TCP, inorganic chemicals, and other diagnostic parameters to evaluate the effectiveness of treatment processes and to monitor the quality of the fully treated water. Treated water was delivered to SWS Plant 121 for delivery in the SWS distribution system. Water quality data, as obtained, are summarized in the DDW compliance reports appended to the monthly progress reports to EPA.

In August 2006, by mutual agreement among EPA, South Coast Air Quality Management District (SCAQMD), and VCWD, the air stripper and off gas control system permits with SCAQMD were cancelled and EPA assumed compliance oversight with respect to operations formerly covered by the SCAQMD permits. The air stripper vapor abatement equipment

consists of four 20,000-pound carbon adsorption systems equipped with heaters. Air compliance samples were collected according to the revised protocol approved by EPA on February 3, 2011. The revised protocol requires air sampling immediately after a carbon change out, every other month for 6 months, and then monthly thereafter. The CRs submitted a revised QAPP for air and waste water discharges to the EPA in September of 2012 (AMEC, 2012a) and the Field Sampling and Analysis Plan for air and waste water discharges was issued in July 2013 (Stetson 2013b). All air samples were analyzed by EPA Method TO-15.

No carbon or resin changeouts were performed during 2019 since the plant was offline for much of the year. Carbon and resin changeouts since 2009 are summarized in Table 4-1. Spent carbon and resin are managed at facilities that are authorized to accept CERCLA wastes. As they are received, certificates of disposal and reactivation are provided to EPA in the monthly progress reports.

Waste brine and water softener wastes produced by the ISEP system were discharged under Industrial Wastewater Permit Nos. 016112 and 22058 from the LACSD. The new Industrial Wastewater Permit No. 22058 was issued on May 17, 2017. Brine discharges occurred throughout 2019, although the majority was in April, June, August, September and December. Total annual discharge during 2019 was approximately 1.38 million gallons, which was a significant decrease from the 3.46 million gallons discharged in 2018. Brine discharges have been approximately one fourth what they were before the single pass IX and nitrate bypass systems were brought online, although the 2019 discharges are particularly low because the plant was offline for most of the year. Brine discharges for VCWD are summarized in Section 6.1. Brine discharge samples were collected and analyzed in accordance with permit requirements. Self-Monitoring Reports (SMRs) were submitted to LACSD and EPA on a semi-annual basis covering January to June and July to December 2019, respectively. The SMRs summarize flow, and brine quality data collected during the reporting period.

## 4.2 Subarea 3 – La Puente Valley County Water District Treatment Plant

The LPVCWD Treatment Plant operated on a near full-time basis in 2019, experiencing periodic downtime associated with routine maintenance and infrequent and unplanned operational interruptions. Operational issues experienced during 2019 included, but were not limited to:

- February: The plant experienced about 32 hours of downtime due to a hydrogen peroxide feed line leak, an effluent booster breaker trip, a SCE power outage, a blower motor fault on Air Stripper No. 1 and a Well No. 5 VFD fault; and
- August: The plant experienced about 12 hours of downtime due to installation and testing of a VFD for Well No. 5 and SCE power outages.

The 2019 extraction rate for LPVCWD was 2,355 gpm, above the EPA-approved extraction rate of 2,250 gpm. The Air Stripper No. 2 air flow issues experienced in past years, which reduced the treatment capacity, were overcome by operating Air Stripper #2 at a minimum air to water ratio of 45 to 1 throughout 2019. LPVCWD plans to submit a permit amendment request to DDW in June 2020.

Raw and treated water sampling was performed in accordance with the DDW permit and included weekly sampling for VOCs, perchlorate, 1,4-dioxane, NDMA, 1,2,3-TCP, and various inorganic and physical parameters. The weekly sampling results are included in monthly progress reports submitted to DDW as a requirement of LPVCWD's drinking water permit. These results are also included in the monthly progress reports to EPA.

In August 2006, by mutual agreement among EPA, SCAQMD, and LPVCWD, air strippers and off-gas unit permits were cancelled, and EPA assumed compliance oversight with respect to operations formerly covered by the SCAQMD permits. The VOC treatment equipment consists of a 30-foot tall air-stripping tower with a single 7,000-pound VPGAC absorber and a 41-foot-tall air-stripping tower with a single 20,400-pound VPGAC absorber. Air compliance samples were collected and analyzed by EPA Method TO-15 according to the revised protocol approved by EPA on February 3, 2011. The revised protocol requires air sampling immediately after a carbon change out and monthly thereafter. In November 2014, the EPA approved revised procedures for air monitoring and carbon change outs that were implemented in 2015. The revised procedures require air sampling immediately after a carbon change out, every other month for 6 months, and then monthly thereafter.

One VPGAC and three resin change outs were performed during 2019. The VPGAC will continue to be managed at facilities approved by EPA to accept CERCLA wastes. As they are received, copies of disposal manifests for spent carbon and resin are provided to EPA in the monthly progress reports. Carbon and resin changeouts are summarized in Table 4-1.

Waste brine and water-softener wastes were discharged under Industrial Wastewater Discharge Permit 21905 issued by LACSD. This new permit reflects the transition of treatment technology from the ISEP to the single-pass IX process on July 30, 2010. As a result of this transition, the continuous discharge of brine to the sewer has stopped and discharges consist predominantly of ion exchange rinse water. LPVCWD discharged approximately 59,600 gallons during 2019. Discharges from the LPVCWD Brine Vault are summarized in Section 6.2. Semi-annual wastewater discharge sampling was performed in accordance with permit requirements during 2019. SMRs were prepared and submitted to LACSD and EPA covering the January to June and July to December periods.

### 4.3 Subarea 3 – San Gabriel Valley Water Company B6 Treatment Plant

The SGVWC B6 Treatment Plant operated on a full-time basis in 2019, although operational issues were experienced throughout the year, including, but not limited to:

- August: Beginning on August 15th, the treatment plant operated at reduced capacity with B25A and B25B wells due to a failed VFD at Air Stripper No. 4. The VFD was replaced on September 18, and the plant returned to full capacity.
- November: The treatment plant was offline from November 1st to 5th due to failure in the UV System (communication card); and
- December: The soft starter for B26B well failed, and as a result, SGVWC removed B26A and B26B wells from service from December 24th to December 31st because the DDW permit requires both wells to operate together.

Raw and treated water sampling were performed in accordance with the DDW permit and included sampling for COCs, 1,2,3-TCP, inorganic chemicals, and other diagnostic parameters. Water quality data are summarized in monthly reports to DDW and are included in the monthly progress reports to EPA.

In August 2006, by mutual agreement among EPA, SCAQMD, and SGVWC, permits for the four air strippers and off-gas units were cancelled and EPA assumed compliance oversight with respect to operations formerly covered by the SCAQMD permits. Air compliance samples were collected according to the revised protocol approved by EPA on February 3, 2011. The revised protocol requires air sampling immediately after a carbon change out, every other month for 6 months, and then monthly thereafter. The air compliance sampling data were included in the monthly progress reports to EPA.

In 2019, SGVWC changed out approximately 80,000 pounds of carbon and 2,544 cubic feet of resin at the B6 treatment plant. As they are received, copies of disposal manifests for changeout of spent VPGAC and resin are provided to EPA in the monthly progress reports. Carbon and resin changeouts are summarized in Table 4-1.

Waste brine and water-softener wastes were discharged under Industrial Wastewater Discharge Permit 21905 issued by LACSD. This new permit reflects the transition of treatment technology to the single-pass IX process in May 2018. Discharges consist predominantly of ion exchange rinse water. LPVCWD discharged approximately 7,102,836 gallons during 2019. Brine discharges for the San Gabriel B6 plant are summarized in Section 6.3. Brine discharge samples were collected and analyzed in accordance with permit requirements. SMRs were submitted to LACSD and EPA on a semi-annual basis covering the periods from January to June and July to December 2019. The SMRs summarize flow, and brine quality data collected during the reporting period.

### 4.4 Subarea 3 – San Gabriel Valley Water Company B5 Treatment Plant

The SGVWC B5 Treatment Plant operated on a full-time basis in 2019 experiencing periodic downtime associated with routine maintenance and infrequent and unplanned operational interruptions. Raw and treated water sampling was performed in accordance with the DDW permit and included sampling for COCs, 1,2,3-TCP, inorganic chemicals, and other diagnostic parameters. Water quality data are summarized in monthly reports to DDW and are included in the monthly progress reports to EPA.

In 2019, SGVWC changed out approximately 640,000 pounds of LPGAC and 3,392 cubic feet of resin at the B5 treatment plant. Copies of disposal manifests for changeout of spent carbon and resin are provided in monthly progress reports to EPA, as they are received. Carbon and resin changeouts are summarized in Table 4-1.

SGVWC B5 Treatment Plant discharges relatively low volumes of GAC backwash under Industrial Wastewater Permit No. 017075 from the LACSD, issued on July 11, 2006, subsequently revised and reissued in 2011, and reissued again on October 4, 2016. The total annual discharge for 2019 was approximately 656,000 gallons. Discharges for SGVWC B5 are summarized in Section 6.4. Discharge samples were collected and analyzed in accordance with permit requirements. SMRs were submitted to LACSD and EPA on a semi-annual basis covering the periods from January to June and July to December 2019. The SMRs summarize flow, and discharge quality data collected during the reporting period.

### 4.5 Subarea 3 – California Domestic Water Company Treatment Plant

The 2019 annual production of the CDWC Treatment plant was 10,426 gpm, which exceeded the annual target of 8,000 gpm. Operational issues experienced throughout the year included, but were not limited to:

- January: The ion exchange system and UV system experienced about 5 hours of downtime due to a drawdown test on Well 3, static level check on Well 3, and shutdown of the UV plant;
- March: The ion exchange system experienced about 60 hours of downtime due to drawdown and meter tests on Well 3, a power outage, and rebuilding of Trojan Unit 2;
- April: Air Stripper No. 2 experienced about 79 hours of downtime due to a power outage and replacement of the blower motor;
- August: Air Strippers No. 1, 2 and 3 experienced between 33 to 36 hours of downtime during the month due to a SCE power outage. The ion exchange system experienced

about 36 hours of downtime due to communication failure at the UV Plant, and a power outage;

- September: Air Stripper No. 1 experienced about 314 hours of downtime due to repair of the screen in the carbon absorber, servicing of the Cla-Val, a low pressure alarm on the absorber, repairs to reservoir pump, and carbon changeout. Air Stripper No. 2 experienced about 15 hours of downtime due to repair of screens, carbon changeout, servicing of the Cla-Val, a low pressure alarm on the absorber, and a blower breaker failure; and
- October: Air Stripper No. 1 experienced about 67 hours of downtime due to carbon changeout and replacement of the effluent valve.

Raw and treated water sampling was performed in accordance with the DDW permit and included sampling for COCs, inorganic chemicals, and other diagnostic parameters. Water quality data are summarized in monthly reports to DDW and are included in the monthly progress reports to EPA.

CDWC performed vapor-phase carbon changeouts in June and September, during which approximately 40,000 and 42,000 pounds of carbon were changed out, respectively. No single pass IX resin changeout events occurred during 2019. Copies of disposal manifests for changeout of spent carbon and resin were provided in monthly progress reports to EPA.

# 5. PERFORMANCE MONITORING RESULTS

Potentiometric and groundwater quality monitoring data obtained for the PSEP monitoring program during 2019 were collected in support of performance monitoring during continued operation of the BPOU remedy. Results of potentiometric monitoring, water quality sampling, and groundwater modeling activities are presented in the following sections.

## 5.1 Potentiometric Monitoring Results

The primary objective of the potentiometric monitoring described in Section 3.1 is to verify that the BPOU groundwater flow model accurately reflects the observed flow field and to verify that the remedy is limiting further migration of COCs in groundwater. As noted in Section 5.2 of the PSEP, results from potentiometric monitoring are also used to develop potentiometric surface maps to assist in evaluating changes in groundwater flow patterns in the BPOU.

Key components of the assessment of potentiometric data include the following:

- Regional water level fluctuations due to basin-wide recharge and pumping conditions;
- Local-scale water level fluctuations due to ongoing groundwater production and extraction system pumping; and
- Regional and local-scale lateral and vertical hydraulic gradients and flow directions.

Potentiometric monitoring results for 2019 are discussed in the following sections.

### 5.1.1 Water Level Fluctuations

Long-term regional water level conditions in the BPOU are evaluated using water level data for the LACO Key Well. Figure 5-1 shows the water levels measured in the Key Well from 1982 through 2019. During 2019, groundwater levels in the LACO Key Well sharply increased from the annual low of 176.54 feet msl in January 2019 to 212.53 feet msl in December 2019, returning to water levels last recorded prior to 2014. In August 2019, the water level elevation at the LACO Key Well recovered above 200 feet msl, which is the lower end of the established basin operational range. As shown on Figure 5-1, similar patterns of rapid recharge, following longer periods of gradually decreasing water levels, have been previously observed in association with above average precipitation occurring in 1983, 1992, 1995, 1998, 2005, and 2010.

Figures 5-2 and 5-3 show water levels in multiport monitoring wells MW5-03 and MW5-20. The hydrographs for MW5-03 and MW5-20 represent water level conditions in Subarea 1, in the northern portion of the BPOU, and in Subarea 3, in the southern portion of the BPOU, respectively. Water levels in MW5-03 were recorded in February, May, and December 2019

and demonstrated an increase of approximately 30 feet at all ports throughout 2019, similar to the LACO Key Well. Groundwater measurements taken at the different ports of MW5-03 showed that water levels exhibited similar increasing trends at all depths. Water levels in MW5-20 were recorded in June and December 2019 and also showed a sharp increase throughout the year. Groundwater levels at the different ports of MW5-20 showed similar increasing trends at all depths, but were lower in Port 1-5 in early 2019 following a period of gradually decreasing water levels. However, in late 2019, the water levels at all ports converged again after a rapid period of recharge, as previously seen in historical trends.

### 5.1.2 Lateral Hydraulic Gradients

Generalized potentiometric surface maps for the shallow and deep elevation intervals were developed based on water level data collected in the multiport monitoring wells to assess observed groundwater flow patterns and hydraulic gradients across the BPOU. Figures 5-4 and 5-5 show observed groundwater flow conditions in the shallow (above -500 feet msl) and deep (below -500 feet msl) elevation intervals in May and June 2019. Figures 5-6 and 5-7 show observed groundwater flow conditions in the shallow and deep elevation intervals in December 2019. Evaluation of observed groundwater flow patterns on a more detailed scale is limited by spatial variations in hydrostratigraphy and significant short-term water level fluctuations that occur in response to variations in local recharge and pumping.

As shown on Figures 5-4 through 5-7, lateral hydraulic gradients are generally towards the southwest. Although it is difficult to generalize groundwater flow directions given the seasonality of pumping and recharge in the San Gabriel Basin, groundwater flow directions in the BPOU are typically more southerly during higher water level conditions and are more westerly during lower water level conditions. Groundwater flow directions based on potentiometric measurements conducted in May/June and December 2019 were generally consistent.

### 5.1.3 Vertical Hydraulic Gradients

Water level measurements in multiport monitoring wells and piezometer clusters installed near extraction wells indicate that vertical hydraulic gradients vary throughout the BPOU. As discussed in Section 5.1.1, hydrographs shown on Figures 5-2 and 5-3 represent water level conditions in Subarea 1 (MW5-03), in the northern portion of the BPOU, and in Subarea 3 (MW5-20), in the southern portion of the BPOU, respectively. As shown on Figure 5-2, hydrographs for ports at different depths in MW5-03 were generally similar, indicating very little to no upward hydraulic gradient in Subarea 1. As shown on the hydrograph for MW5-20 in Figure 5-3, the vertical gradient in Subarea 3 is varied temporally. Water levels measured in MW5-20 in shallow ports 6 and 7 in December 2018, at elevations of -85.4 and -94.4 feet msl respectively, were approximately 6 to 10 feet higher than the lower ports in MW5-20,

indicating moderate downward vertical hydraulic gradients in the shallow aquifer in Subarea 3. However, in June 2019, this difference in water levels between the shallow and deeper ports decreased to 3 to 4 feet, demonstrating a smaller downward gradient, and in December 2019, water levels in the shallow ports were similar to or higher than the deeper ports, indicating a slight upward gradient. There was no significant vertical gradient observed among the deeper ports of MW5-20.

Vertical hydraulic gradients calculated at selected multiport wells and piezometer clusters located in Subarea 1, Subarea 2, and Subarea 3 are summarized in Table 5-1. The estimates summarized in Table 5-1 are based on semi-annual water level conditions in February, May, June, and December 2019.

Calculated vertical hydraulic gradients in Subarea 1 piezometers PZ1-1BS/D and multiport well MW 5-03 were slightly upwards throughout 2019. The vertical gradient in PZ1-1BS/D remained generally consistent between 1.3 x $10^{-3}$ and 1.1 x $10^{-3}$ ft/ft in June and December 2019 respectively, and the gradient in MW 5-03 increased from 4.1 x $10^{-4}$ to 1.4 x $10^{-3}$ ft/ft between February and December 2019.

Calculated vertical hydraulic gradients were relatively low and variable in direction across the Subarea 2 multiport wells throughout 2019. The vertical gradient in well MW 5-01 transitioned from 2.5 x $10^{-3}$ ft/ft downwards in February 2019 to 1.7 x $10^{-3}$ ft/ft upwards in June, then remained upwards at 1.2 x $10^{-3}$ ft/ft in December 2019. Between May 2019 and December 2019, the vertical gradient in well MW 5-24 transitioned from 4.8 x $10^{-4}$ ft/ft upwards to 5.4 x $10^{-5}$ downwards, while the vertical gradient in MW 5-25 transitioned from 3.7 x $10^{-4}$ ft/ft downward to 1.3 x $10^{-4}$ upwards.

Calculated vertical hydraulic gradients were generally downward in Subarea 3 piezometers PZ3-1BS/D and multiport well MW 5-20 throughout 2019. The vertical gradient in piezometers PZ3-1BS/D remained downwards but increased slightly from 4.4 x $10^{-3}$ ft/ft to 5.1 x $10^{-3}$ ft/ft in June and December 2019 respectively. The gradient in MW 5-20 was 5.4 x $10^{-3}$ ft/ft downwards in June 2019; however, the vertical gradient transitioned to 3.0 x $10^{-3}$ upwards in December 2019.

## 5.2 Groundwater Quality Monitoring Results

Groundwater samples were collected from wells in the PSEP monitoring program to evaluate groundwater quality conditions in the BPOU. As described in Section 3.2, groundwater samples were analyzed for the 21 COCs listed in PSEP Table 2-1 including: 1,4-dioxane, NDMA, perchlorate, and VOCs. As described in Section 3.2, groundwater quality monitoring data collected to satisfy DDW permit requirements were used to supplement the PSEP monitoring

program during 2019. Groundwater quality monitoring results for 2019 are discussed in the following sections.

### 5.2.1 Summary of PSEP Groundwater Quality Results

Groundwater quality results for the PSEP monitoring program in 2019 are summarized in Table 5-2. This report evaluates the spatial distribution and temporal trends for six selected COCs in groundwater including: 1,4-dioxane, carbon tetrachloride, NDMA, perchlorate, PCE, and TCE. This evaluation relies on depictions of the interpreted current spatial distribution of COCs and COC concentration trends. The interpreted COC plumes are further evaluated in Sections 5.3.1, as well as in Section 5.0 of Appendix A.

Results of water quality monitoring that was performed by the WEs to satisfy the requirements of DDW drinking water permits, which also satisfies monitoring requirements under the PSEP, are presented in Table 5-2, and are summarized below:

- The DDW-required monitoring for the BPOU COCs in the extraction wells fulfills the requirements of the PSEP, but the DDW requirements also include more frequent monitoring (weekly or monthly) than the PSEP (quarterly or annually). Therefore, in some instances Table 5-2 includes additional water quality results for BPOU COCs in the extraction wells not required by the PSEP;
- Water quality results for 1,2,3-TCP are presented in Table 5-2. Concentrations of 1,2,3-TCP were detected at levels that exceed the NL [0.005 micrograms per liter (µg/L)] in one well: SA1-3 Lante;
- Detections of non-COC organic compounds for all available 2019 sampling results are presented in Table 5-3. EDB was not detected above laboratory reporting limits in 2019. In 2019, there were no reported concentrations of non-COC organic compounds that exceeded the MCLs, NLs, or regional screening levels (RSLs; if MCLs and NLs are not available); and
- Detections of TICs for all available 2019 sampling results are presented in Table 5-4. TICs were identified in 13 samples collected from 13 sampling locations inclusive of individual sampling ports in multiport wells. The TICs included possible detections of alcohols, aldehydes, alkanes, ketones, and PCE.

### 5.2.2 Data Validation and Data Quality Assessment

Data management activities for the BPOU Project are managed by LDC under contract to the Watermaster. LDC utilizes EDMSi, a web based environmental data management system, for the management of historical data compiled from the EPA San Gabriel Basin database, CRs, and other relevant sources. New water quality data that are collected for the PSEP monitoring

program are reported to LDC by laboratories, validated in ADR.Net, and uploaded to EDMSi as part of the real-time automated Tier 1A/1B process and Tier 3 selection. As specified by the QAPP (AMEC, 2013a), Tier 1A/1B validation was performed by LDC on water quality data collected for the PSEP program and manual Tier 3 validation was performed on approximately five percent for perchlorate and VOCs and ten percent for all other analyses for the PSEP. Results of the data validation are used to evaluate laboratory performance and ensure that data quality is acceptable to meet BPOU Project objectives. In July 2019, the CRs and WEs implemented changes to data management activities associated water quality data collected from project extraction wells operated by the WEs. These changes results resulted in the discontinuation of Tier 1A/1B and Tier 3 validation of water quality data for project extraction wells beginning in July 2019. EPA approved these changes in an e-mail to the CRs dated June 27, 2019.

Data qualifiers that were assigned during the Tier 1A/1B and Tier 3 reviews are shown with the groundwater sampling results summarized in Table 5-2. Based on the data validation efforts and the evaluation of field quality control (QC) samples, all analytical sample results are considered usable to support the BPOU Project Data Quality Objectives (DQOs).

TICs associated with EPA 524.2 and EPA 8270C analyses continue to be evaluated using procedures consistent with the Standard Operating Procedure used by the EPA's regional laboratory to identify and remove compounds that are clearly laboratory artifacts such as column bleed and laboratory contamination.

Prior to the start of the 2019 annual sampling event, the QA Manager reminded both the Field Sampling Manager and the Laboratory Project Manager of contaminants observed in field and laboratory blanks associated with the 2018 sampling event, potential sources of contaminants, and procedures to avoid contamination. The QA Manager verified the procedures were being implemented during the on-site field sampling and laboratory audits that were performed during the 2019 annual sampling event. Although two common laboratory contaminants (acetone and methylene chloride) and perchlorate were observed at levels below the reporting limit in equipment and field blanks, the levels and frequency were greatly reduced from 2018. The QA Manager will continue to work with the Field Sampling Manager and Laboratory Project Manager to identify and eliminate potential sources of contamination.

In 2018, LDC consulted the lab regarding N-Nitrosomorpholine detections in samples collected by the WEs and analyzed by Method 521. Though the lab indicated there was not background contamination and maintains that the method was employed without interference for N-Nitrosomorpholine, Method 521 specifically mentions the potential problems with background contamination for this analyte. As a result, the CRs recommended that the presence of N-Nitrosomorpholine be evaluated by analyzing a single round of samples from the B5 extraction wells and the three multiport wells with detectable N-Nitrosomorpholine

concentrations. Further, the laboratory would analyze these samples using Method 1625C and be instructed to specifically calibrate and report N-Nitrosomorpholine as a target analyte. However, these samples were mistakenly not collected in 2019; therefore, these samples will be added to the sample scope for 2020 and used to conduct further evaluation of past and future reported N-Nitrosomorpholine detections using Method 521.

EPA 8270C non-detect acidic compounds associated with upgradient monitoring sample from MW5-03 Port 4 collected on December 10, 2019 were qualified R due to especially low recovery of acid surrogates associated with the analysis.

Results of the Tier 3 validation are described as follows:

- The results for perchlorate, reported below the laboratory reporting limit for samples collected on May 23, 2019 at MW5-11 Ports 1 and 2, were qualified J (estimated detect) due to high recovery in the matrix spike (MS), and also elevated to the reporting limit and qualified U (non-detect) due to equipment blank contamination. As a result, the overall qualification of these results is therefore UJ (estimated non-detect);
- The results for perchlorate, reported below the laboratory reporting limit, for samples collected on June 6, 2019 at MW5-27 Ports 1 through 4, were elevated to the reporting limit and qualified U (non-detect) due to field blank and equipment blank contamination;
- The results for acetone, reported below the laboratory reporting limit, for samples collected on June 21, 2019 at MW5-01 Ports 1 through 4, were elevated to the reporting limit and qualified U (non-detect) due to field blank and equipment blank contamination;
- The results for acetone for samples collected on June 21, 2019 at MW5-01 Ports 5 through 7 were qualified U (non-detect) due to field blank and equipment blank contamination;
- The detect results for all volatile analytes for samples collected on June 21, 2019 at MW5-01 Ports 1, 5, and 6, were qualified J (estimated detect) due to high surrogate recovery; and
- The detect results for all volatile analytes were qualified J (estimated detect) and the non-detect results for were qualified UJ (estimated non-detect) for the sample collected on June 21, 2019 at MW5-01 Port 7 due to low surrogate recovery.

A Final Tier 3 validation report was submitted by LDC to the Watermaster on October 25, 2019 (LDC, 2019). The Tier 3 validation report has been posted on a secure LDC BPOU web portal.

## 5.3 Groundwater Plume Modeling Results

The following sections summarize the groundwater plume modeling for MY 2018-19 including updates to the groundwater quality model and evaluation of the distribution of COCs in the BPOU. A detailed description of the approach used for the development of plume maps and chemical cross sections for the six selected COCs is presented in Appendix A.

Consistent with previous Annual PE Reports, water quality data from wells screened at selected depths within the aquifer were interpreted using three-dimensional geospatial modeling software. For annual PE reports prior to 2015, geospatial modeling of the distribution of select COCs in groundwater was performed using the EarthVision® modeling software. Beginning in 2015, the water quality modeling was performed using Earth Volumetric Studio (EVS®) software by C Tech. EVS® has superior 3D volumetric capabilities and is used to better estimate COC mass dissolved in groundwater to support the evaluation of remedy performance as described in Section 7.1.2.3. Appendix A provides a detailed description of the development of the EVS® model for geospatial modeling of the distribution of COCs in groundwater in the BPOU.

### 5.3.1 Distribution of Selected Chemicals of Concern

The lateral distribution of the six selected COCs in three specific elevation intervals is shown in Appendix A. The three elevation intervals are as follows:

- Elevations between the water table (or potentiometric surface) and -200 feet msl;
- Elevations between -200 feet and -500 feet msl; and
- Elevations below -500 feet msl.

The plume maps for the three elevation intervals shown in Appendix A illustrate isoconcentration contours for “composite” elevation intervals for the three elevation intervals listed above. Therefore, these “composite” isoconcentration contours represent the outermost extent of a given COC at any elevation within the elevation intervals.

Included in Figures 5-8 through 5-10 is the distribution of the total concentration of the six COCs normalized to their respective MCLs or NLs for the three elevation intervals above. The total normalized COC (TCOC) concentration at each monitoring point was calculated by summing the concentration of each COC divided by its respective MCL or NL using the following equation:

$$C_{TCOC} = \Sigma\ (C_{PCE}/MCL)>1 + (C_{TCE}/MCL)>1 + (C_{CTC}/MCL)>1 + (C_{1,4\text{-diox}}/NL)>1 + (C_{CLO4}/MCL)>1 + (C_{NDMA}/NL)>1$$

where:

$C_{TCOC}$ = Total normalized COC concentration (unitless)

$C_{PCE}$/MCL = PCE concentration normalized to MCL of 5 µg/L (unitless)

$C_{TCE}$/MCL = TCE concentration normalized to MCL of 5 µg/L (unitless)

$C_{CTC}$/MCL = carbon tetrachloride concentration normalized to MCL of 0.5 µg/L (unitless)

$C_{1,4\text{-diox}}$/NL = 1,4-dioxane concentration normalized to NL of 1 µg/L (unitless)

$C_{CLO4}$/MCL = perchlorate concentration normalized to MCL of 6 µg/L (unitless)

$C_{NDMA}$/NL = NDMA concentration normalized to NL of 10 ng/L (unitless)

Normalized COC concentrations less than one (i.e., representative of concentrations less than the MCL or NL) were assigned a zero value for the calculation. As such, the outermost contour of 1 for the TCOC plume generally represents the extent of COC concentrations in the plume that exceed the MCLs or NLs.

Chemical cross sections showing the vertical distribution of selected COCs and the TCOC plume along four discrete transects are also shown in Appendix A. Cross section A-A' represents a north-south transect that is aligned generally with the longitudinal axis of the COC plumes. Cross sections B-B', C-C', and D-D' represent east-west or northwest-southeast transects that are aligned generally perpendicular to the dominant groundwater flow direction in the BPOU. Cross sections B-B', C-C', and D-D' show the distribution of the COC plumes in the upgradient, mid-plume, and downgradient areas of the BPOU and include various production wells that are vulnerable to lateral migration of COC plumes towards the west or east.

Given the three-dimensional nature of the interpolated COC plumes, the reader should consider the three-dimensional visualization that is inset in the corner of each figure that provides the appropriate context for reviewing the two-dimensional plume maps and chemical cross sections. It should be noted that the water quality data used to create the three-dimensional plume interpretations are posted on the plume maps according to the composite elevation intervals described above. In some instances, the "composite" isoconcentration contours may not appear to correspond to water quality data that are within the elevation interval because of the interpolation between sampling locations performed by the EVS® modeling software.

As with any approach used to interpolate data between known data points, there are uncertainties and limitations to the geospatial modeling approach that may result in alternative interpretations of the distribution of COCs in groundwater. These uncertainties and limitations are summarized as follows:

- The plume maps and chemical cross sections attempt to depict the 3D distribution of COCs in groundwater with 2D images, and they represent interpolated approximations of the distribution of COCs in groundwater based on available data. As described in Appendix A, the plume interpretations generally incorporate water quality data for the period from April through June 2019. Where data were not available for that time period, data from the next closest date during the August through December 2019 time period were utilized to represent the plumes as accurately as possible;
- Alternative interpretations of the distribution of the COC plumes are possible and may differ from the plumes depicted herein;
- The Duarte Fault is represented as a diffuse zone of faulting on the plume maps and chemical cross sections. However, no faulting was explicitly represented in the 3D model used to interpolate the plumes. The diffuse fault zone is considered to be a reasonable representation of the uncertainty in the fault's location as it has several fault splays concealed beneath alluvial deposits; and
- The northern-most limits of some COCs depicted on the plume maps are uncertain due to the limited amount of data available to the CRs from other EPA-named PRPs, including the Mobil/Lockheed/Valspar group, as well as other entities that may be PRPs in the northern portions of the BPOU. In consideration of the lack of recent available groundwater data from several PRP facilities and historical detections of several COCs such as TCE and PCE in the area north of the Duarte Fault zone, isoconcentration contours for TCE and PCE are truncated at the downgradient (southern) extent of the Duarte Fault zone.

Evaluation of the TCOC plume maps (Figures 5-8 through 5-10) and chemical cross sections that are shown in Appendix A (Figures A-47 through A-50) resulted in the following general observations of the spatial distribution of COCs in the BPOU:

- Consistent with previous interpretations of individual and composite COC plumes within the BPOU, the longitudinal extent of the TCOC plume extends from the Duarte Fault zone in Subarea 1, approximately 7.5 miles towards the southwest, where the plume terminates near the confluence of Avocado Creek and the San Gabriel River;
- In the shallow elevation interval above -200 feet msl, TCOC concentrations greater than 50 times the MCLs were observed along the longitudinal axis of the plume immediately downgradient of Subarea 1 and in the mid-plume area extending downgradient towards the CDWC Subproject wells. As shown in Figure 5-8, areas of localized area of TCOC concentrations exceeding 100 times the MCLs exist in the vicinity of AJ MW-4 in Subarea 1 driven by elevated perchlorate reported in November 2019, and near MW5-05 in Subarea 2. Compared to 2018, the plume of concentrations

exceeding 20 times and 50 times the MCLs increased in extent along the longitudinal axis;

- In the intermediate elevation interval between -200 and -500 feet msl, the TCOC plume extends from monitoring well MW5-03 in Subarea 1 to well COI 5 near the downgradient terminus of Subarea 3. In 2019, the extent of TCOC concentration exceeding 50 times the MCLs increased in this depth interval in Subarea 3 compared to 2018, and encompassed monitoring wells SGVWC B5E, MW 5-20, MW 5-22, and MW 5-23 (Figure 5-9). Similar to previous years, a localized area of TCOC concentrations ranging from 50 to 100 times the MCL was observed in this depth interval in Subarea 2 in the vicinity of MW5-05; and
- Below -500 feet msl, the TCOC plume extends from MW5-03 in Subarea 1 to near the SGVWC B5 extraction wells in Subarea 3. From MW5-03 to near the mid-plume wells MW5-05 and MW5-15, the plume consists of TCOC concentrations slightly exceeding the MCLs with an isolated area exceeding 5 times the MCL near MW5-24. In Subarea 3, the extent of the plume exceeding at least 5 times the MCL increased slightly farther downgradient in 2019 compared to previous years due in part to increased TCOC concentration in SGVWC well B5D.

## 5.4 Groundwater Flow Modeling Results

As described in Section 3.3, the BPOU groundwater model was updated with pumping, recharge, and boundary condition data through the end of MY 2018-2019. The adequacy of groundwater model calibration continued to be evaluated using water level observations at 89 monitoring and production well locations that were selected as long-term basin-wide calibration targets, including 47 targets located in the BPOU area. Water level observations for MY 2018-19 were updated from the San Gabriel Basin Database, California Department of Water Resources, LACDPW, the United States Geological Survey National Water Information System, and from data collected as part of the PSEP monitoring program.

### 5.4.1 Updated Model Calibration Results

After completing the model updates described in Sections 3.3.1 through 3.3.3, the model was checked for its ability to replicate observed head levels over the revised 15-year simulation period ending in MY 2018-19. As described in Section 3.3.2, the recent updates in methodology for estimating recharge from precipitation and irrigation return flows resulted in minimal adjustments being required to achieve a reasonable match between simulated and observed heads in the model.

The list of observation wells used to assess model calibration is presented in Table 5-5. Updated model calibration statistics are summarized in Table 5-6. Calibration statistics were

calculated for two data sets. The first data set (herein referred to as “complete dataset”) consists of observation and pumping wells utilized during recent model calibration efforts and data from observation wells PZ-1-3B S, PZ1-3B D, PZ3-1B S, PZ3-1B-S, MW5-03 (multiport), MW5-20 (multiport), and MW5-23 (multiport). Because the model utilizes quarterly-averaged extraction rates for pumping wells, the direct comparison of model-predicted heads to instantaneous observed heads can be misleading and does not necessarily indicate error in the modeling results. Consequently, the second data set consists of the first observation data set without the pumping wells (herein referred to as the “non-pumping dataset”).

Using the complete dataset of 70 observation points (pumping and non-pumping wells), the average basin-wide model residual (the average difference between model simulated and observed heads) for the 15-year simulation period is -0.58 feet (Table 5-6). The average model residual for the 42 observation wells within the BPOU area is 0.09 feet for the same period. The root-mean squared error (RMSE) for the calibrated model is 15.66 feet for the entire model and 7.76 feet for the BPOU area.

Using the non-pumping dataset consisting of 50 observation points (Table 5-6), the average basin-wide model residual for the 15-year simulation period is -0.62 feet. The average model residual for the 37 observation wells within the BPOU area is -0.50 feet for the same period. The RMSE for the calibrated model is 8.84 feet for the entire model and 6.00 feet for the BPOU area.

Simulated and observed potentiometric heads in the BPOU for the 15-year model simulation period are compared on hydrographs presented on Figures 5-11 through 5-18. These hydrographs illustrate the model’s ability to simulate temporal groundwater elevation changes and vertical gradients in Subareas 1, 2 and 3 of the BPOU. Figure 5-11 shows a good match between observed and model-predicted heads for the LACO Key Well. Simulated water levels in the Subarea 1 (Figures 5-12 and 5-13), Subarea 2 (Figures 5-14 through 5-16) and Subarea 3 (Figures 5-17 and 5-18) portions of the BPOU generally are within five feet of observed water levels.

As described in Section 5.1.3, overall, the observed vertical gradients in Subarea 1 and Subarea 2 are relatively small, slightly upward in Subarea 1 and either slightly upward to slightly downward in Subarea 2. Comparatively, the 15-year model simulation results generally showed a range from no vertical gradient to a very slight upward or downward vertical gradient simulated in the model in Subareas 1 and 2. Thus, the relatively small vertical gradients predicted by the model are consistent with the relatively small observed vertical gradients. This match in observed and simulated vertical gradients is depicted for Subarea 2 wells MW5-01, MW5-24, and MW5-25 on Figures 5-14, 5-15, and 5-16, respectively.

Vertical hydraulic gradients in Subarea 3 are downward in both simulated and observed water level data throughout the 15-year simulation. The simulated water levels in the shallowest ports in MW5-23 (ports 4 through 6) are generally lower than observed water levels by up to 15 feet (Figure 5-17). At the request of the EPA, previous consultants to the BPOU CRs conducted a detailed evaluation of the vertical head differences observed in Subarea 3 and refined the BPOU groundwater model by adding low permeability separating layers that were observed in well logs in parts of the Subarea 3 (Geomatrix, 2007). In addition, the vertical anisotropy ratio (ratio of vertical to horizontal hydraulic conductivity) assigned to various layers in the model was adjusted to increase simulated vertical gradients. Although these efforts resulted in some improvements to the match between observed and simulated vertical gradients, the model continues to locally under-predict observed vertical gradients in Subarea 3 as shown in Figure 5-17. This under-prediction of vertical gradients is most likely attributable to the smaller (local) scale heterogeneities that are present in the aquifer compared to the broader scale of heterogeneities that are represented in the model (Geomatrix, 2007).

Potentiometric surfaces simulated using the BPOU groundwater model are compared to observed water levels in Fall 2018 and Spring 2019 on Figures 5-19 through 5-26. The simulated results were exported from the model for approximately the same time period as the observed water levels. As shown on Figures 5-19 and 5-20, simulated water levels in Subarea 1 generally range from 3 to 9 feet higher than observed water levels in Fall 2018 and Spring 2019.

Simulated potentiometric surfaces in Subarea 3 are compared to observed water levels on Figures 5-21 through 5-26 for the following elevation intervals: above -200 feet msl, between -200 and -500 feet msl, and below -500 feet msl. These elevation intervals correspond to the approximate elevations of interpreted hydrostratigraphic separating units in Subarea 3. Figures 5-21 through 5-26 show simulated water levels versus observed at multiport monitoring wells located more distal from pumping wells (MW5-20, MW5-22, and MW5-23). In the elevation interval above -200 feet msl, simulated water levels generally ranged from 6 to 13 feet lower than observed water levels in Fall 2018 and ranged from approximately 3 to 7 feet lower than observed water levels in Spring 2019. Simulated water levels in MW5-20, MW5-22, and MW5-23 in the elevation interval between -200 and -500 feet msl generally ranged from 0 to 4 feet lower than observed water levels in Fall 2018 and were 1 to 4 feet lower than observed water levels in Spring 2019. In the elevation interval below -500 feet msl, simulated water levels at these locations were 1 to 5 feet lower than observed in Fall 2018 and were 1 to 7 feet lower than observed in Spring 2019.

The largest differences between simulated and observed water levels occur in the immediate vicinity of the SGVWC B5, B6, and CDWC pumping wells in the elevation interval above -200 feet msl (Figures 5-21 and 5-24). These differences are most likely attributable to the smaller

(local) scale of heterogeneities that are present in the aquifer compared to the broader scale of heterogeneities that are represented in the model. In addition, these differences in simulated and observed water levels may in part be related to variability in the pumping rates of various extraction wells in response to water supply demands as compared to the average pumping rates that are simulated using quarterly stress periods in the model.

The annual model water balance is summarized in Table 5-7. As described previously, recharge from precipitation and irrigation return flows was updated in the model for the entire simulation period, including previously reported recharge data for MY 2003-04 to MY 2017-18. Therefore, the previously reported annual water balances for MY 2003-04 to MY 2017-18 were also updated in Table 5-7 for consistency and to allow for valid comparisons between MY 2018-19 and previous model years. The water balance calculated by the model for MY 2018-19 was generally comparable to previous model years. In MY 2018-2019, there was a net positive increase in storage, since the combined model inflows from recharge and other inflows were greater than the sum of the groundwater outflow components from the model.

### 5.4.2 Results of Performance Evaluation Simulations

Groundwater flow simulations utilizing 5-year forward particle tracking from MY 2014-15 through MY 2018-19 were performed to evaluate the performance of the groundwater extraction system. Results of the transient five-year particle tracking simulation of extraction system performance are presented in plan view for Subarea 1 at two elevation intervals on Figures 5-27 and 5-28. Results for Subarea 3 are presented in plan view at three elevation intervals on Figures 5-29 through 5-31. Figure 5-32 presents particle tracking results in profile view along the long axis of the plume (cross section A-A'). As described above, the starting locations for the particles were assigned to provide a generalized representation of groundwater originating within the inferred horizontal and vertical extent of the TCOC plume. To aid the reader in evaluating the results, the interpreted extent of the TCOC plume in 2019 is shown on Figures 5-27 through 5-32 for reference. Particle tracks are color coded on these figures; particles that are captured by project extraction wells are shown as orange and brown tracks, particles captured by the CDWC Subproject wells are shown in blue, and particles not captured during the five-year simulation period are shown in gray. Starting particle locations are shown on the figures as solid circles located at the upgradient end of each particle track.

As described in Section 3.3.4, the simulated tracks of particles released below -600 ft msl in the vicinity of Subarea 2 wells MW5-24 and MW5-25 tend to conform to dipping FEFLOW model layers, rather than observed potentiometric head measurements and simulated potentiometric heads generated by the model. The simulated potentiometric heads from June 30, 2019 were used to develop interpreted particle flow paths in this deeper portion of the

plume for the MY 2018-19 particle tracking analysis presented in this report. As shown on Figure 5-32, flow paths originating in the lower ports of MW5-24 were manually projected orthogonal to the simulated potentiometric head contours until they reached the nearest downgradient project extraction wells (i.e., SGVWC B26A and B26B).

Given the limitations of the particle tracking results described above, depictions of short-term hydraulic control presented in this report should not be considered representative of long-term extraction system performance. Additional discussion of particle tracking results in relation to remedy performance is presented in Section 7.1.3.

## 5.5 Groundwater Extraction and Chemical Mass Removal

Monthly groundwater extraction volumes for 2019 were compiled from monthly reports submitted to DDW and EPA in monthly progress reports. Groundwater extraction volumes for all operational extraction wells in 2019 are shown in Table 2-1. Average monthly and average annual extraction rates are also provided in Table 2-1 together with design extraction rates for each extraction well, target operational extraction rates, and EPA-approved extraction rates for each well. Design extraction rates are based on the peak design capacity of the treatment plants whereas target operational extraction rates generally assume ten percent downtime for each well for treatment plant maintenance. The EPA-approved extraction rates shown in Table 2-1 are based on groundwater flow model simulations performed in support of extraction system design in 2000 and 2001 and updated in 2012 and 2013. These average extraction rates are necessary to achieve the remedial action objectives, inclusive of the addition of 8,000 gpm groundwater extraction from the CDWC Bassett Wellfield as requested by EPA in January 2015.

Estimates of chemical mass removed from extracted groundwater in 2019 for the VCWD Lante, LPVCWD, SGVWC B6, SGVWC B5, and CDWC Subprojects are presented in Section 6.0.

## 6. TREATMENT PLANT PERFORMANCE RESULTS

This section presents a summary of the 2019 operational performance results for the BPOU Subproject treatment plants.

### 6.1 Subarea 1 – Valley County Water District Lante Subproject

As described earlier in this report, the VCWD Lante Treatment Plant was offline for much of 2019 due to PLC upgrade work, Arrow well reactivation, and other improvements. The plant began operating in recirculation mode starting July 29, 2019, and on July 31, 2019, VCWD completed installation of the OITs at the main AUX panel, which allowed the plant to operate again. The treatment plant was started up on August 28 and operated for testing purposes during the rest of the year. As a result, the 2019 annual production was about 8% of the 6,000 gpm annual target. However, VCWD completed the PLC upgrade and start up testing of the Arrow Well in December with the Lante treatment plant operating at a flow rate of approximately 6,200 gpm. In the long term, it is anticipated the VCWD treatment plant will be able to meet the target extraction rates after DDW approves the continuous operation of the Arrow Well and the revised Subarea 1 extraction plan is implemented. During 2019, 810 acre-feet of groundwater was extracted and treated from the production wells (primarily SA1-3 and the Arrow Well), equating to an average annual production rate of 459 gpm.

Table 6-1 summarizes the water quality data collected from the individual production wells and from the fully treated water. The design concentrations and expected average influent concentrations for the VCWD Lante Treatment Plant, together with applicable MCLs and NLs for the COCs, are also presented in Table 6-1. During 2019, samples were only collected from SA1-1 and SA1-3 between August and December. Well SA1-2 was offline for all of 2019 and, as a result, was not sampled during the year. In April, DDW approved VCWD's startup testing plan, including initial sampling/testing of the Arrow Well and allowing temporary delivery of treated water from Arrow Well to customers during startup testing if initial water quality testing showed treated water quality was compliant with DDW requirements. The Arrow Well was sampled on August 13. Results were provided to DDW on August 26 and verbal approval for temporary discharge during startup testing was provided by DDW on the same day. Raw water concentrations in SA1-1, SA1-3 and the Arrow Well, reported in Table 6-1, did not exceed design concentrations. No COCs were detected in the fully treated water. As shown in Table 6-1, the reporting limits are below the respective MCLs or NLs for each COC. Figures 6-1 to 6-13 illustrate raw and treated water concentration trends for 2019, relative to the applicable MCL or NL.

Historically, groundwater concentrations have been typically higher in Well SA1-3 than SA1-1. However, the perchlorate concentrations observed in SA1-3 during 2019 were greater than

those in SA1-1, which did not contain levels of perchlorate above the MCL in 2019. The 1,1-dichloroethene concentrations observed in SA1-1 in 2019 exceeded those recorded in SA1-3 and were close to or exceeded the MCL. In Well SA1-3, concentrations of tetrachloroethene, perchlorate, trichloroethene, 1,2,3-trichloropropane, and chloroform typically exceeded their respective MCLs and NLs. The tetrachloroethene concentrations reported in the 2019 samples from SA1-3 ranged from 110 to 140 µg/L, as compared to the MCL of 5 µg/L. Trichloroethene concentrations observed in SA1-3 also exceeded the MCL of 5 µg/L, ranging from 40 to 53 µg/L. Elevated concentrations of tetrachloroethene (160 µg/L) and trichloroethene (70 µg/L) were also recorded in the one Arrow Well sample collected during 2019. However, no COCs were detected in any of the fully treated water samples.

Because the plant was offline for much of the year and sampling was limited and the Arrow Well was only sampled once, 2019 trends are difficult to discern. Concentrations of 1,4-dioxane and perchlorate in SA1-3 displayed increasing trends during the limited, while trichloroethene, cis-1,2-dichloroethene, chloroform and 1,2,3-trichloropropane displayed decreasing trends in SA1-3. The remaining COCs appeared to be relatively stable in SA1-3 during 2019. In general, limited COCs were detected in SA1-1 and those that were routinely above the method detection limits in the September to December 2019 samples displayed relatively stable concentration trends, with the following exceptions. Perchlorate displayed a slightly decreasing trend, while trichloroethene and chloroform concentrations were slightly increasing. The 1,1-dichloroethene concentration in the December sample from SA1-1 around 13 µg/L, as compared to the approximately 5.5 µg/L observed in the September and October samples.

Treated water COC concentrations remained below the MCLs/NLs in all of the 2019 sampling events. Average concentrations for the raw water influent to the treatment plant are summarized in Table 6-2.

Historical (2008 to 2019) trends for indicator COCs in the VCWD extraction wells are presented in Figures B-1 to B-7 (Appendix B). Concentrations of COCs are typically higher in SA1-3 than the other extraction wells; however, COC concentrations show strong decreasing trends. Mass removed during 2019 was calculated by using the average raw water concentration for each COC from each of the three production wells and multiplying that result by the volume of water treated, with the appropriate dimensional conversion. In these calculations, concentrations below the detection limit were treated as zero. For the compounds considered, approximately 22.2 pounds of chemical mass were removed by the VCWD Lante Treatment Plant in 2019. This is significantly less than the 381 pounds removed in 2018, which was expected given that the extraction wells and treatment plant were offline for much of the year and when they did operate, operations were limited to startup and testing activities. The majority of the chemical mass removed was attributed to tetrachloroethene (36%), with

trichloroethene and 1,1-dichloroethene (1,1-DCE) representing an additional 26% and 20% of the total mass removed, respectively. Perchlorate represented 13% of the total mass removed during 2019.

Exhaust air quality data for 2019 are summarized in Table 6-3 for the four air strippers and VPGAC systems. Air sampling during 2019 was limited due to the extensive downtime. During 2019, TCE was the primary VOCs detected in the vapor phase. Table 6-4 provides a summary of air risk and hazard calculated from compounds detected in the air exhaust. Risk was calculated using SCAQMD Tier 4 procedures and compared against ARARs. Calculated risk and hazard values were below ARARs for the maximum individual cancer risk (MICR), acute hazard, chronic hazard, and cancer burden.

In 2019, the VCWD Treatment Plant discharged 1,375,456 gallons of waste brine to the LACSD sewer with an annual average discharge rate of approximately 2.6 gpm. Brine flow data are summarized in Table 6-5.

## 6.2 Subarea 3 – La Puente Valley County Water District Subproject

In 2019, the average annual flow rate at the LPVCWD Treatment Plant was 2,343 gpm, which exceeded the EPA-approved extraction rate of 2,250 gpm. Approximately 3,793 acre-feet of groundwater were extracted during 2019. LPVCWD 2 and LPVCWD 3 accounted for 52 and 36 percent, respectively, of groundwater extracted and treated during 2019. LPVCWD 5 was inoperable for most of 2019 and produced the remaining 11.2 percent of groundwater extracted and treated.

Extraction wells LPVCWD 2 and LPVCWD 3 were sampled at least monthly during 2019. LPVCWD 5 was only sampled in January and February, when the well was in operation. Water quality data are summarized in Table 6-6. Figures 6-14 to 6-22 illustrate 2019 raw and treated water concentration trends relative to the applicable MCL or NL for selected COCs. COC concentrations in LPVCWD 2 were greater than those observed in LPVCWD 3 and LPVCWD 5. Most COCs in LPVCWD 2 displayed decreasing trends during 2019. COCs were either below applicable MCLs or NLs or not detected in LPVCWD 3, with the exception of perchlorate. Perchlorate, PCE, TCE, and NDMA were the only COCs detected in Well LPVCWD 5, with only TCE, NDMA and perchlorate exceeding their respective MCLs/NLs.

All three extraction wells contained perchlorate concentrations exceeding the MCL. Perchlorate concentrations in LPVCWD 2 displayed a slightly decreasing trend during 2019 (from 36 µg/L to 25 µg/L), whereas perchlorate concentrations in LPVCWD 3 was relatively stable. LPVCWD 2 and LPVCWD 5 also contained NDMA and TCE at concentrations greater than their respective MCLs. The concentrations of 1,2-dichloroethane (1,2-DCA) and carbon tetrachloride were above their respective MCLs in LPVCWD 2 and below their MCLs in in the

other extraction wells. The January sample from LPVCWD 2 contained higher concentrations of COCs than observed during the rest of the year. Concentrations of COCs in LPVCWD displayed stable or slightly decreasing trends during 2019. There were no instances during 2019 where COC concentrations in the fully treated water exceeded an MCL or NL.

Historical (2008 to 2019) trends for indicator COCs in the LPVCWD extraction wells are presented in Figures B-8 to B-16 (Appendix B). Since 2009, COC concentrations in LPVCWD 2 have consistently been greater than those in LPVCWD 3 and LPVCWD 5. Most COCs in LPVCWD 2 show decreasing trends, but high variability accompanies some of the overall decreasing trends. Concentrations of PCE in LPVCWD 2 appear relatively stable. Seasonal fluctuations, with lower concentrations in the summer months and higher concentrations in the winter months were observed from 2014 to 2019, with the exception of 2017. Historically, COC concentrations in LPVCWD 3 showed a strong decrease from 2008 to 2009 and have remained relatively stable to slightly decreasing since 2009. COC concentrations in LPVCWD 3 have been near or below the MCL/NLs since 2009, except PCE, which displayed a steady decline in LPVCWD 3 from 2008 to 2013, when concentrations fell below the detection limit and have largely remained below 0.5 µg/L. LPVCWD 5 experienced steep declines in COC concentrations during the first six months of operation (January to June 2009), and since then, most COCs have displayed a steady decline or have remained fairly stable. Concentration of 1,4-dioxane in LPVCWD 2 have historically been above the NL (1 µg/L) but dropped below the NL in 2019.

Average chemical concentrations for the treatment plant raw water influent are summarized in Table 6-7 together with the volume of water treated and the total mass removed per chemical. In these calculations, concentrations below the detection limit were treated as zero. For the COCs considered, approximately 482 pounds of chemical mass were removed from groundwater in 2019. The total chemical mass removed had gradually declined since 2007, a result of the decreasing COC concentrations. However, the increased production from LPVCWD 2, which historically has higher concentrations of COCs, resulted in an increase in mass removal during 2019.

Air quality data collected weekly from the Small Tower and Large Tower inlet and outlet are summarized in Table 6-8. A summary of the air risk and hazard associated with the off-gas GAC systems is provided in Table 6-9. The MICR, acute hazard, chronic hazard, and cancer burden ARARs were not exceeded in 2019.

Because brine discharges from the ISEP were eliminated when perchlorate treatment changed to single pass IX, only about 59,639 gallons of wastewater, consisting predominantly of IX rinse water, were discharged to the LACSD sewer in 2019. Wastewater flows are summarized in Table 6-10. Discharges met permit requirements.

### 6.3 Subarea 3 – San Gabriel Valley Water Company B6 Subproject

In 2019, the average annual flow rate at the SGVWC B6 Treatment Plant was 6,543 gpm, which exceeded the EPA-approved extraction rate of 6,500 gpm. Production was primarily from B25A and B25B, accounting for approximately 39% and 33% of the total production during the year, respectively. Wells B26A and B26B accounted for approximately 14% and 13% of the remaining production, respectively. Standby wells B6C and B6D did not extract any groundwater during 2019. Approximately 10,554 acre-feet of groundwater were extracted and treated in 2019.

SGVWC B6 Treatment Plant raw water is typically sampled monthly and treated water data is collected weekly (Table 6-11). Standby wells B6C and B6D were not sampled in 2019. Table 6-11 also includes the design and expected average influent concentrations for the SGVWC B6 Treatment Plant together with applicable MCLs and NLs for the COCs. During 2019, the only occurrences where the raw water concentrations exceeded the design concentrations were for carbon tetrachloride, where three samples from Well B26B exceeded the maximum design concentration of 10 µg/L (maximum concentration observed as 12 µg/L). In 2019, all of the weekly treated water samples were below the COCs respective MCL/NLs.

Figures 6-23 to 6-32 illustrate raw and treated water concentrations relative to the applicable MCL or NL in 2019. Concentrations of cis-1,2,-DCE and 1,1-DCE were mostly below their respective MCLS, with a few exceptions. Concentrations of 1,1,-DCE in Well B25A were at or slightly above the MCL in the May, September, and November samples and concentrations of cis-1,2-dichloroethene (cis-1,2-DCE) in Well B25A were at or slightly above the MCL in the September and November samples. Raw water concentrations of PCE exceeded the MCL in wells B25A and B25B and were below the MCL in the remaining extraction wells. With a few exceptions observed during the year, concentrations of 1,2-DCA, 1,4-dioxane, carbon tetrachloride, NDMA, perchlorate, and TCE exceeded their associated MCLs and NLs in raw water samples collected from all extraction wells. Concentration trends for COCs in raw water samples were generally stable through 2019, with the following exceptions. Concentrations of 1,2-DCA, 1,4-dioxane, and cis-1,2-DCE in Well B25A displayed a slightly increasing trend during 2019. A slightly increasing 1,4-dioxane trend was observed in Wells B25A and B26A as well. The remaining COCs were relatively stable in the raw water samples collected during 2019.

Historical (2008 to 2019) trends for indicator COCs in the B6 extraction wells are presented in Figures B-15 to B-21 (Appendix B). COC concentrations in extraction wells B26A, B6C and B6D have generally displayed relatively stable or slightly decreasing trends since 2008. Several COCs in B25A, B25B and B26B show increasing trends. Concentrations of 1,2-DCA, 1,4-dioxane, perchlorate, NDMA, PCE and TCE in B26B display increasing trends since 2008. Concentrations of 1,2-DCA, 1,4-dioxane, and TCE in B25A have displayed increasing trends. PCE concentrations

in B25A vary more than in the other extraction wells, with an overall slightly increasing trend. Perchlorate concentrations in B25A have displayed an increasing trend since 2013. Additionally, concentrations of 1,4-dioxane, PCE, TCE, NDMA and perchlorate in Well B25B have displayed a slightly increasing trend since 2014; however, concentrations of PCE and perchlorate in B25B displayed decreasing trends during 2019. Concentrations of 1,2-DCA in B25B have displayed an increasing trend since April 2016.

Average chemical concentrations for raw influent to the treatment plant are summarized in Table 6-12, together with the volume of water treated and the total mass removed per chemical. In these calculations, concentrations below the detection limit were treated as zero. For the compounds considered, approximately 3,661 pounds of chemical mass were removed from groundwater in 2019, which represents an increase from 2018 (2,118 pounds removed). TCE makes up approximately 43.3 percent of the total mass removed, with perchlorate accounting for an additional 32.0 percent and PCE accounting for 11.7 percent.

SGVWC B6 Treatment Plant air quality data are summarized in Table 6-13. Table 6-14 provides summary of air risk and hazard calculated from compounds detected in the air exhaust. Risk was calculated using SCAQMD Tier 4 procedures and compared against ARARs. The annual 52-week average rolling MICR ARAR of $1\times10^{-6}$ was exceeded in December 2019 due to faulty heater equipment that has since been repaired. The acute hazard, chronic hazard and cancer burden ARARs were also not exceeded in 2019.

The SGVWC B6 Treatment Plant discharged 7,102,836 gallons of waste brine to the LACSD sewer with an average discharge rate of approximately 12.5 gpm during 2019. Brine flow data are summarized in Table 6-15.

## 6.4 Subarea 3 – San Gabriel Valley Water Company B5 Subproject

The average annual extraction rate for the SGVWC B5 Subproject was about 6,457 gpm, which was approximately 92% of the EPA-approved extraction rate of 7,000 gpm, due to lower pumping capacity of the B5E well caused by lower water levels in the basin and rehabilitation of B5E well. Rehabilitation of Well B5E began in April 2018 and was completed on February 8, 2019. Following completion, production capacity of B5E increased significantly (approximately 3,800 gpm when operating as standalone well or 2,900 gpm when operating with other wells; pre-rehab capacity was approximately 2,000 gpm when operating with other wells). Rehabilitation of B5E well has increased plant production (up from the 2018 average production of 78 percent of the annual target). Approximately 10,418 acre-feet of water were extracted and treated. Production was primarily from wells B5B and B5D, accounting for approximately 42% and 40% of the 10,418 acre-feet of water extracted during 2019, respectively. COI 5 accounted for an additional 4% of the water extracted, and B5E accounted for the remaining 14%. The average annual production rates for B5B, B5E, B5D and COI 5 were 2,704 gpm, 2,595 gpm, 258 gpm and 898 gpm, respectively.

Raw and treated water quality data for the SGVWC B5 Treatment Plant are provided in Table 6-16, which also includes the design and expected average influent concentrations for the SGVWC B5 Treatment Plant and applicable MCLs and NLs for the COCs. All raw water concentrations were below maximum design concentrations in the production wells throughout 2019. Figures 6-33 to 6-40 show raw and treated water concentration trends relative to the applicable MCL or NL. COC concentrations in B5E tended to be higher than the other B5 extraction wells, with the exception of PCE, where Well COI 5 displayed the highest concentrations. COC concentrations tended to be below their respective MCL/NLs, with the following exceptions. In B5E, 1,2-DCA, NDMA and TCE concentrations exceeded their respective MCLs. Concentrations of carbon tetrachloride in B5E and B5D were routinely above the MCL (0.5 µg/L). Concentrations of perchlorate in Well B5E were around 20 µg/L throughout 2019, exceeding the MCL (6 µg/L), while the perchlorate concentrations in the COI 5 well varied from slightly below to slightly above the MCL during 2019. PCE concentrations observed in Well B5E were generally below the MCL (5 µg/L) in 2019, with a single exceedance (5.4 µg/L in November), while concentrations in COI 5 exceeded the MCL. No COCs were detected at concentrations exceeding their MCL or NL in the fully treated water samples.

COC concentrations in all of the extraction wells displayed relatively stable trends throughout 2019, with the exception of carbon tetrachloride in B5E, which displayed an increasing trend from August to December and NDMA in B5E, which showed a slightly decreasing trend.

Historical (2008 to 2019) trends for COCs in the B5 extraction wells are presented in Figures B-22 to B-28 (Appendix B). Concentrations of PCE, TCE, 1,2-DCA, perchlorate, NDMA and carbon tetrachloride in Well B5E have shown increasing trends from 2008 through 2013-2014. During the period from approximately 2013 to 2014, PCE concentrations continued their increasing trend in B5E, whereas carbon tetrachloride displayed a decreasing trend and the other chemicals generally remained stable or showed a slightly increasing trend.

All of the COC concentrations in Well B5B have generally shown a stable or slightly decreasing trend since 2008. However, after a stable period from 2008 to 2015, PCE concentrations in Well B5B increased from 2015 to mid-2018, and decreased thereafter. Similar trends appear to be present in COI 5, with the exception of PCE, which has shown a generally increasing trend from 2009 to 2019. With these exceptions, most of the COCs in the B5 extraction wells display relatively stable or slightly decreasing trends.

Average chemical concentrations for the raw influent to the treatment plant are summarized in Table 6-17, together with the volume of water treated and the total mass removed per chemical. In these calculations, concentrations below the detection limit were treated as zero. For the compounds considered, approximately 286 pounds of chemical mass were removed from groundwater in 2019, which is less than the 345 pounds removed in 2018. Approximately 10,418 acre-feet of water were produced in 2019. Total mass removed by the B5 Plant

displayed an increasing trend until 2013, where a maximum of 770 pounds of contaminant were removed. Between 2013 and 2018, the total mass removed generally decreased due largely to the reduced groundwater rates; 7,036 gpm in 2013 to 5,451 gpm in 2018. Although the average production rate increased from 5,451 gpm in 2018 to 6,457 gpm in 2019, less chemical mass was removed in 2019 due to lower COC concentrations in extracted groundwater. During 2019, perchlorate, PCE and TCE accounted for approximately 83 percent of the mass removed, with 1,4-dioxane accounting for another 12.5 percent of the mass removed.

The SGVWC B5 Treatment Plant discharged approximately 656,500 gallons of wastewater from GAC backwashing to the LACSD sewer in 2019, with monthly average flow rate of 1.23 gpm. Brine flows are summarized in Table 6-18.

## 6.5 Subarea 3 – California Domestic Water Company Subproject

The average annual extraction rate for the CDWC was 10,426 gpm, exceeding the target extraction rate of 8,000 gpm. Approximately 16,827 acre-feet of groundwater were extracted and treated, of which approximately 68% was extracted from Wells 3 and 5A. An additional approximately 14% was from Well 2, with Well 8 accounting for 9% of the extracted water during 2019. Wells 6 and 10 accounted for 4% each. Well 14 did not operate during 2019.

The extraction wells were sampled at least once a month during 2019. Raw and treated water quality data for the CDWC Treatment Plant are provided in Table 6-19, which also includes the design and expected average influent concentrations and applicable MCLs and NLs for the COCs. Carbon tetrachloride, perchlorate and NDMA concentrations in Well 3 were above MCL/NLs throughout 2019. Concentrations of TCE and PCE in wells 3, 6, 5A and 10 were generally above their respective MCLs throughout the year. PCE and TCE concentrations exceeded the design concentrations (both of which are 20 µg/L) in the majority of samples from Well 10, and TCE concentrations in Well 3 were above its design concentration for most of the year. However, no COCs were detected in fully treated water above the respective MCLs or NLs. The only COC detected in fully treated water (Bassett Blend) samples in 2019 was TCE; however, all reported concentrations were below the MCL.

Figures 6-41 to 6-47 show raw and treated water concentration trends relative to the applicable MCL or NL. In general, COC concentrations in Wells 3 and 10 were higher than those observed in the other extraction wells during 2019. Concentrations of COCs showed stable or slightly decreasing trends, with the following exceptions. COC concentrations in Well 3 tended to display a slightly decreasing trend in the beginning of the year (until around April), followed by an increasing trend to around September, before decreasing for the remainder of the year. COC concentrations in Well 10 displayed a similar trend as Well 3, with a slightly more variability throughout the year. TCE and PCE concentrations in Wells 5A and 6, and carbon

tetrachloride in Well 5A were the only other COCs detected above their respective MCLs/NLs in the remaining extraction wells. The temporal trends during 2019 in Wells 5A and 6 for these compounds were stable or slightly decreasing.

The Bassett Blend treated water samples were analyzed for PCE, TCE, and carbon tetrachloride weekly and for NDMA every other week and 1,1-DCE and cis-1,2-DCE were analyzed for monthly. Treated water COC concentrations were below the MCLs/NLs throughout 2019.

Historical (2007 to 2019) trends for COCs in the CDWC extraction wells are presented in Figures B-29 to B-35 (Appendix B). 1,2-DCA has never been detected in any of the extraction wells. PCE and TCE concentrations in Well 3 and Well 6 show an increasing trend from 2007 until late-2013/mid-2014, after which concentrations began to decrease. PCE and TCE concentrations in the remaining extraction wells have been relatively stable, with the exception Well 14 and Well 10. In Well 14, PCE and TCE concentrations increased from around 1 µg/L in January 2012 to 20 µg/L in November 2012, followed by a general decrease to about 2 to 3 µg/L by the end of 2016. However, PCE and TCE concentrations have since increased with a maximum PCE concentration of 18 µg/L and maximum TCE concentration of 22 µg/L recorded in November 2018. PCE and TCE concentrations in Well 10 have been highly variable since regular monitoring began in June 2016 and no clear trend is apparent. Perchlorate concentrations in Well 14 increased from 2012 until the end of 2014, after which concentrations have displayed a decreasing trend until the beginning of 2018 and have since displayed an increasing trend through 2019. Well 3 has displayed a slightly increasing trend in perchlorate concentrations since 2008. Carbon tetrachloride concentrations in most of the extraction wells decreased from 2007 to 2012 and have been relatively stable since, with the exceptions of Wells 3 and 6, which continue to decrease. NDMA concentrations are generally below the NL since 2008, with the exception of Well 3, which displayed a steady decrease until about 2014 and has since shown a slightly increasing trend, despite more variability than observed in the past.

Average concentrations for the raw water influent to the treatment plant are summarized in Table 6-20. Mass removed during 2019 was calculated by using the average raw water concentration for each COC from each of the seven production wells and multiplying that result by the volume of water treated, with the appropriate dimensional conversion. In these calculations, concentrations below the detection limit were treated as zero. For the compounds considered, approximately 1,283 pounds of chemical mass were removed by the CDWC Treatment Plant in 2019. Total COC mass removal from CDWC had displayed a generally decreasing trend since 2014, before an increase was observed in 2018. The 2019 mass removal represented a decrease from the 2018 mass removal of 1,612 pounds, but was comparable to 2017 (1,201 pounds). The decrease in mass removal from 2018 to 2019 is a result in a decrease in the total volume of extracted groundwater, particularly related to a decrease from Wells 6

and 10, which tend have higher PCE and TCE concentrations and an increase in extraction from Well 2, which historically has lower COC concentrations. PCE and TCE represented approximately 32.5 percent and 47.3% of the mass removed, respectively, in 2019. Perchlorate represented another 14.1% of the total mass removed.

# 7. EVALUATION OF REMEDY PERFORMANCE AND TREATMENT PLANT OPERATIONS

The following sections summarize the performance of the BPOU remedial action including chemical mass removed by the groundwater extraction system, long-term trends in COC concentration in PSEP wells, plume migration control, and the operation and performance of the Subproject treatment plants.

## 7.1 Groundwater Extraction System Performance

As described in the PSEP and Section 3.0 of this report, the evaluation of remedy performance involves both short-term and long-term evaluation of groundwater extraction system performance. Annual PE Reports evaluate the short-term performance of the groundwater extraction system using groundwater modeling and empirical data to assess whether extraction well operation is limiting further migration of groundwater contamination into less contaminated areas.

The CRs completed detailed evaluations of groundwater extraction system performance in both Subareas 1 and 3 in 2012 and 2013, respectively. An evaluation of remedy performance for Subarea 1 was completed in August 2012 (CDM Smith, 2012) and an evaluation of the Subarea 3 remedy performance was completed in March 2013 (CDM Smith, 2013). In addition to an annual update of extraction system performance relative to hydraulic performance, this report includes statistical trend evaluations of COC concentrations in groundwater and estimates of COC mass in groundwater to aid in the evaluation of chemical mass removal in support of the overall performance of the remedy. Groundwater extraction system performance is discussed in the following sections.

### 7.1.1 Extraction Well Performance

The VCWD Lante, LPVCWD, SGVWC B6, and SGVWC B5 Subproject wells are generally capable of achieving the design extraction rates according to the BPOU extraction plan with the exception of the SGVWC B5B and B5E wells. The SGVWC wells B5B and B5E are currently unable to meet the EPA approved extraction rate due to reduced pumping capacity caused by lower water levels and/or a reduction of the specific capacity of the wells.

As noted earlier in this report, the VCWD Lante Treatment Plant did not meet EPA extraction rates in 2019 due primarily to the plant not being operational during the installation of an updated PLC system and startup testing of the rehabilitated Arrow Well. It is anticipated that the DDW will approve continuous operation of the Arrow Well in mid-2020 which will allow the VCWD Subproject to increase groundwater extraction and mass removal to supplement extraction from the existing extraction wells SA1-1 and SA1-3.

### 7.1.2 Groundwater Extraction and Chemical Mass Removal

The VCWD, LPVCWD, SGVWC B6, SGVWC B5, and CDWC Treatment Plants were all operational in 2019.

- In 2019, VCWD only treated 810 acre-feet of water in 2019, due to the plant being offline most of the year related to PLC upgrades and other plant improvements. Startup testing of the Arrow Well was completed in December and the plant achieved an average flow rate of 3,980 gpm (approximately 66 percent of the approved extraction rate) that month;
- The LPVCWD Treatment Plant achieved an annual average extraction rate of 2,355 gpm, which exceeded the EPA-approved extraction rate of 2,250 gpm. LPVCWD operated using LPVCWD 2 and LPVCWD 3 as the primary extraction wells in 2019;
- The SGVWC B6 Treatment Plant operated at an annual average flow rate of 6,543 gpm, which also exceeded the EPA-approved extraction rate of 6,500 gpm;
- The SGVWC B5 Treatment Plant operated at an annual average flow rate of 6,543 gpm, which was 92 percent of the 7,000 gpm annual target due to reduced pumping capacity from the B5B and B5E wells caused by lower water levels and/or a reduction of the specific capacity of the wells and a decision by SGVWC to reduce pumping during winter months due to low water demand. Rehabilitation of the Well B5E was completed in February 2019 and resulted in an increased production rate from that well in 2019;
- The CDWC Treatment Plant operated at an annual average flow rate of 10,426 gpm, which exceeded the minimum extraction rate of 8,000 gpm for the Bassett Wellfield requested by EPA; and
- Overall, BPOU extraction from the combined BPOU treatment facilities averaged 26,239 gpm on an annual basis, which is below the EPA-approved extraction rate of 29,750 gpm, largely due to the VCWD Subproject being offline for most of the year.

The chemical mass removed at the VCWD Lante, LPVCWD, SGVWC B6, SGVWC B5, and CDWC Treatment Plants were 22 pounds, 482 pounds, 3,661 pounds, 286 pounds, and 1,283 pounds, respectively (Table 7-1). The BPOU project-wide total mass removed in 2019 was 5,734 pounds. Since 2004, the cumulative chemical mass removed is 94,118 pounds (Table 7-1).

Table 7-1 also presents a summary of the mass removal rate in terms of pounds of COCs removed per 1,000 gpm of groundwater extracted as an indicator of mass removal efficiency. The flow-weighted mass removal rate (mass removed/groundwater extracted) in 2019 was 217 pounds (lbs)/1,000 gpm, which is higher than 2017 and 2018 (approximately 166-188

lbs/1,000 gpm) and comparable to that achieved in 2016 (211 lbs/1,000 gpm). A summary of mass removal for the various BPOU subprojects is provided below:

- VCWD Subproject mass removal efficiency increased from 2005 to 2009, peaked in 2011 at around 1,700 lbs/1,000 gpm, decreased sharply from 2011 to 2017, and has shown a steady or slightly decreasing trend since 2017;
- LPVCWD Subproject mass removal efficiency displayed a slightly decreasing trend from 2007 to 2018, but an increase was observed in 2019;
- B6 Subproject mass removal efficiency has displayed a slightly increasing trend since 2005. Despite a decrease in removal efficiency observed in 2018, the mass removal efficiency for the B6 project rebounded strongly in 2019, recording its highest efficiency to date;
- B5 Subproject mass removal efficiency increased slightly from 2005 to 2013, after which a slightly decreasing trend has been observed; and
- CDWC Subproject mass removal efficiency has displayed a relatively stable trend since 2014.

Project-wide, mass removal rates peaked in 2009-2011, followed by a decreasing trend until 2014 and has since remained relatively stable around 200 lbs/1000 gpm. The overall decrease in mass removal rates in 2019 is largely a representation of reductions in COC concentrations in groundwater, particularly within Subarea 1. Mass removal rates over time for the subprojects are shown in Figure 7-1.

#### *7.1.2.1 Trends in COC Concentrations and Chemical Mass in Groundwater*

Short-term spatial trends in groundwater quality in the BPOU as observed during 2019 are presented in Section 5.3.1. Short-term changes in groundwater quality are observed seasonally and from year-to-year. These short-term changes occur primarily in response to variations in both local and regional groundwater flow conditions throughout the basin. Long-term trends in groundwater quality are difficult to discern at specific locations within the COC plumes due to seasonal changes in groundwater levels and flow directions and the localized influences of groundwater pumping from various production and extraction wells. As a result, the PSEP outlines an approach for evaluating short-term changes in groundwater quality and extraction system performance in Annual Performance Evaluation reports.

Although the evaluation of groundwater quality trends and extraction system performance presented in this annual PE report are not specifically intended to be used to develop conclusions regarding long-term trends in groundwater quality and extraction system performance, information provided herein will be used to support the evaluation of overall

remedy performance. As described in the CRs responses to EPA comments on the 2017 Annual PE Report, since the previous Subarea 1 and 3 remedy evaluations were completed in 2012 and 2013, the CRs have added detailed evaluations of performance data to the annual PE reports to provide much of the same information provided in the 2012 and 2013 remedy evaluations. These additional detailed evaluations include: 1) Mann-Kendall trend analysis of target COC concentrations in project monitoring wells to statistically evaluate temporal changes in COC concentrations, 2) estimates of the dissolved chemical mass remaining in groundwater to track changes in mass removal trends, and 3) development of TCOC concentration maps to provide a composite evaluation of changes in the distribution of COCs in groundwater. As a result, these additional evaluations of performance data combined with the other components of the annual PE reports including continued refinements to model simulations of groundwater capture satisfy the requirements of the more detailed Five-Year remedy evaluations described in the Performance Standards Evaluation Plan.

#### *7.1.2.2 Evaluation of COC Concentration Trends in PSEP Wells*

The Mann-Kendall statistical analysis was performed to evaluate long-term trends in concentration for the six selected COCs (1,4-dioxane, carbon tetrachloride, NDMA, perchlorate, PCE, and TCE) for the majority of the wells in the PSEP for the period 2004 through 2019.

The Mann-Kendall analysis is a rank based, non-parametric test used to detect trends in time series data. The Mann-Kendall test calculates a statistic, S, that represents the sum of the differences between the number of observations that are increasing or decreasing relative to earlier observations when arranged in a temporal order. The difference between one observation and an earlier observation is computed and assigned a value of 1 if the difference is positive, -1 if negative, and zero if there is no difference. If S is a sufficiently large, positive sum, the Mann-Kendall analysis indicates an increasing trend. Alternatively, if S is a sufficiently large, negative sum, then a decreasing trend is indicated. Once the observed S test statistic is calculated from the data, the probability of observing a test statistic at least as extreme as the one actually observed is calculated (“p-value”), and the confidence in the test statistic is calculated as (1 – p-value). Finally, the decision matrix below was used to make conclusions based on the confidence of the S test statistic. Further detail on the Mann-Kendall method is included in Appendix C.

| Mann-Kendall Statistic (S) | Confidence in Trend | Concentration Trend |
|---|---|---|
| S>0 | >95% | Increasing |
| S>0 | 90% - 95% | Probably Increasing |
| S>0 | <90% | No Trend |
| S≤0 | <90% and COV≥1 | No Trend |
| S≤0 | <90% and COV<1 | Stable |
| S<0 | 90% - 95% | Probably Decreasing |
| S<0 | 95% | Decreasing |

Figures 7-2 through 7-19 show the distribution of individual COCs in groundwater within the BPOU for elevation intervals between the water table and -200 feet msl, between -200 and -500 feet msl, and below -500 feet msl, and calculated Mann-Kendall concentration trends for the majority of PSEP monitoring wells.

Appendix C includes the detailed Mann-Kendall statistics and calculated trend for each COC in the PSEP monitoring points. Tables C-1 through C-6 show the Mann-Kendall statistical parameters and trend results for the six COCs for all PSEP monitoring points. Charts showing the COC time-concentration trends for all PSEP multiport monitoring wells, trend line, Mann-Kendall trend statistic, and calculated trend are included in Appendix C, chart groups C-1 through C-6. The charts are organized by Subareas 1 and 3 and by the depth intervals described above. Non-detect results are treated as follows: the lowest method detection limit associated with the non-detect results is divided by 2, and this value is used as the result for all non-detects. This prevents a non-detect result that has a reporting limit higher than the minimum detected result giving rise to an apparent increasing trend.

Summary statistics for COC concentration trends calculated using the Mann-Kendall statistical analysis are presented in Table 7-2 and the spatial locations of these trends are displayed in plan view on Figures 7-2 through 7-19. Because not all well locations have results for each of the six COCs, the number of sample results for each area and COC varies. Therefore, interpretations for the collective six COCs are described below to represent the range of results for various areas and COCs (see Table 7-2 for underlying data for individual COCs by subarea and BPOU-wide).

For the BPOU as a whole, the Mann-Kendall statistical evaluation was performed on 28,010 samples collected from 2004 – 2019 at 491 sampling locations for the six primary COCs. The following summarizes the Mann-Kendall statistics for the six COCs in combination, organized by depth intervals (the shallow depth interval above -200 feet msl, the intermediate depth interval between -200 and -500 feet msl, and the deep interval below -500 feet msl). In the

shallow interval of the BPOU, approximately 59% of the sampling locations showed decreasing concentrations whereas approximately 6% were increasing. In the intermediate interval of the BPOU, approximately 45% of the sampling locations showed decreasing concentrations whereas approximately 41% were increasing. In the deep interval of the BPOU, approximately 16% of the sampling locations showed decreasing concentrations whereas approximately 47% were increasing.

Examination of the Mann-Kendall trends in Table 7-2, Figures 7-2 through 7-19, and in Appendix C leads to the following observations and general conclusions regarding COC concentration trends in Subarea 1, Subarea 2 (mid-plume area), and Subarea 3.

**SUBAREA 1**

The following presents the summary of Mann-Kendall trend statistics for the 6,565 samples collected from 258 sampling locations for the six primary COCs in combination in Subarea 1 from 2004 – 2019. In the shallow interval of Subarea 1, approximately 59% of the sampling locations show decreasing concentrations whereas approximately 2% are increasing. In the intermediate interval of Subarea 1, approximately 64% of the sampling locations show decreasing concentrations whereas approximately 18% are increasing. In the deep interval of Subarea 1, one of the sampling locations show an increasing trend; the other 11 sample locations have no discernable concentration trend. Compared to 2018, there was an increase in the percentage of sampling locations that showed decreasing trends at all elevation intervals in Subarea 1, corresponding with either a decrease or no change in the percentage of locations that showed increasing trends.

***Wells Located within Subarea 1***

Monitoring wells within Subarea 1 include MW5-03, MW5-11, MW5-13, MW5-17, MW5-18, Whico MP-3, AJ-, and ALR- monitoring wells, and are considered to be general indicators of the quality of groundwater that is flowing toward downgradient extraction wells installed for the VCWD Lante Subproject. The following describes the trends observed for the COCs in specific monitoring wells in Subarea 1 based on the Mann-Kendall statistical evaluation presented on Figures 7-2 through 7-19:

- The concentration trends for 1,4-dioxane, carbon tetrachloride, and NDMA continue to be stable or decreasing in most monitoring points. The trend for 1,4-dioxane in Port 3 of MW5-13 in the shallow elevation interval is probably increasing, but this indicates an improvement from the increasing trend observed in 2018. Concentrations of these COCs are near or below the MCLs in most monitoring points, except for 1,4-dioxane in Port 3 of MW5-11, located in the shallow interval of the southern portion of Subarea 1;

- The concentration trend for perchlorate in these wells continues to be generally decreasing. The only exceptions are Port 3 of MW5-03 in the intermediate elevation interval, which shows an increasing trend, and Port 1 of MW5-17 in the shallow elevation interval, which is probably increasing. Concentrations of perchlorate are near or below the MCLs in most Subarea 1 monitoring points, except wells AJ MW-4 and MW5-03; and
- The concentration trends for PCE and TCE are generally stable or decreasing and below MCLs in all monitoring points, with the exceptions of Port 1 of MW5-18 in the intermediate elevation interval, which shows an increasing trend for PCE, and Port 1 of MW5-03 in the deep interval, which shows an increasing trend for TCE. Concentrations of PCE and TCE are below the MCLs in most monitoring points in the intermediate and deep elevation intervals of Subarea 1.

**SUBAREA 2**

The following presents the summary of Mann-Kendall trend statistics for the 5,990 samples collected from 301 sampling locations for the six primary COCs in combination in Subarea 2 from 2004 – 2019. In the shallow interval of Subarea 2, approximately 63% of the sampling locations show decreasing concentrations whereas approximately 6% are increasing. In the intermediate interval of Subarea 2, approximately 55% of the sampling locations show decreasing concentration trends whereas approximately 29% are increasing. In the deep interval of Subarea 2, approximately 29% of the sampling locations show decreasing concentration trends whereas approximately 43% are increasing; it should be noted that only 7 of the 54 sample locations in the deep interval had discernable concentration trends. Compared to 2018, there was an increase in the percentage of sampling locations that showed decreasing trends at all elevation intervals in Subarea 2, corresponding with either a decrease or no change in the percentage of locations that showed increasing trends.

***Wells Located within Subarea 2, Immediately Downgradient of Subarea 1***

Monitoring wells located within Subarea 2, immediately downgradient of Subarea 1, include MW5-01, MW5-24, and MW5-25, and are considered to be general indicators of the quality of groundwater that is located immediately downgradient of Subarea 1 extraction wells installed for the VCWD Lante Subproject. The following describes the trends observed for the COCs in specific monitoring wells in this portion of Subarea 2 based on the Mann-Kendall statistical evaluation presented on Figures 7-2 through 7-19:

- The concentration trends for 1,4-dioxane, carbon tetrachloride, and NDMA are predominantly stable or decreasing in these monitoring wells, with the exception of

Port 1 of MW5-24 located below -500 feet msl, which shows a slight increasing trend for 1,4-dioxane over all historical data. Concentrations of these COCs are near or below the MCLs in most Subarea 2 monitoring points, except for 1,4-dioxane in Ports 1, 2, and 7 of MW5-24, and carbon tetrachloride in Ports 1 and 2 of MW5-24 and Port 1 of MW5-25;

- The concentration trends for perchlorate in MW5-01, MW5-24, and MW5-25 in the elevation intervals above -200 feet msl and between -200 and -500 feet msl continue to be predominantly decreasing. The only exceptions are for perchlorate in well MW5-25, which is increasing in the intermediate ports (Ports 3 and 4) and deeper Port 2, and in well MW5-01, which is increasing in deeper Port 5; and
- The concentration trends for PCE and TCE in the monitoring points located above -200 feet msl and between -200 and -500 feet msl are generally stable or decreasing and are below MCLs in MW5-25. The only exception is an increasing trend for PCE in Port 3 of MW5-25; however, the concentrations of PCE are consistently below the MCLs. Due to a low frequency of detection, statistical trends were not calculated for PCE and TCE below -500 feet msl. Concentrations of PCE and TCE are predominantly not reported or below the MCLs in wells MW5-01 and MW5-25 and in the deep Ports 1 and 2 of MW5-24.

***Wells Located within Subarea 2, Mid-Plume Area***

Monitoring wells located within the mid-plume area of Subarea 2, downgradient of Subarea 1 and upgradient of Subarea 3 include MW5-05, MW5-08, and MW5-15. These wells are considered to be general indicators of the quality of groundwater that is flowing downgradient toward the SGVWC B6, LPVCWD, and CDWC Subproject extraction wells. The ports in these wells show varying COC concentration trends across the three elevation intervals based on the Mann-Kendall statistical evaluation presented on Figures 7-2 through 7-19 as summarized below:

- The concentration trends for all COCs in well MW5-15, located in the eastern portion of the plumes, are predominantly decreasing in the elevation intervals above -200 feet msl and between -200 and -500 feet msl;
- Concentration trends for 1,4-dioxane, carbon tetrachloride, NDMA, and perchlorate in well MW5-08, located in the western portion of the plumes, are generally stable to decreasing, although some trends were not calculated due to infrequency of detections. Concentration trends for PCE and TCE in this well in the interval -200 to -500 feet msl are either stable or increasing, with the exception of Port 1, which was not calculated; and

- In well MW5-05, located in the center of the plumes, several increasing trends are observed in the elevation intervals above -200 feet msl and between -200 and -500 feet msl. However, concentration trends for all COCs are decreasing in Port 3 in the shallow interval. In addition, the trend for carbon tetrachloride is stable in Port 1 in the intermediate interval and probably increasing in Port 2 in the shallow interval, which indicates an improvement from the increasing trend observed in this port in 2018. Concentration trends were not discernable for perchlorate and PCE in Port 4 and for PCE and TCE in Port 2.

**SUBAREA 3**

The following presents the summary of Mann-Kendall trend statistics for the 15,473 samples collected from 339 sampling locations for the six primary COCs in combination in Subarea 3 from 2004 – 2019. In the shallow interval of Subarea 3, approximately 50% of the sampling locations show decreasing concentrations whereas approximately 18% are increasing. In the intermediate interval of Subarea 3, approximately 36% of the sampling locations show decreasing concentrations whereas approximately 52% are increasing. In the deep interval of Subarea 3, approximately 15% of the sampling locations show decreasing concentrations whereas approximately 46% are increasing. Compared to 2018, there was an increase in the percentage of sampling locations that showed decreasing trends at all elevation intervals in Subarea 3. Except for the intermediate interval between -200 and -500 feet msl, there was either a decrease or no change in locations that showed increasing trends.

***Wells Located Within Subarea 3, Upgradient of SGVWC B5 and CDWC Extraction Wells***

Monitoring wells located within Subarea 3, upgradient of the SGVWC B5 and the CDWC extraction wells include MW5-19, MW5-20, and MW5-23. These wells are considered to be general indicators of groundwater quality flowing toward the SGVWC B5 and CDWC Bassett extraction wells. The ports in these wells show varying COC concentration trends across the three elevation intervals based on the Mann-Kendall statistical evaluation presented on Figures 7-2 through 7-19 as summarized below:

- Concentration trends for 1,4-dioxane were not calculated for most monitoring points in wells MW5-20 and MW5-23 due to infrequency of detections, except for intermediate Ports 3 to 5 at MW5-20 and Ports 3 and 4 at MW5-23, which showed stable to increasing trends, and shallow Port 5 at MW5-23, which was probably decreasing. Concentration trends for carbon tetrachloride in these wells were predominately decreasing or not calculated, and concentration trends for NDMA and perchlorate were decreasing in the shallow interval in Port 6 of MW5-20 and Port 5 of MW5-23, but varied from increasing to decreasing in the intermediate and deep

intervals. Concentration trends for PCE and TCE varied from increasing to decreasing, but were generally near or below the MCLs, except for TCE in the intermediate ports of MW5-19, MW5-20, and the deep Port 2 of MW5-23.

- Concentration trends in MW5-19, located near the extraction wells, are decreasing for NDMA, perchlorate and TCE, stable for PCE, and probably decreasing for 1,4-dioxane in Port 5 in the shallow interval. Concentration trends in the intermediate interval in Ports 3 and 4 are decreasing for carbon tetrachloride and increasing for perchlorate, PCE, and TCE; the concentration trend for NDMA in Port 4 is also increasing. The remaining concentration trends in MW5-19 were not calculated due to a low frequency of detections, including all COCs except perchlorate in Port 6 in the shallow interval, and all COCs in Ports 1 and 2 in the deep interval.

***Wells Located Within Subarea 3, Downgradient of SGVWC B5 and CDWC Extraction Wells***

Monitoring wells located within Subarea 3, downgradient of the SGVWC B5 and CDWC extraction wells, include MW5-26 and MW-27. These wells are considered to be general indicators of groundwater quality downgradient from the SGVWC B5 and CDWC extraction wells, and the BPOU project as a whole. In 2019, monitoring results for these wells were generally consistent with previous years, with either non-detect results or detected concentrations below applicable MCLs or NLs. Since 2005, COC concentrations in these wells have generally been below laboratory reporting limits with the exception of infrequent and inconsistent detections of various COC, which are typically at concentrations below MCLs or NLs. These trends indicate that there has been no significant migration of COC mass southwest of the Subarea 3 extraction wells and CDWC wells. In addition, with the exception of PCE and TCE in COI 5, concentrations of COCs are relatively stable in COI 5 and CDWC, near the terminus of the BPOU plume.

#### *7.1.2.3 Evaluation of Chemical Mass in Groundwater in the BPOU*

Mass removal rates based on influent groundwater concentrations to the various subproject treatment systems have generally declined since 2010 (Table 7-1 and Appendix B). To further evaluate in-situ changes in chemical mass within groundwater in the BPOU over time, estimates of the remaining chemical mass dissolved in groundwater in the BPOU were developed. For the period between 2004 and 2014, annual mass estimates were calculated from the total volume of each isoconcentration shell of each of the 6 primary COC plumes using the EarthVision® geospatial modeling software, and multiplying the volumes by an assumed effective porosity value of 0.20 and by the median COC concentration in each isoconcentration shell.

Starting in 2015, as described in the 2015 Annual PE Report, the dissolved chemical mass remaining in groundwater was calculated using a new modeling approach based on the EVS® modeling software. The EVS® software more accurately estimates plume mass because it explicitly calculates chemical mass based on the interpolated concentrations within the model grid cells and an assumed effective porosity (0.20).

In the EVS® model, the mass of remaining COCs was calculated using the following equation:

$$\text{Mass in Groundwater} = \sum C_i . V . n$$

where:

$C_i$ = concentration of COC, per cell, in groundwater

V = the volume of the cell

n = effective porosity of the soil (0.20)

Following the calculation of the COC masses in each model grid cell, the COC masses in each cell were summed to arrive at a total mass for the entire area for each compound.

The estimates for remaining dissolved mass for each COC and the total dissolved COC mass are shown in Table 7-3. The estimated total dissolved COC mass is also shown on Figure 7-20. As described in the 2016 Annual PE Report, due to the differences in methodologies used for estimation of dissolved COC mass between EarthVision® and EVS, the pre-2014 mass estimates are not comparable to the post-2014 estimates.

The estimated remaining total dissolved COC mass in 2019 was 48,107 pounds. As shown in Figure 7-20, between 2015 and 2017, the total estimated dissolved COC mass indicated a decreasing trend similar in magnitude to the long-term decreasing trend beginning in 2006. Since 2017, the total dissolved COC mass estimated using the EVS® model has remained relatively unchanged. The estimated dissolved masses of 1,4-dioxane, perchlorate, and PCE increased slightly from 2018 to 2019. These slight increases may be in part related to the increasing water levels in the basin and are within the level of uncertainty associated with the supporting data and methods used to estimate the in situ chemical mass in groundwater.

Between 2015 and 2019, the estimated total dissolved COC mass calculated using the EVS model decreased by approximately 24,699 pounds, corresponding to an average annual COC mass removal rate of approximately 6,175 pounds. As shown in Table 7-1, the total estimated dissolved COC mass removed by the BPOU project extraction wells from 2015 to 2019 was approximately 26,295 pounds, corresponding to an average annual COC mass removal rate of approximately 5,229 pounds per year. Therefore, the total estimated dissolved COC mass removal predicted by the model for 2015 through 2019 is approximately 18% higher than the actual mass removal from the project wells. Despite the difference in simulated total dissolved

COC mass removed based on the EVS® model compared to the actual mass removed based on influent groundwater concentrations to treatment plants (Table 7-1), we believe that EVS® model-based mass estimates provide a useful method to support the evaluation of long-term temporal trends in COC mass dissolved in groundwater in the BPOU. Because of the apparent sensitivity of the mass estimation methodology to changes in COC concentrations, we believe that the methodology is best utilized to evaluate long-term trends rather than short-term changes in plume mass from year to year.

### 7.1.3 Assessment of Migration Control

As described in the PSEP, the BPOU groundwater model is the primary tool for assessing extraction system performance. Evaluations of extraction system performance were performed using the updated BPOU groundwater model and forward particle tracking based on actual pumping and water level conditions for the five-year period from MY 2014-15 through MY 2018-19. Because particle tracking simulations only cover a five-year period which may or may not be indicative of long-term aquifer conditions, particle tracking results based on short-term (five year) simulations of groundwater flow are subject to various limitations and should not be considered representative of long-term extraction system performance.

Based on the evaluation of equipotential contours (Figures 5-19 through 5-26) and forward particle tracking results (Figures 5-27 through 5-32), the general observations regarding extraction system performance are described below:

- The operation of the VCWD Subproject had a limited effect on hydraulic control and chemical mass removal in 2019 as compared to prior years due to the plant being offline for most of the year. It should be noted that the hydraulic capture shown by the particle tracking results on Figures 5-27 and 5-28 represents average pumping conditions of about 1,940 gpm over five years from MY 2014-15 to MY 2018-19 and is not representative of pumping conditions in 2019. We anticipate that the VCWD Subproject will be able to meet the target extraction rate and achieve improved hydraulic containment beginning in mid-2020 following DDW approval of the continuous operation of the Arrow Well;
- The SGVWC B6 Subproject extraction wells achieved sustained production above the EPA approved extraction rates and continue to provide significant hydraulic control as shown by the five-year particle tracking results (Figures 5-29 through 5-32);
- Despite production from the SGVWC B5 Subproject continuing below the EPA-approved extraction rate of 7,000 gpm, increased production from the SGVWC B5 extraction wells combined with the operation of the CDWC production wells continue to provide significant hydraulic control in the downgradient portion of Subarea 3 as

demonstrated by the five-year particle tracking simulation results (Figure 5-29 through 5-32);

- The operation of La Puente Valley County Water District (LPVCWD) extraction well(s) continue to provide consistent hydraulic control and chemical mass removal throughout the five-year particle tracking simulation period;
- The CDWC Subproject wells continue to provide effective hydraulic control and chemical mass removal in Subarea 3 throughout the five-year particle tracking simulation period; and
- Consistent with previous years, operation of the COI 5 extraction well provided limited benefit related to hydraulic control or chemical mass removal when compared to other project extraction wells. As shown on Figure 5-30, the COI 5 well is interpreted to be located at the southern terminus of the TCOC plume contour of 1 (unitless) in the depth interval extending from -200 to -500 feet msl. As a result, the lateral and vertical extent of COC concentrations exceeding MCLs or NLs in the vicinity of the COI 5 well appears to be limited.

In summary, the overall performance of project extraction wells continued to limit the migration of COCs in groundwater and removed chemical mass consistent with the Performance Standards established in the PSEP.

## 7.2 Treatment System Operations

The treatment plant operations that were described in detail earlier in this report are summarized below.

### 7.2.1 Subarea 1 – Valley County Water District Lante Subproject

The VCWD Lante Treatment Plant operated under its DDW drinking water permit and delivered most of the fully treated water to SWS. The VCWD Subproject extracted and treated groundwater at an annual rate of about 459 gpm, which was approximately 8 percent of the target groundwater extraction rate. This was largely due to the plant being offline most of the year for the installation of an updated PLC system and startup testing of the rehabilitated Arrow Well. It is anticipated that the DDW will approve continuous operation of the Arrow Well in mid-2020 which will allow the VCWD Lante Subproject to increase groundwater extraction and mass removal. In the meantime, it anticipated that the VCWD Subproject will continue to extract and treat groundwater utilizing existing extraction wells SA1-1 and SA1-3.

Treatment plant modifications and other operational improvements are discussed in Section 2.1; operational problems and other issues that impacted operations and performance in 2019 are described in Section 4.1. Future operational improvements include:

- VCWD will address peroxide quenching issues at the VCWD Treatment Facility.

### 7.2.2 Subarea 3 – La Puente Valley County Water District Subproject

The LPVCWD Subproject extracted and treated groundwater at an annual rate of about 2,355 gpm, which met the extraction target of 2,250 gpm. The plant reliably treated raw water to drinking water standards for all COCs.

Treatment plant modifications and other operational improvements are discussed in Section 2.2.1; operational problems and other issues that impacted operations and performance in 2019 are described in Section 4.2. Future operational improvements include:

- LPVCWD will submit a permit amendment request to DDW to modify the air to water ratio requirement for Air Stripper No. 2, add a nitrate treatment system, approve PSR II Plus resin for treatment of perchlorate, and update the OM&M plan.

### 7.2.3 Subarea 3 – San Gabriel Valley Water Company B6 Subproject

The SGVWC B6 Treatment Plant operated at an annual average flow rate of 6,543 gpm, which met the EPA-approved extraction rate of 6,500 gpm. The plant reliably treated raw water to drinking water standards for all COCs.

Treatment plant modifications and other operational improvements are discussed in Section 2.2.2; operational problems and other issues that impacted operations and performance in 2019 are described in Section 4.3. Future operational improvements include:

- SGVWC will perform inspections of the Plant B6 air strippers and will continue the UV demonstration project.

### 7.2.4 Subarea 3 – San Gabriel Valley Water Company B5 Subproject

The SGVWC B5 Treatment Plant operated at an average annual flow rate of 6,457 gpm, which was 92 percent of the 7,000 gpm annual target. Production has recently been hampered by lower pumping capacity of the B5B and B5E wells caused by lower water levels and/or a reduction of the specific capacity of extraction wells and a decision by SGVWC to reduce pumping during winter months due to low water demand. However, SGVWC rehabilitated Well B5E in 2019, resulting in an increased production rate from that well. The plant reliably treated raw water to drinking water standards for all COCs.

Operational improvements are described in Section 2.2.3 and operational problems and other issues that impacted operations and performance in 2019 are described in Section 4.4. There are no significant operational improvements for SGVWC B5 plant currently planned for the future.

### 7.2.5 Subarea 3 – California Domestic Water Company Treatment Plant

The CDWC Treatment Plant operated at an average annual flow rate of 10,426 gpm, which exceeds the EPA target extraction rate of 8,000 gpm. The plant reliably treated raw water to drinking water standards for all COCs.

Treatment plant modifications and other operational improvements are described in Section 2.2.4; operational problems and other issues that impacted operations and performance in 2019 are described in Section 4.5.

## 8. SUMMARY AND RECOMMENDATIONS

In 2019, most BPOU subproject extraction wells continued to limit the migration of COCs in groundwater and remove chemical mass consistent with the remedial objectives established in the UAO. A notable exception are the VCWD Lante subproject extraction wells which had a limited effect on hydraulic control and chemical mass removal in 2019 as compared to prior years due to the extraction wells and treatment plant being offline for most of the year.

From the Mann-Kendall statistical evaluation summarized in Section 7.1.2.2, the relatively low percentage of sampling points with increasing concentrations in Subarea 1 as compared to Subareas 2 and 3 is consistent with previously reported observations regarding decreasing COC concentrations in Subarea 1. The slightly higher percentage of sampling locations with increasing concentration trends in Subareas 2 and 3 is consistent with the downgradient migration of dissolved chemical mass in groundwater from areas of formerly higher COC concentration (Subarea 1) to downgradient areas with lower COC concentrations (Subareas 2 and 3).

As described in Section 7.1.2.3, the total dissolved COC mass removed in the BPOU calculated by the EVS® geospatial modeling software was within 18% of the actual estimated COC mass removed by the project extraction wells. The estimates of remaining chemical mass in groundwater post-2014 continue to demonstrate a general decreasing trend in chemical mass dissolved in groundwater within the BPOU consistent with the long-term trend observed since 2004. This decrease is also reflected in the mass removal rates observed at the treatment plants (Table 7-1 and Figure 7-1). Mass removal rates peaked in 2009-2011 and have since declined, largely reflecting reductions in COC concentrations in groundwater, particularly within Subarea 1.

Recommendations and operational issues to be addressed for the BPOU in 2020 include:

- Begin full time operation of the Arrow Well at the VCWD Lante Treatment Plant as part of the implementation of the modified extraction plan for Subarea 1 that was approved by EPA in 2013. This modified extraction plan requires groundwater extraction from the Arrow and Lante (SA1-3) wells at 5,000 gpm with an additional 1,000 gpm of groundwater extraction from SA1-1. Given that COC concentrations in SA1-1 are now consistently below MCLs/NLs, it is recommended that benefits of continued operation of SA1-1 be re-evaluated in consultation with EPA after the Arrow Well is operational on a continuous basis;
- LPVCWD is currently working with DDW to permanently approve the air-to-water ratio on Air Stripper No. 2 and anticipates being able to operate at approximately 2,500 gpm to continue to meet the EPA annual target flow rate of 2,250 gpm;

- Continue to evaluate alternatives to increase pumping in SGVWC B5 Subproject wells during periods of low basin water levels and evaluate the reason for reduced extraction rates in certain wells;
- Continue to track carbon and resin change outs and provide disposal certificates to EPA in the monthly progress reports; and
- Continue to evaluate and improve operational efficiency of the LPVCWD, VCWD Lante, SGVWC B6, SGVWC B5, and CDWC Subprojects.

## 9. REFERENCES


AMEC, 2012a, Quality Assurance Project Plan for Air and Waste Water Discharges, Rev. 2, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, 14 September 2012.

AMEC, 2012b, Performance Standards Evaluation Plan, Revision 3, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, 13 April 2013.

AMEC, 2013a, Quality Assurance Project Plan for Groundwater, Rev. 5, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, 18 April 2013.

AMEC, 2013b, Field Sampling Plan for Groundwater, Rev. 7, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, 18 April 2013.

AMEC, 2013c, Revised Final Performance Standards Evaluation Plan, Revision 4, Baldwin Park Operable Unit of San Gabriel Valley Superfund Sites, 18 April 2013.

AMEC Geomatrix, 2010a, Quality Assurance Project Plan, Revision 3, Baldwin Park Operable Unit of San Gabriel Valley Superfund Sites, 9 September 2010.

AMEC Geomatrix, 2010b, Field Sampling Plan for Groundwater, Revision 5, Baldwin Park Operable Unit of San Gabriel Valley Superfund Sites, 9 September 2010.

AMEC Geomatrix, 2010c, Revised Final Performance Standards Evaluation Plan, Revision 2, Baldwin Park Operable Unit of San Gabriel Valley Superfund Sites, 9 September 2010.

AMEC and ERM, 2011, 2010 Annual Performance Evaluation Report, Volumes 1 and 2, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, 6 April 2011.

Camp Dresser and McKee (CDM), 1996, Draft, Pre-Remedial Design Report, Pre-Remedial Design Groundwater Monitoring Program, Baldwin Park Operable Unit, December 1996.

CDM, 1997, Final Draft, Pre-Remedial Design Report, Pre-Remedial Design Groundwater Monitoring Program, Baldwin Park Operable Unit, September 1997.

CDM Smith, 2012, Memorandum, Subarea 1 Analysis for BPOU Remedy Evaluation, 31 August 2012.

CDM Smith, 2013, Memorandum, Subarea 3 Analysis for BPOU Remedy Evaluation, 29 March 2013.

Bulletin No. 104-2, Planned Utilization of Ground Water Basins, San Gabriel Valley,

Appendix A: Geohydrology, March 1966.

Civiltech Engineering, Inc., 2013, Preliminary Design Report for the Lante Well Upgrade, Arrow Well Reactivation, and New Well Analysis, 21 June 2013.

Environmental Resources Management (ERM), 2006, Response to the Discovery of 1,2,3-Trichloropropane and Monitoring for Non-COCs, Baldwin Park Operable Unit, San Gabriel Valley Superfund Site, 29 September 2006.

U.S. Environmental Protection Agency, Region IX (EPA), 2000, Groundwater Extraction Plan for Baldwin Park Operable Unit, San Gabriel Valley Superfund Sites, 4 February 2000.

EPA, 2015, Modifications to the Subarea 3 Groundwater Extraction Plan, Baldwin Park Operable Unit, San Gabriel Valley Area 2 Superfund Site, 5 January 2015.

Geomatrix, 2005, Comprehensive Groundwater Modeling Report, Baldwin Park Operable Unit of San Gabriel Valley Superfund Sites, 29 July 2005.

Geomatrix, 2006a, Proposal for Non-COC Groundwater Analysis and Reporting, Performance Standards Evaluation Plan Monitoring Program, Baldwin Park Operable Unit, 24 August 2006.

Geomatrix, 2006b, Quality Assurance Project Plan, Revision 2, Baldwin Park Operable Unit of San Gabriel Valley Superfund Sites, 6 November 2006.

Geomatrix, 2006c, Addendum to the Comprehensive Groundwater Modeling Report, Baldwin Park Operable Unit of San Gabriel Valley Superfund Sites, 8 September 2006.

Geomatrix, 2007, Quality Assurance Project Plan for Air, Brine, and Treated Water, Baldwin Park Operable Unit of San Gabriel Valley Superfund Sites, 16 March 2007.

Geosyntec, 2015a, Addendum to Field Sampling and Analysis and Quality Assurance Project Plans, Air and Waste Water Discharges, Baldwin Park Operable Unit, Los Angeles County, California, 3 February 2015.

Geosyntec, 2015b, Addendum to 2014 Annual Performance Evaluation Report, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, 4 August 2015.

Geosyntec & ERM, 2016, Revised Final 2015 Annual Performance Evaluation Report, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, 16 December 2016.

Geosyntec & ERM, 2017, 2016 Annual Performance Evaluation Report, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, 12 May 2017.

Harding Lawson Associates (HLA), 1999, Draft Addendum to the Pre-Remedial Design Report, Pre-Remedial Design Groundwater Monitoring Program, Baldwin Park Operable Unit, 14 January 1999.

HLA, 2000a, Final Remedial Design/Remedial Action Work Plan, Baldwin Park Operable Unit, San Gabriel Basin, California, 10 February 2000.

HLA, 2000b, Draft Final Conceptual Design Report, Baldwin Park Operable Unit, San Gabriel Basin, California, 4 August 2000.

Laboratory Data Consultants, Inc. (LDC), 2007, Data Management Plan for the Baldwin Park Operable Unit Performance Standards Evaluation Plan Monitoring Program, May 17, 2007.

LDC, 2018, BPOU 2017 PSEP Data Validation, 31 January 2018.

LPVCWD, 2019, Technical Performance Report for the La Puente Valley County Water District Treatment Facility, Annual Report 2018-2019. November 2019.

Malcom Pirnie, 2008, Cost Assessment for Perchlorate and Nitrate Treatment at the Valley County Water District, December 2008.

Stetson Engineers, Inc. (Stetson), 2004, San Gabriel Valley Water Company Plant B6, Interim Remedial Action Report, 29 September 2004.

Stetson, 2005, Revised Draft Interim Remedial Action Report, San Gabriel Valley Area 2 Superfund Site (commonly known as the Baldwin Park Operable Unit) Valley County Water District Subproject, Operable Unit 04, March 2005.

Stetson, 2006a, Field Sampling Plan, Groundwater, Revision 4, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles, California, 6 November 2006.

Stetson, 2006b, Field Sampling Plan, Off-Gas Air, Waste Brine, and Treated Water, Revision Draft 4, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles, California, 14 August 2006.

Stetson, 2006c, Interim Remedial Action Report, San Gabriel Valley Water Company Area 2 Superfund Site, San Gabriel Valley Water Company B5 Subproject, Operable Unit 05, Part of the Baldwin Park Operable Unit, Los Angeles County, California, September 2006.

Stetson, 2008, Well No. 5 Well Completion Report, 2 July 2008.

Stetson, 2009, Summary and Evaluation Air Stripper No. 4 Acid Cleaning, Valley County Water District, SA1 Arrow Lante Treatment Plant, 18 February 2009.

Stetson, 2013b, Field Sampling and Analysis Plan, Air and Wastewater Discharges, Revision 05, July 2013.

Stetson, 2018, Technical Performance Report (2014-2015) for Plant B6 Water Treatment Facility, March 2018.

Stetson, 2019a, 2018 Annual Technical Performance Report for the Lante Plant, March 2019.

Stetson, 2019b, Technical Performance Report for the San Gabriel Valley Water Company Plant B5 Water Treatment Facility, May 2019.

Stetson, 2019c, Technical Performance Report California Domestic Water Company Perchlorate Treatment Facility, August 2019.

Stetson, 2020, N-Nitrosodimethylamine (NDMA) UVPHOX Treatment Facility Technical Performance Report, March 2020.

USGS, 2016, Estimating Spatially and Temporally Varying Recharge and Runoff from Precipitation and Urban Irrigation in the Los Angeles Basin, California, Scientific Investigation Report 2016-5068.

Watermaster, 2001, Preliminary Design Report, Watermaster Plan for the Baldwin Park Operable Unit, 23 April 2001.

# TABLES

**TABLE 2-1**
**MONTHLY GROUNDWATER EXTRACTION VOLUMES AND RATES (2019)**
Baldwin Park Operable Unit
San Gabriel Valley, California

| Extraction Well | Design Extraction Rates | EPA Approved Extraction Rates | January 2019 | | February 2019 | | March 2019 | | April 2019 | | May 2019 | | June 2019 | | July 2019 | | August 2019 | | September 2019 | | October 2019 | | November 2019 | | December 2019 | | Average Production to Date | Variance to Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | Well Production | Average Production Rate[1] | | |
| | (gpm) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (acre-feet) | (gpm) | (gpm) | (%) |
| **Subarea 1** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **VCWD SA-1 Subproject** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SA1-1 | 2,400 | 1,000 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.987 | 7 | 16.780 | 127 | 18.686 | 136 | 11.087 | 84 | 132.360 | 966 | **110** | |
| SA1-2 | Inactive | Inactive | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 5.326 | 40 | 0.000 | 0 | 12.947 | 98 | 0.000 | 0 | **11** | |
| SA1-3 (VCWD Lante) | 3,400 | 5,000 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 10.812 | 79 | 65.928 | 497 | 65.239 | 476 | 52.636 | 397 | 356.909 | 2,605 | **338** | |
| Arrow | 3,400 | | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 1.492 | 11 | 0.000 | 0 | 3.306 | 24 | 0.000 | 0 | 55.919 | 408 | **37** | |
| **Subtotal** | **9,200** | **6,000** | **0.000** | **0** | **0.000** | **0** | **0.000** | **0** | **0.000** | **0** | **0.000** | **0** | **0.000** | **0** | **0.000** | **0** | **13.291** | **97** | **88.034** | **664** | **87.231** | **637** | **76.670** | **578** | **545.188** | **3,980** | **459** | **7.7** |
| **Subarea 3** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **LPVCWD Subproject** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LPVCWD 2 | Standby | Standby | 0.592 | 4 | 110.179 | 890 | 190.452 | 1,390 | 184.357 | 1,391 | 189.142 | 1,427 | 184.535 | 1,392 | 190.784 | 1,393 | 190.492 | 1,391 | 188.025 | 1,418 | 186.966 | 1,365 | 182.037 | 1,373 | 188.568 | 1,376 | **1,234** | |
| LPVCWD 3 | Standby | Standby | 0.411 | 3 | 34.016 | 275 | 132.677 | 968 | 131.158 | 989 | 146.371 | 1,104 | 123.127 | 929 | 137.136 | 1,001 | 137.517 | 1,004 | 140.825 | 1,062 | 133.711 | 976 | 132.527 | 1,000 | 132.429 | 967 | **856** | |
| LPVCWD 5 | 2,500 | 2,250 | 339.287 | 2,477 | 85.705 | 693 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.003 | 0 | 0.015 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | **264** | |
| **Subtotal** | **2,500** | **2,250** | **340.291** | **2,484** | **229.900** | **1,858** | **323.129** | **2,359** | **315.515** | **2,380** | **335.513** | **2,531** | **307.662** | **2,321** | **327.923** | **2,394** | **328.024** | **2,394** | **328.850** | **2,480** | **320.677** | **2,341** | **314.564** | **2,373** | **320.997** | **2,343** | **2,355** | **104.7** |
| **SGVWC B6 Subproject** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C | - | - | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | **0** | |
| B6D | - | - | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | 0.000 | 0 | **0** | |
| B25A (SA3-1S) | 2,800 | 2,500 | 366.391 | 2,674 | 326.977 | 2,643 | 374.832 | 2,736 | 346.921 | 2,617 | 360.491 | 2,631 | 363.815 | 2,744 | 337.769 | 2,466 | 343.866 | 2,510 | 338.499 | 2,553 | 351.198 | 2,564 | 283.646 | 2,139 | 351.198 | 2,564 | **2,570** | |
| B25B (SA3-1D) | 2,800 | 2,500 | 313.678 | 2,290 | 280.707 | 2,269 | 322.635 | 2,355 | 299.488 | 2,259 | 310.455 | 2,266 | 312.537 | 2,357 | 274.968 | 2,007 | 276.208 | 2,016 | 271.777 | 2,050 | 280.145 | 2,045 | 262.837 | 1,983 | 280.145 | 2,045 | **2,162** | |
| B26A (SA3-2S) | 1,100 | 750 | 144.162 | 1,052 | 114.819 | 928 | 141.063 | 1,030 | 136.350 | 1,028 | 138.990 | 1,015 | 143.730 | 1,084 | 143.689 | 1,049 | 63.423 | 463 | 58.175 | 439 | 154.681 | 1,129 | 133.884 | 1,010 | 154.681 | 1,129 | **946** | |
| B26B (SA3-2D) | 1,100 | 750 | 132.229 | 965 | 104.952 | 848 | 129.382 | 944 | 125.028 | 943 | 127.594 | 931 | 130.702 | 986 | 133.597 | 975 | 58.478 | 427 | 53.758 | 405 | 142.794 | 1,042 | 114.252 | 862 | 142.794 | 1,042 | **864** | |
| **Subtotal** | **7,800** | **6,500** | **956.460** | **6,982** | **827.455** | **6,687** | **967.913** | **7,065** | **907.787** | **6,847** | **937.530** | **6,843** | **950.785** | **7,171** | **890.023** | **6,496** | **741.974** | **5,416** | **722.208** | **5,447** | **928.818** | **6,779** | **794.619** | **5,993** | **928.818** | **6,779** | **6,543** | **100.7** |
| **SGVWC B5 Subproject** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B5B | 3,300 | 3,000 | 385.445 | 2,814 | 288.069 | 2,328 | 342.837 | 2,503 | 393.450 | 2,968 | 383.804 | 2,802 | 386.529 | 2,916 | 364.674 | 2,662 | 361.148 | 2,636 | 361.304 | 2,725 | 377.314 | 2,754 | 343.779 | 2,593 | 377.314 | 2,754 | **2,704** | |
| B5E | 3,300 | 3,000 | 0.992 | 7 | 266.869 | 2,157 | 413.561 | 3,019 | 397.922 | 3,001 | 388.255 | 2,834 | 392.119 | 2,958 | 388.549 | 2,836 | 387.284 | 2,827 | 381.247 | 2,876 | 388.411 | 2,835 | 392.165 | 2,958 | 388.411 | 2,835 | **2,595** | |
| B5D | Standby | Standby | 286.983 | 2,095 | 76.396 | 617 | 0.840 | 6 | 4.013 | 30 | 25.618 | 187 | 1.224 | 9 | 1.726 | 13 | 1.853 | 14 | 2.964 | 22 | 3.101 | 23 | 8.336 | 63 | 3.101 | 23 | **258** | |
| COI 5 | 1,200 | 1,000 | 134.601 | 983 | 115.076 | 930 | 119.392 | 872 | 20.546 | 155 | 0.000 | 0 | 71.270 | 538 | 181.338 | 1,324 | 168.818 | 1,232 | 162.112 | 1,223 | 163.545 | 1,194 | 150.640 | 1,136 | 163.545 | 1,194 | **898** | |
| **Subtotal** | **7,800** | **7,000** | **808.021** | **5,898** | **746.410** | **6,032** | **876.630** | **6,399** | **815.932** | **6,154** | **797.677** | **5,822** | **851.141** | **6,420** | **936.288** | **6,834** | **919.102** | **6,709** | **907.626** | **6,846** | **932.371** | **6,805** | **894.920** | **6,750** | **932.371** | **6,805** | **6,457** | **92.2** |
| **Total** | **27,300** | **21,750** | **2,104.772** | **15,364** | **1,803.765** | **14,577** | **2,167.672** | **15,823** | **2,039.234** | **15,382** | **2,070.720** | **15,196** | **2,109.588** | **15,912** | **2,154.234** | **15,724** | **2,002.391** | **14,617** | **2,046.718** | **15,438** | **2,269.097** | **16,562** | **2,080.773** | **15,694** | **2,727.374** | **19,907** | **15,813** | **72.7** |
| **CDWC Project** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | NA | NA | 0.932 | 7 | 0.613 | 5 | 0.296 | 2 | 258.662 | 1,829 | 239.180 | 1,804 | 340.661 | 2,487 | 334.396 | 2,441 | 310.218 | 2,340 | 286.931 | 2,094 | 359.842 | 2,626 | 206.517 | 1,797 | 53.499 | 346 | **1,482** | |
| 3 | NA | NA | 553.375 | 4,039 | 503.685 | 4,071 | 489.293 | 3,818 | 587.029 | 4,151 | 552.225 | 4,165 | 570.891 | 4,167 | 565.870 | 4,130 | 536.570 | 4,047 | 587.769 | 4,290 | 582.925 | 4,255 | 480.781 | 4,184 | 576.981 | 3,730 | **4,087** | |
| 5A | NA | NA | 234.479 | 1,711 | 298.039 | 2,409 | 410.101 | 3,200 | 470.941 | 3,330 | 448.538 | 3,383 | 463.517 | 3,383 | 462.078 | 3,373 | 432.707 | 3,264 | 474.867 | 3,466 | 473.627 | 3,457 | 353.248 | 3,074 | 368.191 | 2,380 | **3,036** | |
| 6 | NA | NA | 19.913 | 145 | 3.742 | 30 | 28.531 | 223 | 77.534 | 548 | 100.452 | 758 | 132.649 | 968 | 109.219 | 797 | 105.269 | 794 | 27.925 | 204 | 15.822 | 115 | 1.350 | 12 | 0.989 | 6 | **383** | |
| 8 | NA | NA | 1.240 | 9 | 0.785 | 6 | 52.909 | 413 | 122.289 | 865 | 3.547 | 27 | 254.050 | 1,854 | 316.469 | 2,310 | 305.133 | 2,301 | 323.193 | 2,359 | 143.866 | 1,050 | 51.292 | 446 | 3.881 | 25 | **972** | |
| 10 | NA | NA | 22.831 | 167 | 3.889 | 31 | 35.957 | 281 | 67.723 | 479 | 71.683 | 541 | 140.824 | 1,028 | 129.663 | 946 | 174.607 | 1,317 | 52.743 | 385 | 49.261 | 360 | 3.271 | 28 | 3.503 | 23 | **465** | |
| **Subtotal** | **NA** | **8,000** | **832.770** | **6,078** | **810.753** | **6,552** | **1,017.087** | **7,936** | **1,584.178** | **11,202** | **1,415.625** | **10,677** | **1,902.592** | **13,887** | **1,917.695** | **13,997** | **1,864.504** | **14,063** | **1,753.427** | **12,799** | **1,625.343** | **11,863** | **1,096.460** | **9,542** | **1,007.044** | **6,510** | **10,426** | **130.3** |

**Notes:**
[1] - Average production rates estimated by dividing the total monthly well production by the number of minutes in each month.
gpm - gallons per minute.
1 acre-foot = 325,851 gallons.
* - There is a discrepancy between production figures reported by La Puente and San Gabriel for well COI #5. La Puente reported 145.91 AF. The San Gabriel value is reported.

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# TABLE 3-1
# 2019 POTENTIOMETRIC MONITORING NETWORK AND MEASUREMENT FREQUENCY
Baldwin Park Operable Unit
San Gabriel Valley, California

| Well Name | Site ID | Measurement Frequency | | |
|---|---|---|---|---|
| | | Weekly | Quarterly | Semi-Annual |
| **Extraction Wells** | | | | |
| COI 5 | 08000097 | | x | |
| LPVCWD 05 | 08000209 | | x | |
| SA1-1 | 08000185 | | x | |
| SA1-2 | 08000186 | | x | |
| SA1-3 (LANTE) | 08000060 | | x | |
| SGVWC B25A | 08000187 | | x | |
| SGVWC B25B | 08000188 | | x | |
| SGVWC B26A | 08000189 | | x | |
| SGVWC B26B | 08000190 | | x | |
| SGVWC B5B | 61900719 | | x | |
| SGVWC B5E | 08000205 | | x | |
| | | | | |
| **Piezometers** | | | | |
| PZ1-1AD | PZ1-1AD | | x | |
| PZ1-1AS | PZ1-1AS | | x | |
| PZ1-1BD | PZ1-1BD | | x | |
| PZ1-1BS | PZ1-1BS | | x | |
| PZ1-2AD | PZ1-2AD | | x | |
| PZ1-2AS | PZ1-2AS | | x | |
| PZ1-2BD | PZ1-2BD | | x | |
| PZ1-2BS | PZ1-2BS | | x | |
| PZ1-3AD | PZ1-3AD | | x | |
| PZ1-3AS | PZ1-3AS | | x | |
| PZ1-3BD | PZ1-3BD | | x | |
| PZ1-3BS | PZ1-3BS | | x | |
| PZ3-1AD | PZ3-1AD | | x | |
| PZ3-1AS | PZ3-1AS | | x | |
| PZ3-1BD | PZ3-1BD | | x | |
| PZ3-1BS | PZ3-1BS | | x | |
| PZ3-2AD | PZ3-2AD | | x | |
| PZ3-2AS | PZ3-2AS | | x | |
| PZ3-2BD | PZ3-2BD | | x | |
| PZ3-2BS | PZ3-2BS | | x | |
| PZ3-5EAD | PZ3-5EAD | | x | |
| PZ3-5EAS | PZ3-5EAS | | x | |
| PZ3-5EBD | PZ3-5EBD | | x | |
| PZ3-5EBS | PZ3-5EBS | | x | |
| PZ3-CI5AD | PZ3-CI5AD | | x | |
| PZ3-CI5AS | PZ3-CI5AS | | x | |
| PZ3-CI5BD | PZ3-CI5BD | | x | |
| PZ3-CI5BS | PZ3-CI5BS | | x | |

Geosyntec consultants

# TABLE 3-1
# 2019 POTENTIOMETRIC MONITORING NETWORK AND MEASUREMENT FREQUENCY
Baldwin Park Operable Unit
San Gabriel Valley, California

| Well Name | Site ID | Measurement Frequency | | |
|---|---|---|---|---|
| | | Weekly | Quarterly | Semi-Annual |
| PZ3-LP3AD | PZ3-LP3AD | | x | |
| PZ3-LP3AS | PZ3-LP3AS | | x | |
| PZ3-LP3BD | PZ3-LP3BD | | x | |
| PZ3-LP3BS | PZ3-LP3BS | | x | |
| PZ3-5BA | PZ3-5BAS | | x | |
| PZ3-5BB | PZ3-5BBS | | x | |
| SGVWC B5A | 61900718 | | x | |
| | | | | |
| **Multiport Monitoring Wells** | | | | |
| MW 5-01 | EPAW51 | | | x |
| MW 5-03 | BPW503 | | | x |
| MW 5-05 | BPW505 | | | x |
| MW 5-08 | BPW508 | | | x |
| MW 5-11 | BPW511 | | | x |
| MW 5-13 | BPW513 | | | x |
| MW 5-15 | BPW515 | | | x |
| MW 5-17 | BPW517 | | | x |
| MW 5-18 | BPW518 | | | x |
| MW 5-19 | BPW519 | | | x |
| MW 5-20 | BPW520 | | | x |
| MW 5-22 | BPW522 | | | x |
| MW 5-23 | BPW523 | | | x |
| MW 5-24 | BPW524 | | | x |
| MW 5-25 | BPW525 | | | x |
| MW 5-26 | BPW526 | | | x |
| MW 5-27 | BPW527 | | | x |
| WHICO MP-1 | W10WHMP1 | | | x |
| | | | | |
| **Other Monitoring Wells** | | | | |
| LACO KEY | Z1000006 | x | | |

**TABLE 3-2**
**SUMMARY OF PSEP AND DDW REQUIREMENTS FOR SOURCE WATER AND UPGRADIENT SURVEILLANCE MONITORING**
**Baldwin Park Operable Unit**
**San Gabriel Valley, California**

| Well Name | Site ID | Port or Sampling Depth (ft bgs) | PSEP Requirements | | | | | DDW Requirements | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Analytes and Sampling Frequency[a] | | | | | | | | | | | | | | | |
| | | | VOCs | 123-TCP | 1,4-Dioxane | NDMA | Perchlorate | VOCs including TICs | NDMA | Nitrosamines (NMOR) | Perchlorate | $NO_3$ | $SO_4$ | 1,4-Dioxane | SVOCs including TICs | 123-TCP | Various Metals | Title 22 Non-Volatile SOCs and chlorate[c] |
| | | | EPA Method 8260B or 524.2 | EPA Method 524.2 SIM (MOD) | EPA Method 8270C (MOD) | EPA Method 1625C (MOD) | EPA Method 314.0 | EPA Method 524.2 | EPA Method 1625C (MOD) | EPA Method 521 | EPA Method 314.0 | EPA Method 300.0 | EPA Method 300.0 | EPA Method 8270C (MOD) | EPA Method 525.2 or 625 or 8270C | EPA Method 524.2 SIM (MOD) | Various Methods | Various Methods |
| **Extraction Wells** | | | | | | | | | | | | | | | | | | |
| COI 5 | 08000097 | | Q | Q | | Q | Q | M | M | M | M | M | | M | A | M | Q | |
| LPVCWD 05 | 08000209 | | Q | A | Q | Q | Q | M[b] | M | | M | M | M | M | A | A | | |
| SA1-1 | 08000185 | | Q | Q | Q | Q | Q | M[b] | M | | M | M | M | M | A | M | | |
| SA1-2 | 08000186 | | Q | Q | Q | Q | Q | M[b] | M | | M | M | M | M | A | M | | |
| SA1-3 (Lante) | 08000060 | | Q | Q | Q | Q | Q | M[b] | M | | M | M | M | M | A | M | | |
| SGVWC B25A | 08000187 | | Q | Q | Q | Q | Q | M[b] | M | | M | M | TIE | M | A | M | | |
| SGVWC B25B | 08000188 | | Q | Q | Q | Q | Q | M[b] | M | | M | M | TIE | M | A | M | | |
| SGVWC B26A | 08000189 | | Q | Q | Q | Q | Q | M[b] | M | | M | M | TIE | M | A | M | | |
| SGVWC B26B | 08000190 | | Q | Q | Q | Q | Q | M[b] | M | | M | M | TIE | M | A | M | | |
| SGVWC B5B | 61900719 | | Q | Q | Q | Q | Q | M[b] | M | M | M | M | TIE | M | A | M | | |
| SGVWC B5E | 08000205 | | Q | Q | Q | Q | Q | M[b] | M | M | M | M | TIE | M | A | M | | |
| CDWC 02 | 01901181 | | A[d] | | A | A | A | M[d] | M | | M | M | TIE | | | | TIE | |
| CDWC 03 | 01903057 | | A[d] | | A | A | A | M[d] | M | | M | M | TIE | | | | TIE | |
| CDWC 05A | 08000100 | | A[d] | | A | A | A | M[d] | M | | M | M | TIE | | | | TIE | |
| CDWC 06 | 01902967 | | A[d] | | A | A | A | M[d] | M | | M | M | TIE | | | | TIE | |
| CDWC 08 | 01903081 | | A[d] | | A | A | A | M[d] | M | | M | M | TIE | | | | TIE | |
| CDWC 10 | 08000223 | | A[d] | | A | A | A | M[d] | M | | M | M | TIE | | | | TIE | |
| CDWC 14 | 08000174 | | A[d] | | A | A | A | M[d] | M | | M | M | TIE | | | | TIE | |
| **Multiport Monitoring Wells** | | | | | | | | | | | | | | | | | | |
| MW5-01 | BPW501 | Port 13 | A | | A | A | A | | | | | | | | | | | |
| | | Port 12 | A | | A | A | A | | | | | | | | | | | |
| | | Port 11 | A | | A | A | A | | | | | | | | | | | |
| | | Port 10 | A | | A | A | A | | | | | | | | | | | |
| | | Port 9 | A | | A | A | A | | | | | | | | | | | |
| | | Port 8 | A | | | A | A | | | | | | | | | | | |
| | | Port 7 | A | | | A | A | | | | | | | | | | | |
| | | Port 6 | A | | | A | A | | | | | | | | | | | |
| | | Port 5 | A | | | A | A | | | | | | | | | | | |
| | | Port 4 | A | | | A | A | | | | | | | | | | | |
| | | Port 3 | A | | | A | A | | | | | | | | | | | |
| | | Port 2 | A | | | A | A | | | | | | | | | | | |
| | | Port 1 | A | | | A | A | | | | | | | | | | | |
| MW5-03 | BPW503 | Port 10 | A | A | A | A | A | A[b] | A | A | A | A | | A | A | A | A | A |
| | | Port 9 | A | A | A | A | A | A[b] | A | | A | A | | A | A | A | A | A |
| | | Port 8 | A | A | A | A | A | A[b] | A | | A | A | | A | A | A | A | |
| | | Port 7 | A | A | A | A | A | A[b] | A | | A | A | | A | A | A | A | |
| | | Port 6 | A | A | A | A | A | A[b] | A | | A | A | | A | A | A | A | |
| | | Port 5 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | A | |
| | | Port 4 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | A | |
| | | Port 3 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | A | |
| | | Port 2 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | A | |
| | | Port 1 | A | A | | A | A | A[e] | A | | A | A | | A | A | A | A | |
| MW5-05 | BPW505 | Port 4 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | Port 3 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | Port 2 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | Port 1 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| MW5-08 | BPW508 | Port 4 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | Port 3 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | Port 2 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | Port 1 | A | | | A | A | A[b] | A | | A | A | | A | A | | A | |

**TABLE 3-2**
**SUMMARY OF PSEP AND DDW REQUIREMENTS FOR SOURCE WATER AND UPGRADIENT SURVEILLANCE MONITORING**
**Baldwin Park Operable Unit**
**San Gabriel Valley, California**

| Well Name | Site ID | Port or Sampling Depth (ft bgs) | PSEP Requirements | | | | | DDW Requirements | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Analytes and Sampling Frequency[a] | | | | | | | | | | | | | | |
| | | | VOCs | 123-TCP | 1,4-Dioxane | NDMA | Perchlorate | VOCs including TICs | NDMA | Nitrosamines (NMOR) | Perchlorate | $NO_3$ | $SO_4$ | 1,4-Dioxane | SVOCs including TICs | 123-TCP | Various Metals | Title 22 Non-Volatile SOCs and chlorate[c] |
| | | | EPA Method 8260B or 524.2 | EPA Method 524.2 SIM (MOD) | EPA Method 8270C (MOD) | EPA Method 1625C (MOD) | EPA Method 314.0 | EPA Method 524.2 | EPA Method 1625C (MOD) | EPA Method 521 | EPA Method 314.0 | EPA Method 300.0 | EPA Method 300.0 | EPA Method 8270C (MOD) | EPA Method 525.2 or 625 or 8270C | EPA Method 524.2 SIM (MOD) | Various Methods | Various Methods |
| MW5-11 | BPW511 | Port 3 | A | A | A | A | A | A[b] | A | A | A | A | | A | A | A | A | A |
| | | Port 2 | A | A | A | A | A | A[b] | A | | A | A | | A | A | A | A | A |
| | | Port 1 | A | A | A | A | A | A[b] | A | | A | A | | A | A | A | A | |
| MW5-13[e] | BPW513 | Port 3 | A | BIE | A | A | A | BIE | BIE | BIE | BIE | BIE | | BIE | BIE | BIE | BIE | BIE |
| | | Port 2 | A | BIE | A | A | A | BIE | BIE | | BIE | BIE | | BIE | BIE | BIE | BIE | BIE |
| | | Port 1 | A | BIE | A | A | A | BIE | BIE | | BIE | BIE | | BIE | BIE | BIE | BIE | |
| MW5-15 | BPW515 | Port 3 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | Port 2 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | Port 1 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| MW5-17[e] | BPW517 | Port 3 | A | BIE | A | A | A | BIE | BIE | BIE | BIE | BIE | | BIE | BIE | BIE | BIE | BIE |
| | | Port 2 | A | BIE | A | A | A | BIE | BIE | | BIE | BIE | | BIE | BIE | BIE | BIE | BIE |
| | | Port 1 | A | BIE | A | A | A | BIE | BIE | | BIE | BIE | | BIE | BIE | BIE | BIE | |
| MW5-18 | BPW518 | Port 3 | A | A | A | A | A | A[b] | A | A | A | A | | A | A | A | A | A |
| | | Port 2 | A | A | A | A | A | A[b] | A | | A | A | | A | A | A | A | A |
| | | Port 1 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | A | |
| MW5-19 | BPW519 | Port 6 | A | | A | A | A | | | | | | | | | | | |
| | | Port 5 | A | | A | A | A | | | | | | | | | | | |
| | | Port 4 | A | | A | A | A | | | | | | | | | | | |
| | | Port 3 | A | | | A | A | | | | | | | | | | | |
| | | Port 2 | A | | | A | A | | | | | | | | | | | |
| | | Port 1 | A | | | A | A | | | | | | | | | | | |
| MW5-20 | BPW520 | Port 7 | A | | | A | A | | | | | | | | | | | |
| | | Port 6 | A | | | A | A | | | | | | | | | | | |
| | | Port 5 | A | | A | A | A | | | | | | | | | | | |
| | | Port 4 | A | | A | A | A | | | | | | | | | | | |
| | | Port 3 | A | | A | A | A | | | | | | | | | | | |
| | | Port 2 | A | | A | A | A | | | | | | | | | | | |
| | | Port 1 | A | | | A | A | | | | | | | | | | | |
| MW5-22 | BPW522 | Port 6 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | | |
| | | Port 5 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | | |
| | | Port 4 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | | |
| | | Port 3 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | | |
| | | Port 2 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | | |
| | | Port 1 | A | A | | A | A | A[b] | A | | A | A | | A | A | A | | |
| MW5-23 | BPW523 | Port 6 | A | | | A | A | | | | | | | | | | | |
| | | Port 5 | A | | A | A | A | | | | | | | | | | | |
| | | Port 4 | A | | A | A | A | | | | | | | | | | | |
| | | Port 3 | A | | A | A | A | | | | | | | | | | | |
| | | Port 2 | A | | A | A | A | | | | | | | | | | | |
| | | Port 1 | A | | | A | A | | | | | | | | | | | |
| MW5-24 | BPW524 | Port 7 | A | | A | A | A | | | | | | | | | | | |
| | | Port 6 | A | | A | A | A | | | | | | | | | | | |
| | | Port 5 | A | | A | A | A | | | | | | | | | | | |
| | | Port 4 | A | | A | A | A | | | | | | | | | | | |
| | | Port 3 | A | | A | A | A | | | | | | | | | | | |
| | | Port 2 | A | | A | A | A | | | | | | | | | | | |
| | | Port 1 | A | | A | A | A | | | | | | | | | | | |

**TABLE 3-2**
**SUMMARY OF PSEP AND DDW REQUIREMENTS FOR SOURCE WATER AND UPGRADIENT SURVEILLANCE MONITORING**
**Baldwin Park Operable Unit**
**San Gabriel Valley, California**

| Well Name | Site ID | Port or Sampling Depth (ft bgs) | PSEP Requirements | | | | | DDW Requirements | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Analytes and Sampling Frequency[a] | | | | | | | | | | | | | | | |
| | | | VOCs | 123-TCP | 1,4-Dioxane | NDMA | Perchlorate | VOCs including TICs | NDMA | Nitrosamines (NMOR) | Perchlorate | $NO_3$ | $SO_4$ | 1,4-Dioxane | SVOCs including TICs | 123-TCP | Various Metals | Title 22 Non-Volatile SOCs and chlorate[c] |
| | | | EPA Method 8260B or 524.2 | EPA Method 524.2 SIM (MOD) | EPA Method 8270C (MOD) | EPA Method 1625C (MOD) | EPA Method 314.0 | EPA Method 524.2 | EPA Method 1625C (MOD) | EPA Method 521 | EPA Method 314.0 | EPA Method 300.0 | EPA Method 300.0 | EPA Method 8270C (MOD) | EPA Method 525.2 or 625 or 8270C | EPA Method 524.2 SIM (MOD) | Various Methods | Various Methods |
| MW5-25 | BPW525 | Port 7 | A | | | A | A | | | | | | | | | | | |
| | | Port 6 | A | | | A | A | | | | | | | | | | | |
| | | Port 5 | A | | A | A | A | | | | | | | | | | | |
| | | Port 4 | A | | A | A | A | | | | | | | | | | | |
| | | Port 3 | A | | A | A | A | | | | | | | | | | | |
| | | Port 2 | A | | A | A | A | | | | | | | | | | | |
| | | Port 1 | A | | A | A | A | | | | | | | | | | | |
| MW5-26 | BPW526 | Port 7 | A | | | A | A | | | | | | | | | | | |
| | | Port 6 | A | | | A | A | | | | | | | | | | | |
| | | Port 5 | A | | | A | A | | | | | | | | | | | |
| | | Port 4 | A | | | A | A | | | | | | | | | | | |
| | | Port 3 | A | | | A | A | | | | | | | | | | | |
| | | Port 2 | A | | | A | A | | | | | | | | | | | |
| | | Port 1 | A | | | A | A | | | | | | | | | | | |
| MW5-27 | BPW527 | Port 7 | A | | | A | A | | | | | | | | | | | |
| | | Port 6 | A | | | A | A | | | | | | | | | | | |
| | | Port 5 | A | | | A | A | | | | | | | | | | | |
| | | Port 4 | A | | | A | A | | | | | | | | | | | |
| | | Port 3 | A | | | A | A | | | | | | | | | | | |
| | | Port 2 | A | | | A | A | | | | | | | | | | | |
| | | Port 1 | A | | | A | A | | | | | | | | | | | |
| WHICO MP-1 | W10WHMP1 | Port 6 | A | | A | A | A | | | | | | | | | | | |
| | | Port 5 | A | | A | A | A | | | | | | | | | | | |
| | | Port 4 | A | | A | A | A | | | | | | | | | | | |
| | | Port 3 | A | | A | A | A | | | | | | | | | | | |
| | | Port 2 | A | | A | A | A | | | | | | | | | | | |
| | | Port 1 | A | | A | A | A | | | | | | | | | | | |
| **Monitoring Wells** | | | | | | | | | | | | | | | | | | |
| AJMW-2R | W11AJMW2R | | A | | A | A | A | | | | | | | | | | | |
| AJMW-4 | W11AJMW4 | | A | | A | A | A | | | | | | | | | | | |
| AJMW-6 | W11AJMW6 | | A | | A | A | A | | | | | | | | | | | |
| ALR MW-1R | W11AZW01R | | A | | A | A | A | | | | | | | | | | | |
| ALR MW-3 | W11AZW03 | | A | A | A | A | A | | | | | | | | | | | |
| ALR MW-8 | W11AZW08 | | A | | A | A | A | | | | | | | | | | | |
| ALR MW-9 | W11AZW09 | | A | | A | A | A | | | | | | | | | | | |
| LACO Key | Z1000006 | | A | | A | A | A | | | | | | | | | | | |
| **Monitoring Well Cluster** | | | | | | | | | | | | | | | | | | |
| MW 5-28D | BPW528D | | A | | A | A | A | | | | | | | | | | | |
| MW 5-28I | BPW528I | | A | | A | A | A | | | | | | | | | | | |
| MW 5-28S | BPW528S | | A | | A | A | A | | | | | | | | | | | |

**TABLE 3-2**
**SUMMARY OF PSEP AND DDW REQUIREMENTS FOR SOURCE WATER AND UPGRADIENT SURVEILLANCE MONITORING**
**Baldwin Park Operable Unit**
**San Gabriel Valley, California**

| Well Name | Site ID | Port or Sampling Depth (ft bgs) | PSEP Requirements | | | | | DDW Requirements | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Analytes and Sampling Frequency[a] | | | | | | | | | | | | | | | |
| | | | VOCs | 123-TCP | 1,4-Dioxane | NDMA | Perchlorate | VOCs including TICs | NDMA | Nitrosamines (NMOR) | Perchlorate | $NO_3$ | $SO_4$ | 1,4-Dioxane | SVOCs including TICs | 123-TCP | Various Metals | Title 22 Non-Volatile SOCs and chlorate[c] |
| | | | EPA Method 8260B or 524.2 | EPA Method 524.2 SIM (MOD) | EPA Method 8270C (MOD) | EPA Method 1625C (MOD) | EPA Method 314.0 | EPA Method 524.2 | EPA Method 1625C (MOD) | EPA Method 521 | EPA Method 314.0 | EPA Method 300.0 | EPA Method 300.0 | EPA Method 8270C (MOD) | EPA Method 525.2 or 625 or 8270C | EPA Method 524.2 SIM (MOD) | Various Methods | Various Methods |
| **Production Wells** | | | | | | | | | | | | | | | | | | |
| CIC Baldwin 1 | 01900885 | | A | | | A | A | | | | | | | | | | | |
| LACO SF1 | 08000070 | | A | | A | A | A | | | | | | | | | | | |
| SGVWC B6D | 08000098 | | A | | A | A | A | M[b] | M | | M | M | TIE | M | A | M | | |
| SWS 139W2 | 01901599 | 285 | A | | | A | A | | | | | | | | | | | |
| | | 370 | A | | | A | A | | | | | | | | | | | |
| SWS 139W6 | 08000152 | 975 | A | | | A | A | | | | | | | | | | | |
| SWS 140W5 | 08000145 | | A | | | A | A | M | M | | M | M | TIE | | | | A | |
| VCWD Big Dalton | 01900035 | 275 | A | | A | A | A | A[b] | A | | A | A | | A | A | A | A | |
| VCWD E Maine | 01900027 | | A | | | A | A | Q | | | A | Q | TIE | | | | TIE | |
| VCWD Morada | 01900029 | 430 | A | | A | A | A | | | | | | | | | | | |
| | | 510 | A | | A | A | A | | | | | | | | | | | |
| VCWD Paddy Lane | 01900031 | 340 | A | | A | A | A | A[b] | A | | A | A | | A | A | | A | |
| | | 460 | A | | A | A | A | | | | | | | | | | | |
| VCWD W Maine | 01900028 | | A | | | A | A | Q | | | A | Q | TIE | | | | TIE | |

[a] Sampling frequency:
BIE (Biennial - every two years; odd number years)
A (Annual)
SA (Semi-annual)
Q (Quarterly)
M (Monthly)
BIW (Biweekly)
TIE (Triennial - every three years)

[b] TIC analysis annually

[c] Non-volatile synthetic organic chemicals - includes Ethylene Bromide

[d] DDW VOC analyses required for only 1,2-DCA, CTC, PCE, and TCE. DDW required VOC analyses will be used to satisfy PSEP requirement.

[e] Multiport well needs to be sampled for PSEP requirement when DDW does not sample biennially.

Geosyntec consultants

# TABLE 3-3
## SPREADING BASIN AND RIVER RECHARGE
## GROUNDWATER FLOW MODEL
Baldwin Park Operable Unit
San Gabriel Valley, California

Volumes of water spread in acre-feet

| | Spreading Basins | | | | | | | | | | | | | | San Gabriel River | | | | | Rio Hondo | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date/Quarter | Ben Lomond | Big Dalton | Buena Vista | Citrus | Eaton Basin | Fish Canyon | Forbes | Irwindale/ Manning | Little Dalton | Peck Road | San Gabriel Canyon | Santa Fe | Sawpit | Walnut | Morris Dam - Foothill Blvd | Foothill Blvd - Santa Fe Dam | Santa Fe Dam - Valley Blvd | Valley Blvd - Station E322 | Station E322 - Whittier Narrows | Rio Hondo at Whittier Narrows | Total |
| 2003/Q3[a] | 2,877 | 0 | 66 | 0 | 95 | 593 | 450 | 5,280 | 0 | 2,097 | 9,232 | 20,983 | 55 | 459 | 4,561 | 1,512 | 0 | 0 | 0 | 2,224 | 50,484 |
| 2003/Q4[b] | 719 | 0 | 110 | 86 | 286 | 533 | 225 | 2,031 | 777 | 1,049 | 8,771 | 19,031 | 0 | 422 | 3,421 | 504 | 1,473 | 875 | 725 | 4,448 | 45,486 |
| 2004/Q1[c] | 142 | 0 | 195 | 169 | 472 | 997 | 167 | 1,741 | 871 | 2,075 | 6,392 | 20,272 | 108 | 776 | 3,384 | 498 | 0 | 0 | 0 | 4,400 | 42,659 |
| 2004/Q2[d] | 0 | 0 | 108 | 85 | 94 | 821 | 0 | 1,741 | 307 | 519 | 3,653 | 0 | 108 | 597 | 1,692 | 0 | 1,457 | 866 | 717 | 4,400 | 17,165 |
| 2004/Q3 | 1,870 | 0 | 44 | 0 | 95 | 1,126 | 169 | 1,895 | 0 | 0 | 5,539 | 0 | 0 | 362 | 1,710 | 0 | 1,473 | 875 | 725 | 4,448 | 20,331 |
| 2004/Q4 | 719 | 0 | 110 | 428 | 573 | 1,778 | 281 | 1,760 | 0 | 4,195 | 8,771 | 0 | 0 | 784 | 1,710 | 504 | 2,947 | 1,750 | 1,449 | 6,228 | 33,987 |
| 2005/Q1 | 2,252 | 687 | 86 | 1,841 | 1,120 | 1,160 | 385 | 3,973 | 0 | 33,342 | 7,677 | 38,666 | 1,120 | 708 | 27,888 | 13,061 | 38,916 | 23,117 | 19,851 | 23,499 | 239,349 |
| 2005/Q2 | 2,134 | 405 | 22 | 677 | 472 | 2,286 | 612 | 2,812 | 307 | 5,705 | 5,936 | 50,680 | 863 | 1,050 | 10,715 | 4,485 | 5,829 | 2,597 | 2,867 | 6,600 | 107,054 |
| 2005/Q3 | 3,021 | 643 | 22 | 171 | 286 | 2,074 | 393 | 3,249 | 52 | 524 | 8,771 | 25,862 | 436 | 712 | 4,561 | 2,015 | 1,473 | 875 | 725 | 1,335 | 57,200 |
| 2005/Q4 | 575 | 58 | 22 | 257 | 286 | 1,600 | 225 | 2,031 | 311 | 1,049 | 8,309 | 17,567 | 218 | 471 | 7,982 | 4,031 | 4,420 | 2,626 | 2,174 | 4,448 | 58,660 |
| 2006/Q1 | 281 | 114 | 43 | 502 | 934 | 1,275 | 110 | 795 | 51 | 1,026 | 6,774 | 19,094 | 160 | 378 | 6,135 | 2,957 | 2,883 | 1,712 | 1,418 | 9,574 | 56,216 |
| 2006/Q2 | 2,846 | 1,157 | 1,344 | 1,016 | 661 | 1,641 | 334 | 2,544 | 0 | 1,556 | 8,675 | 29,443 | 432 | 752 | 11,279 | 5,731 | 4,372 | 2,597 | 2,151 | 7,480 | 86,011 |
| 2006/Q3 | 144 | 292 | 44 | 684 | 859 | 1,896 | 56 | 1,624 | 0 | 524 | 9,694 | 3,416 | 109 | 422 | 4,561 | 2,267 | 2,947 | 1,750 | 1,449 | 2,224 | 34,962 |
| 2006/Q4 | 432 | 0 | 44 | 428 | 191 | 1,837 | 56 | 271 | 0 | 524 | 9,232 | 1,952 | 0 | 362 | 2,281 | 1,008 | 2,947 | 1,750 | 1,449 | 4,004 | 28,768 |
| 2007/Q1 | 0 | 343 | 43 | 335 | 840 | 754 | 0 | 397 | 152 | 1,026 | 3,161 | 0 | 53 | 555 | 1,116 | 0 | 4,324 | 2,569 | 2,127 | 3,481 | 21,276 |
| 2007/Q2 | 0 | 116 | 22 | 254 | 94 | 528 | 0 | 402 | 0 | 1,037 | 4,566 | 0 | 0 | 442 | 1,128 | 0 | 4,372 | 2,597 | 2,151 | 2,200 | 19,909 |
| 2007/Q3 | 0 | 0 | 22 | 0 | 95 | 178 | 0 | 271 | 52 | 524 | 923 | 0 | 0 | 326 | 570 | 0 | 2,947 | 1,750 | 1,449 | 4,448 | 13,555 |
| 2007/Q4 | 0 | 0 | 44 | 171 | 95 | 533 | 0 | 677 | 0 | 524 | 3,693 | 0 | 109 | 398 | 570 | 0 | 1,473 | 875 | 725 | 3,559 | 13,446 |
| 2008/Q1 | 427 | 405 | 65 | 339 | 472 | 1,817 | 56 | 536 | 154 | 1,556 | 6,849 | 1,931 | 324 | 549 | 2,256 | 748 | 1,457 | 866 | 717 | 8,360 | 29,884 |
| 2008/Q2 | 1,708 | 116 | 22 | 169 | 94 | 1,348 | 111 | 0 | 51 | 1,037 | 457 | 0 | 108 | 573 | 1,692 | 249 | 1,457 | 866 | 717 | 4,840 | 15,615 |
| 2008/Q3 | 0 | 0 | 0 | 0 | 0 | 1,600 | 0 | 0 | 0 | 1,049 | 6,463 | 488 | 0 | 265 | 14,824 | 4,786 | 5,893 | 3,501 | 2,899 | 6,673 | 48,441 |
| 2008/Q4 | 288 | 58 | 22 | 171 | 286 | 1,185 | 0 | 0 | 0 | 1,573 | 6,463 | 0 | 0 | 157 | 1,710 | 252 | 2,947 | 1,750 | 7,247 | 8,007 | 32,116 |
| 2009/Q1 | 141 | 286 | 21 | 251 | 467 | 1,739 | 55 | 0 | 405 | 2,052 | 4,516 | 0 | 107 | 236 | 1,116 | 986 | 4,324 | 2,569 | 7,799 | 6,092 | 33,162 |
| 2009/Q2 | 0 | 231 | 0 | 169 | 189 | 1,583 | 0 | 402 | 0 | 0 | 5,479 | 0 | 54 | 310 | 564 | 0 | 2,915 | 1,731 | 3,584 | 1,320 | 18,531 |
| 2009/Q3 | 0 | 0 | 0 | 0 | 95 | 1,422 | 0 | 0 | 0 | 4,195 | 11,079 | 0 | 0 | 48 | 4,561 | 252 | 4,420 | 2,626 | 2,174 | 4,004 | 34,876 |
| 2009/Q4 | 0 | 0 | 0 | 0 | 191 | 1,185 | 56 | 406 | 0 | 1,049 | 6,001 | 0 | 0 | 181 | 570 | 1,008 | 2,947 | 1,750 | 8,697 | 10,676 | 34,717 |
| 2010/Q1 | 422 | 114 | 0 | 335 | 560 | 1,971 | 55 | 2,119 | 152 | 3,078 | 5,871 | 3,819 | 0 | 449 | 5,020 | 6,408 | 7,207 | 4,281 | 16,306 | 7,833 | 66,000 |
| 2010/Q2 | 996 | 116 | 0 | 592 | 189 | 2,228 | 445 | 3,348 | 1,075 | 1,556 | 5,479 | 22,203 | 162 | 203 | 11,843 | 15,698 | 10,201 | 6,060 | 4,301 | 5,720 | 92,415 |
| 2010/Q3 | 144 | 0 | 0 | 0 | 95 | 1,719 | 0 | 9,476 | 0 | 1,573 | 5,078 | 6,832 | 109 | 72 | 6,842 | 9,573 | 5,893 | 3,501 | 3,624 | 2,224 | 56,755 |
| 2010/Q4 | 575 | 0 | 0 | 684 | 382 | 1,245 | 56 | 1,760 | 1,398 | 4,195 | 6,924 | 17,079 | 0 | 133 | 14,254 | 18,894 | 4,420 | 2,626 | 5,073 | 14,680 | 94,378 |
| 2011/Q1 | 281 | 801 | 0 | 753 | 560 | 1,681 | 275 | 3,311 | 456 | 4,104 | 5,419 | 29,119 | 107 | 425 | 7,809 | 11,336 | 2,883 | 1,712 | 7,090 | 13,055 | 91,177 |
| 2011/Q2 | 711 | 1,215 | 0 | 1,523 | 566 | 1,700 | 500 | 3,615 | 512 | 6,224 | 6,392 | 19,307 | 485 | 442 | 10,715 | 14,702 | 10,201 | 6,060 | 2,151 | 4,400 | 91,421 |
| 2011/Q3 | 1,439 | 175 | 0 | 941 | 95 | 1,896 | 56 | 5,821 | 155 | 2,097 | 7,386 | 14,151 | 0 | 36 | 8,552 | 7,810 | 7,367 | 4,376 | 1,449 | 5,338 | 69,140 |
| 2011/Q4 | 432 | 0 | 0 | 0 | 191 | 1,482 | 112 | 3,114 | 673 | 2,622 | 5,078 | 11,711 | 0 | 145 | 9,693 | 3,023 | 1,473 | 875 | 2,174 | 8,897 | 51,695 |
| 2012/Q1 | 0 | 0 | 0 | 169 | 283 | 1,172 | 0 | 536 | 102 | 1,556 | 3,196 | 0 | 108 | 167 | 2,256 | 249 | 1,457 | 866 | 3,584 | 5,720 | 21,421 |
| 2012/Q2 | 854 | 405 | 0 | 931 | 283 | 1,231 | 167 | 1,071 | 51 | 1,556 | 7,762 | 0 | 162 | 251 | 1,128 | 0 | 2,915 | 1,731 | 2,151 | 1,760 | 24,409 |
| 2012/Q3 | 2,733 | 117 | 0 | 1,455 | 191 | 1,541 | 337 | 2,301 | 0 | 524 | 2,770 | 0 | 164 | 12 | 1,140 | 0 | 2,947 | 1,750 | 1,449 | 4,004 | 23,435 |
| 2012/Q4 | 575 | 0 | 175 | 171 | 286 | 830 | 0 | 3,790 | 207 | 524 | 11,079 | 4,392 | 327 | 48 | 7,412 | 1,260 | 2,947 | 1,750 | 2,174 | 5,783 | 43,730 |

Geosyntec consultants

# TABLE 3-3
# SPREADING BASIN AND RIVER RECHARGE
# GROUNDWATER FLOW MODEL
Baldwin Park Operable Unit
San Gabriel Valley, California

Volumes of water spread in acre-feet

| | Spreading Basins | | | | | | | | | | | | | | San Gabriel River | | | | | Rio Hondo | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date/Quarter | Ben Lomond | Big Dalton | Buena Vista | Citrus | Eaton Basin | Fish Canyon | Forbes | Irwindale/ Manning | Little Dalton | Peck Road | San Gabriel Canyon | Santa Fe | Sawpit | Walnut | Morris Dam - Foothill Blvd | Foothill Blvd - Santa Fe Dam | Santa Fe Dam - Valley Blvd | Valley Blvd - Station E322 | Station E322 - Whittier Narrows | Rio Hondo at Whittier Narrows | Total |
| **2003/Q3**[a] | 2,917 | 0 | 65 | 0 | 90 | 622 | 462 | 5,260 | 4 | 1,837 | 9,310 | 21,120 | 48 | 461 | 4,542 | 1,560 | 164 | 95 | 82 | 2,443 | 51,082 |
| **2003/Q4**[b] | 697 | 0 | 101 | 51 | 246 | 512 | 244 | 2,082 | 794 | 975 | 8,810 | 18,785 | 12 | 423 | 3,521 | 605 | 878 | 512 | 439 | 4,500 | 44,187 |
| **2004/Q1**[c] | 133 | 4 | 199 | 144 | 438 | 976 | 168 | 1,718 | 849 | 1,879 | 6,522 | 20,347 | 128 | 770 | 3,583 | 467 | 471 | 275 | 236 | 4,500 | 43,807 |
| **2004/Q2**[d] | 0 | 22 | 116 | 95 | 118 | 820 | 0 | 1,789 | 293 | 302 | 3,808 | 0 | 118 | 592 | 1,592 | 11 | 1,363 | 795 | 681 | 4,500 | 17,015 |
| **2004/Q3** | 1,833 | 0 | 42 | 0 | 128 | 1,113 | 164 | 1,945 | 0 | 220 | 5,654 | 0 | 0 | 360 | 1,664 | 0 | 1,874 | 1,093 | 937 | 4,500 | 21,527 |
| **2004/Q4** | 730 | 26 | 107 | 452 | 598 | 1,783 | 257 | 1,778 | 0 | 3,962 | 8,920 | 29 | 9 | 790 | 1,510 | 611 | 3,359 | 1,959 | 1,680 | 6,172 | 34,732 |
| **2005/Q1** | 2,251 | 676 | 89 | 1,806 | 1,147 | 1,142 | 353 | 3,938 | 0 | 33,190 | 7,660 | 38,690 | 1,139 | 702 | 28,038 | 13,064 | 39,372 | 22,967 | 19,686 | 23,255 | 239,165 |
| **2005/Q2** | 2,124 | 413 | 31 | * | 438 | 2,287 | 616 | 2,807 | 288 | 5,753 | 5,880 | 50,860 | 882 | 1,055 | 10,517 | 4,506 | 5,172 | 3,017 | 2,586 | 6,774 | 106,699 |
| **2005/Q3** | 3,055 | 663 | 21 | 160 | 281 | 2,071 | 401 | 3,299 | 66 | 407 | 8,570 | 18,351 | 410 | 714 | 4,631 | 1,965 | 1,704 | 994 | 852 | 1,343 | 49,958 |
| **2005/Q4** | 634 | 44 | 32 | 244 | 315 | 1,627 | 204 | 2,022 | 310 | 896 | 8,170 | 17,783 | 205 | 475 | 7,830 | 4,061 | 4,660 | 2,718 | 2,330 | 4,630 | 59,190 |
| **2006/Q1** | 232 | 84 | 46 | 535 | 889 | 1,241 | 82 | 762 | 48 | 1,146 | 6,520 | 19,140 | 137 | 382 | 5,877 | 3,048 | 2,569 | 1,499 | 1,285 | 9,631 | 55,153 |
| **2006/Q2** | 2,871 | 1,138 | 1,352 | 1,032 | 628 | 1,636 | 327 | 2,543 | 0 | 1,630 | 8,630 | 29,333 | 418 | 753 | 11,087 | 5,749 | 4,454 | 2,598 | 2,227 | 7,536 | 85,942 |
| **2006/Q3** | 184 | 292 | 51 | 643 | 868 | 1,913 | 50 | 1,580 | 0 | 774 | 9,560 | 3,373 | 124 | 425 | 4,583 | 2,376 | 3,314 | 1,933 | 1,657 | 2,168 | 35,868 |
| **2006/Q4** | 500 | 0 | 42 | 445 | 166 | 1,809 | 49 | 210 | 0 | 745 | 9,060 | 1,981 | 0 | 367 | 2,439 | 1,094 | 2,694 | 1,572 | 1,347 | 3,963 | 28,483 |
| **2007/Q1** | 23 | 315 | 35 | 361 | 793 | 726 | 6 | 371 | 167 | 911 | 3,011 | 0 | 50 | 553 | 1,024 | 112 | 4,032 | 2,352 | 2,016 | 3,373 | 20,231 |
| **2007/Q2** | 0 | 99 | 27 | 275 | 117 | 555 | 0 | 418 | 0 | 814 | 4,768 | 0 | 0 | 445 | 865 | 111 | 4,723 | 2,755 | 2,361 | 2,039 | 20,372 |
| **2007/Q3** | 0 | 0 | 21 | 38 | 66 | 178 | 0 | 278 | 40 | 567 | 1,051 | 0 | 0 | 328 | 636 | 65 | 3,397 | 1,982 | 1,698 | 4,491 | 14,836 |
| **2007/Q4** | 26 | 4 | 51 | 193 | 73 | 541 | 8 | 651 | 1 | 724 | 3,861 | 0 | 88 | 401 | 574 | 67 | 1,604 | 936 | 802 | 3,557 | 14,162 |
| **2008/Q1** | 373 | 401 | 75 | 315 | 491 | 1,792 | 82 | 518 | 151 | 1,622 | 6,690 | 1,876 | 316 | 553 | 2,302 | 759 | 1,989 | 1,160 | 994 | 8,135 | 30,594 |
| **2008/Q2** | 1,776 | 139 | 17 | 177 | 74 | 1,363 | 128 | 66 | 68 | 969 | 533 | 39 | 122 | 572 | 1,954 | 222 | 788 | 460 | 394 | 4,969 | 14,830 |
| **2008/Q3** | 0 | 0 | 9 | 37 | 38 | 1,611 | 0 | 37 | 0 | 946 | 6,610 | 605 | 17 | 262 | 14,795 | 4,827 | 5,300 | 3,091 | 2,650 | 6,820 | 47,655 |
| **2008/Q4** | 243 | 42 | 16 | 195 | 269 | 1,189 | 15 | 0 | 4 | 1,326 | 6,394 | 0 | 0 | 157 | 1,833 | 191 | 2,657 | 1,628 | 7,026 | 7,877 | 31,062 |
| **2009/Q1** | 145 | 272 | 12 | 273 | 453 | 1,708 | 45 | 27 | 390 | 1,809 | 4,546 | 26 | 108 | 236 | 970 | 859 | 3,571 | 2,188 | 7,911 | 6,140 | 31,689 |
| **2009/Q2** | 0 | 229 | 0 | 132 | 222 | 1,586 | 0 | 348 | 0 | 124 | 5,411 | 0 | 45 | 308 | 638 | 17 | 3,009 | 1,844 | 3,762 | 1,217 | 18,892 |
| **2009/Q3** | 0 | 0 | 0 | 25 | 106 | 1,440 | 0 | 0 | 0 | 4,249 | 11,015 | 0 | 18 | 49 | 4,277 | 339 | 4,186 | 2,565 | 2,092 | 3,828 | 34,189 |
| **2009/Q4** | 43 | 0 | 0 | 0 | 206 | 1,166 | 31 | 358 | 13 | 980 | 5,959 | 0 | 4 | 175 | 812 | 1,083 | 2,615 | 1,603 | 8,771 | 10,684 | 34,503 |
| **2010/Q1** | 372 | 114 | 0 | 303 | 593 | 1,957 | 45 | 2,103 | 135 | 3,182 | 5,660 | 3,780 | 8 | 451 | 4,809 | 6,412 | 7,606 | 4,661 | 16,261 | 7,637 | 66,089 |
| **2010/Q2** | 1,004 | 113 | 0 | 586 | 214 | 2,235 | 448 | 3,353 | 1,057 | 1,784 | 5,290 | 22,380 | 163 | 205 | 11,690 | 15,586 | 9,673 | 5,928 | 4,316 | 5,905 | 91,930 |
| **2010/Q3** | 139 | 0 | 0 | 32 | 64 | 1,712 | 0 | 9,450 | 0 | 1,552 | 5,093 | 6,650 | 88 | 72 | 7,123 | 9,497 | 5,263 | 3,225 | 3,399 | 2,309 | 55,668 |
| **2010/Q4** | 598 | 3 | 0 | 671 | 380 | 1,216 | 76 | 1,722 | 1,377 | 4,143 | 6,790 | 16,950 | 13 | 127 | 14,168 | 18,863 | 4,089 | 2,506 | 4,784 | 14,601 | 93,077 |
| **2011/Q1** | 283 | 780 | 0 | 710 | 597 | 1,706 | 263 | 3,299 | 476 | 4,225 | 5,260 | 20,846 | 107 | 426 | 7,796 | 11,430 | 2,500 | 1,533 | 6,792 | 12,828 | 81,857 |
| **2011/Q2** | 726 | 1,200 | 0 | 1,557 | 524 | 1,676 | 496 | 3,614 | 512 | 6,260 | 6,550 | 19,180 | 465 | 437 | 10,892 | 14,611 | 9,476 | 5,808 | 1,968 | 4,423 | 90,375 |
| **2011/Q3** | 1,451 | 174 | 0 | 902 | 127 | 1,881 | 59 | 5,750 | 169 | 1,950 | 7,340 | 14,000 | 0 | 41 | 8,458 | 7,688 | 7,642 | 4,684 | 1,728 | 5,101 | 69,145 |
| **2011/Q4** | 445 | 0 | 0 | 26 | 169 | 1,480 | 123 | 3,049 | 662 | 2,859 | 5,009 | 11,690 | 0 | 150 | 9,808 | 3,005 | 879 | 538 | 1,998 | 8,656 | 50,546 |
| **2012/Q1** | 62 | 0 | 0 | 146 | 307 | 1,165 | 0 | 479 | 125 | 1,520 | 3,061 | 191 | 95 | 168 | 2,044 | 137 | 855 | 524 | 3,555 | 5,811 | 20,245 |
| **2012/Q2** | 890 | 407 | 0 | 955 | 266 | 1,243 | 144 | 1,096 | 71 | 1,369 | 7,830 | 0 | 158 | 245 | 1,088 | 53 | 2,280 | 1,397 | 2,313 | 1,909 | 23,714 |
| **2012/Q3** | 2,791 | 125 | 0 | 1,466 | 164 | 1,516 | 359 | 2,253 | 4 | 642 | 2,711 | 0 | 138 | 13 | 912 | 8 | 2,267 | 1,389 | 1,519 | 3,961 | 22,238 |
| **2012/Q4** | 591 | 0 | 172 | 174 | 313 | 838 | 0 | 3,831 | 208 | 644 | 10,970 | 4,305 | 308 | 42 | 7,136 | 1,266 | 2,352 | 1,441 | 2,411 | 5,823 | 42,825 |

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# TABLE 3-3
## SPREADING BASIN AND RIVER RECHARGE GROUNDWATER FLOW MODEL
Baldwin Park Operable Unit
San Gabriel Valley, California

Volumes of water spread in acre-feet

| | Spreading Basins | | | | | | | | | | | | | | San Gabriel River | | | | | Rio Hondo | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date/Quarter | Ben Lomond | Big Dalton | Buena Vista | Citrus | Eaton Basin | Fish Canyon | Forbes | Irwindale/ Manning | Little Dalton | Peck Road | San Gabriel Canyon | Santa Fe | Sawpit | Walnut | Morris Dam - Foothill Blvd | Foothill Blvd - Santa Fe Dam | Santa Fe Dam - Valley Blvd | Valley Blvd - Station E322 | Station E322 - Whittier Narrows | Rio Hondo at Whittier Narrows | Total |
| **2013/Q1** | 0 | 17 | 0 | 169 | 274 | 704 | 0 | 140 | 63 | 895 | 3,936 | 0 | 183 | 92 | 1,046 | 33 | 1,155 | 708 | 2,926 | 2,855 | 15,196 |
| **2013/Q2** | 0 | 44 | 0 | 37 | 81 | 394 | 60 | 27 | 133 | 594 | 7,150 | 0 | 171 | 90 | 1,238 | 21 | 1,942 | 1,191 | 1,689 | 2,623 | 17,485 |
| **2013/Q3** | 0 | 0 | 0 | 19 | 53 | 264 | 0 | 0 | 35 | 354 | 4,519 | 0 | 86 | 49 | 794 | 26 | 1,395 | 855 | 3,430 | 1,500 | 13,379 |
| **2013/Q4** | 0 | 0 | 0 | 85 | 95 | 291 | 0 | 373 | 654 | 267 | 3,599 | 9,440 | 135 | 74 | 10,576 | 1,304 | 712 | 437 | 4,706 | 4,999 | 37,747 |
| **2014/Q1** | 141 | 0 | 0 | 301 | 307 | 86 | 7 | 207 | 274 | 502 | 1,370 | 0 | 159 | 134 | 3,567 | 559 | 910 | 557 | 3,266 | 6,055 | 18,402 |
| **2014/Q2** | 0 | 0 | 0 | 148 | 93 | 398 | 0 | 148 | 0 | 475 | 247 | 0 | 31 | 121 | 709 | 57 | 1,996 | 1,223 | 1,972 | 2,390 | 10,008 |
| **2014/Q3** | 0 | 2 | 0 | 87 | 90 | 802 | 0 | 204 | 0 | 266 | 5,236 | 0 | 0 | 13 | 969 | 18 | 1,253 | 768 | 2,485 | 1,988 | 14,181 |
| **2014/Q4** | 225 | 0 | 0 | 247 | 376 | 194 | 0 | 165 | 0 | 410 | 5,530 | 0 | 0 | 119 | 1,088 | 153 | 2,737 | 1,678 | 4,041 | 7,097 | 24,060 |
| **2015/Q1** | 11 | 0 | 0 | 128 | 140 | 103 | 0 | 3 | 0 | 547 | 4,800 | 0 | 6 | 189 | 1,176 | 27 | 3,031 | 1,857 | 2,537 | 3,882 | 18,437 |
| **2015/Q2** | 0 | 1 | 0 | 70 | 64 | 109 | 0 | 40 | 0 | 408 | 4,630 | 0 | 63 | 3 | 2,078 | 161 | 1,437 | 880 | 4,336 | 1,648 | 15,928 |
| **2015/Q3** | 0 | 0 | 0 | 137 | 108 | 1,017 | 0 | 124 | 0 | 336 | 7,660 | 0 | 15 | 26 | 4,749 | 54 | 1,986 | 1,217 | 3,200 | 4,182 | 24,811 |
| **2015/Q4** | 0 | 0 | 0 | 67 | 80 | 337 | 0 | 0 | 358 | 407 | 3,730 | 8,050 | 80 | 0 | 7,532 | 1,947 | 5,483 | 3,361 | 2,622 | 5,618 | 39,672 |
| **2016/Q1** | 199 | 0 | 0 | 341 | 496 | 367 | 0 | 243 | 0 | 1,118 | 2,577 | 0 | 169 | 0 | 3,973 | 216 | 1,590 | 975 | 6,267 | 12,689 | 31,220 |
| **2016/Q2** | 0 | 0 | 0 | 158 | 93 | 716 | 0 | 12 | 0 | 480 | 5,349 | 0 | 149 | 0 | 707 | 27 | 1,882 | 1,153 | 396 | 1,853 | 12,975 |
| **2016/Q3** | 2,101 | 2 | 1 | 2,234 | 33 | 2 | 159 | 660 | 10 | 267 | 5,544 | 6,355 | 4 | 1 | 14,185 | 1,307 | 1,613 | 1,165 | 29 | 443 | 36,115 |
| **2016/Q4** | 159 | 4 | 1 | 248 | 321 | 220 | 95 | 713 | 858 | 292 | 3,252 | 9,829 | 35 | 1 | 9,225 | 1,153 | 5,570 | 4,024 | 3,119 | 16,552 | 55,671 |
| **2017/Q1** | 605 | 31 | 2 | 1,045 | 409 | 833 | 163 | 1,655 | 31 | 1,941 | 1,732 | 3,616 | 179 | 1 | 5,216 | 2,179 | 4,199 | 3,031 | 3,249 | 17,042 | 47,159 |
| **2017/Q2** | 4 | 613 | 1 | 173 | 152 | 1,393 | 2 | 4 | 869 | 1,421 | 5,305 | 1,388 | 152 | 0 | 6,357 | 786 | 1,416 | 1,023 | 601 | 4,246 | 25,906 |
| **2017/Q3** | 0 | 0 | 0 | 16 | 119 | 387 | 0 | 0 | 476 | 4,079 | 4,273 | 16,050 | 25 | 23 | 14,922 | 8,112 | 1,879 | 1,151 | 685 | 3,344 | 55,541 |
| **2017/Q4** | 817 | 0 | 0 | 243 | 108 | 412 | 192 | 0 | 774 | 340 | 7,020 | 6,991 | 48 | 86 | 3,502 | 2,108 | 3,452 | 2,116 | 1,406 | 5,219 | 34,834 |
| **2018/Q1** | 1,295 | 0 | 0 | 512 | 401 | 455 | 96 | 749 | 548 | 537 | 5,470 | 8,485 | 168 | 85 | 2,701 | 2,808 | 2,220 | 1,361 | 1,175 | 10,437 | 39,503 |
| **2018/Q2** | 1,877 | 74 | 0 | 408 | 181 | 462 | 70 | 69 | 180 | 419 | 2,917 | 1,830 | 169 | 60 | 1,836 | 456 | 3,300 | 2,022 | 1,258 | 2,915 | 20,503 |
| **2018/Q3** | 527 | 0 | 0 | 89 | 85 | 137 | 57 | 61 | 0 | 230 | 4,960 | 0 | 7 | 231 | 677 | 10 | 1,499 | 919 | 133 | 1,895 | 11,517 |
| **2018/Q4** | 121 | 0 | 0 | 237 | 350 | 395 | 0 | 482 | 910 | 275 | 5,492 | 19,357 | 60 | 271 | 9,229 | 5,605 | 2,324 | 1,424 | 1,966 | 5,367 | 53,865 |
| **2019/Q1** | 663 | 548 | 0 | 1,754 | 788 | 641 | 169 | 2,566 | 544 | 4,961 | 3,013 | 21,743 | 244 | 598 | 7,544 | 11,086 | 6,846 | 4,196 | 7,306 | 18,099 | 93,309 |
| **2019/Q2** | 2,297 | 51 | 0 | 1,058 | 224 | 784 | 0 | 54 | 237 | 3,831 | 4,069 | 17,650 | 235 | 321 | 7,266 | 8,170 | 3,378 | 2,071 | 1,222 | 4,460 | 57,378 |

**Notes:**

a. Q3 = Third quarter; July, August, September
b. Q4 = Fourth quarter; October, November, December
c. Q1 = First quarter; January, February, March
d. Q2 = Second quarter; April, May, June

Recharge values obtained from Los Angeles County Department of Public Works. Q4, Q1, and Q2 data for current reporting period considered provisional and are subject to revision in subsequent report.

# TABLE 3-4
# PRECIPITATION AND RETURN FLOW RECHARGE
# GROUNDWATER FLOW MODEL
Baldwin Park Operable Unit
San Gabriel Valley, California

| | | Recharge Zone 1 Area = 2,464 acres | Recharge Zone 2 Area = 19,585 acres | Recharge Zone 3 Area = 31,675 acres | Recharge Zone 4 Area = 19,667 acres | Recharge Zone 5 Area = 11,375 acres | Recharge Zone 6 Area = 5,858 acres | Recharge Zone 7 Area = 2,962 acres | Recharge Zone 8 Area = 463 acres | Recharge Zone 9 Area = 6 acres | Total Model Domain Area = 94,054 acres |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date / Quarter | Average Precipitation [1] (in/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) | Recharge Volume: Return Flow and Precipitation (ac-ft/qtr) |
| 2012/Q4 | 4.59 | 287 | 2,307 | 3,792 | 2,392 | 1,410 | 737 | 380 | 60 | 0.8 | 11,366 |
| 2013/Q1 | 2.85 | 74 | 602 | 1,011 | 651 | 393 | 209 | 110 | 18 | 0.2 | 3,069 |
| 2013/Q2 | 0.77 | 46 | 367 | 594 | 369 | 213 | 110 | 56 | 9 | 0.1 | 1,765 |
| 2013/Q3 | 0.01 | 70 | 557 | 901 | 560 | 324 | 167 | 84 | 13 | 0.2 | 2,676 |
| 2013/Q4 | 1.66 | 45 | 360 | 582 | 361 | 209 | 108 | 54 | 8 | 0.1 | 1,727 |
| 2014/Q1 | 4.11 | 176 | 1,420 | 2,352 | 1,494 | 887 | 467 | 242 | 39 | 0.5 | 7,078 |
| 2014/Q2 | 0.54 | 46 | 367 | 594 | 369 | 213 | 110 | 56 | 9 | 0.1 | 1,765 |
| 2014/Q3 | 0.09 | 154 | 1,225 | 1,981 | 1,230 | 711 | 366 | 185 | 29 | 0.4 | 5,882 |
| 2014/Q4 | 5.73 | 308 | 2,476 | 4,080 | 2,580 | 1,525 | 799 | 413 | 66 | 0.9 | 12,247 |
| 2015/Q1 | 2.42 | 66 | 540 | 905 | 582 | 350 | 186 | 98 | 16 | 0.2 | 2,743 |
| 2015/Q2 | 1.39 | 46 | 367 | 594 | 369 | 213 | 110 | 56 | 9 | 0.1 | 1,765 |
| 2015/Q3 | 2.54 | 354 | 2,823 | 4,598 | 2,876 | 1,678 | 870 | 444 | 70 | 0.9 | 13,713 |
| 2015/Q4 | 1.97 | 189 | 1,514 | 2,475 | 1,553 | 909 | 473 | 242 | 38 | 0.5 | 7,393 |
| 2016/Q1 | 7.31 | 141 | 1,156 | 1,965 | 1,280 | 782 | 421 | 224 | 36 | 0.5 | 6,005 |
| 2016/Q2 | 1.40 | 21 | 163 | 264 | 164 | 95 | 49 | 25 | 4 | 0.1 | 784 |
| 2016/Q3 | 0.01 | 31 | 245 | 396 | 246 | 142 | 73 | 37 | 6 | 0.1 | 1,176 |
| 2016/Q4 | 6.87 | 143 | 1,173 | 1,988 | 1,291 | 786 | 421 | 223 | 36 | 0.5 | 6,063 |
| 2017/Q1 | 16.17 | 189 | 1,552 | 2,641 | 1,722 | 1,053 | 567 | 301 | 49 | 0.7 | 8,074 |
| 2017/Q2 | 0.62 | 21 | 163 | 264 | 164 | 95 | 49 | 25 | 4 | 0.1 | 784 |
| 2017/Q3 | 0.12 | 31 | 245 | 396 | 246 | 142 | 73 | 37 | 6 | 0.1 | 1,176 |
| 2017/Q4 | 0.10 | 2 | 16 | 26 | 16 | 9 | 5 | 2 | 0 | 0.0 | 78 |
| 2018/Q1 | 7.11 | 82 | 670 | 1,136 | 738 | 450 | 241 | 128 | 21 | 0.3 | 3,465 |
| 2018/Q2 | 0.49 | 2 | 16 | 26 | 16 | 9 | 5 | 2 | 0 | 0.0 | 78 |
| 2018/Q3 | 0.00 | 31 | 245 | 396 | 246 | 142 | 73 | 37 | 6 | 0.1 | 1,176 |
| 2018/Q4 | 5.31 | 68 | 554 | 931 | 600 | 362 | 193 | 101 | 16 | 0.2 | 2,825 |
| 2019/Q1 | 18.54 | 278 | 2,286 | 3,896 | 2,542 | 1,556 | 838 | 446 | 73 | 1.0 | 11,915 |
| 2019/Q2 | 1.70 | 21 | 163 | 264 | 164 | 95 | 49 | 25 | 4 | 0.1 | 784 |

**Notes:**

Recharge zones represent precipitation areas in California Department of Water Resources (DWR) Bulletin No. 104-2, Appendix A: Geohydrology, 1966. Precipitation zones are characterized by the measured long-term average annual precipitation amounts.

Recharge volumes represent the total recharge rate from precipitation and irrigated return flows over the area of each recharge zone in the groundwater flow model.

In 2019, recharge values were recalculated for all model years based on the methodology described in the 2016 report "*Estimating Spatially and Temporally Varying Recharge and Runoff from Precipitation and Urban Irrigation in the Los Angeles Basin, California*" by the United States Geological Survey (USGS). Return flows were reduced by a scaling factor to better match the lower values determined by the USGS report. The scaling factor was then adjusted during calibration to better match observed data.

Q1 = First quarter: January, February, March; Q2 = Second quarter: April, May, June; Q3 = Third quarter: July, August, September; Q4 = Fourth quarter: October, November, December

1. Average quarterly precipitation calculated from daily precipitation totals measured at 14 stations in the San Gabriel Basin. Daily measurements provided by Los Angeles County Department of Public Works.

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**TABLE 3-5**
**SIMULATED EXTRACTION WELL PUMPING RATES**
**GROUNDWATER FLOW MODEL**
Baldwin Park Operable Unit
San Gabriel Valley, California

| Well Name | Site ID | Design Extraction Rates (gpm) | Target Operational Extraction Rates (gpm) | EPA Approved Extraction Rates (gpm) | 2014/Q3 | | 2014/Q4 | | 2015/Q1 | | 2015/Q2 | | 2015/Q3 | | 2015/Q4 | | 2016/Q1 | | 2016/Q2 | | 2016/Q3 | | 2016/Q4 | | 2017/Q1 | | 2017/Q2 | | 2017/Q3 | | 2017/Q4 | | 2018/Q1 | | 2018/Q2 | | 2018/Q3 | | 2018/Q4 | | 2019/Q1 | | 2019/Q2 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm | Acre-ft | gpm |
| **Subarea 1** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **VCWD SA-1 Subproject** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SA1-1 | 08000185 | 3,400 | 3,000 | 1,000 | 0 | 0 | 726 | 1806 | 1217 | 3060 | 331 | 832 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SA1-2 | 08000186 | 2,400 | 2,200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SA1-3 (LANTE) | 08000060 | 2,000 | 1,800 | 5,000 | 1323 | 3289 | 347 | 863 | 0 | 0 | 811 | 2038 | 1165 | 2898 | 1193 | 2967 | 1271 | 3231 | 1294 | 3254 | 591 | 1468 | 796 | 1978 | 428 | 1088 | 1050 | 2640 | 1268 | 3153 | 1213 | 3016 | 1181 | 3003 | 639 | 1607 | 259 | 644 | 153 | 381 | 170 | 427 | 307 | 771 |
| **Subtotal** | | **7800** | **7000** | **6000** | **1323** | **3289** | **1073** | **2669** | **1217** | **3060** | **1142** | **2871** | **1165** | **2898** | **1193** | **2967** | **1271** | **3231** | **1294** | **3254** | **591** | **1468** | **796** | **1978** | **428** | **1088** | **1050** | **2640** | **1268** | **3153** | **1213** | **3016** | **1181** | **3003** | **639** | **1607** | **259** | **644** | **153** | **381** | **170** | **427** | **307** | **771** |
| **Subarea 3** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **LPVCWD Subproject** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LPVCWD 2 | 01901460 | Standby | Standby | Standby | 185 | 461 | 109 | 271 | 21 | 53 | 8 | 21 | 12 | 31 | 8 | 20 | 13 | 33 | 48 | 121 | 4 | 10 | 18 | 46 | 15 | 38 | 13 | 33 | 134 | 333 | 29 | 72 | 15 | 38 | 9 | 22 | 121 | 302 | 8 | 20 | 301 | 757 | 558 | 1403 |
| LPVCWD 3 | 01902859 | Standby | Standby | Standby | 51 | 126 | 0 | 0 | 0 | 0 | 6 | 16 | 16 | 39 | 9 | 24 | 15 | 38 | 54 | 135 | 5 | 12 | 23 | 57 | 18 | 46 | 16 | 39 | 155 | 385 | 34 | 84 | 17 | 44 | 10 | 26 | 26 | 64 | 1 | 3 | 167 | 420 | 401 | 1007 |
| LPVCWD 5 | 08000209 | 2,500 | 2,250 | 2,250 | 418 | 1038 | 732 | 1820 | 842 | 2118 | 890 | 2238 | 879 | 2185 | 899 | 2235 | 842 | 2140 | 734 | 1846 | 854 | 2122 | 882 | 2193 | 836 | 2126 | 832 | 2091 | 590 | 1467 | 835 | 2076 | 885 | 2249 | 924 | 2324 | 709 | 1763 | 946 | 2352 | 425 | 1068 | 0 | 0 |
| **Subtotal** | | **2500** | **2250** | **2250** | **653** | **1625** | **841** | **2091** | **863** | **2171** | **905** | **2274** | **907** | **2255** | **916** | **2279** | **870** | **2211** | **836** | **2102** | **863** | **2145** | **923** | **2295** | **869** | **2210** | **861** | **2163** | **879** | **2185** | **898** | **2232** | **917** | **2331** | **943** | **2371** | **856** | **2129** | **955** | **2375** | **893** | **2246** | **959** | **2410** |
| **SGVWC B6 Subproject** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SGVWC B25A | 08000187 | 2,800 | 2,500 | 2,500 | 620 | 1542 | 602 | 1496 | 828 | 2082 | 991 | 2491 | 1007 | 2504 | 999 | 2485 | 1025 | 2606 | 697 | 1752 | 884 | 2197 | 911 | 2266 | 958 | 2435 | 904 | 2274 | 944 | 2346 | 999 | 2483 | 982 | 2498 | 996 | 2504 | 1057 | 2628 | 1024 | 2547 | 1068 | 2686 | 1071 | 2693 |
| SGVWC B25B | 08000188 | 2,800 | 2,500 | 2,500 | 957 | 2380 | 939 | 2334 | 1027 | 2582 | 1000 | 2513 | 1012 | 2515 | 1053 | 2618 | 1079 | 2742 | 823 | 2069 | 1041 | 2589 | 1056 | 2626 | 1055 | 2681 | 944 | 2372 | 961 | 2390 | 978 | 2432 | 956 | 2431 | 944 | 2374 | 909 | 2260 | 859 | 2136 | 917 | 2305 | 922 | 2319 |
| SGVWC B26A | 08000189 | 1,100 | 1,000 | 750 | 223 | 555 | 205 | 510 | 193 | 484 | 192 | 482 | 181 | 449 | 213 | 531 | 211 | 537 | 200 | 502 | 187 | 464 | 212 | 527 | 233 | 591 | 247 | 620 | 255 | 635 | 293 | 728 | 290 | 737 | 265 | 667 | 333 | 827 | 370 | 919 | 400 | 1006 | 419 | 1054 |
| SGVWC B26B | 08000190 | 1,100 | 1,000 | 750 | 432 | 1073 | 473 | 1176 | 482 | 1211 | 484 | 1216 | 430 | 1070 | 398 | 991 | 398 | 1012 | 379 | 952 | 356 | 884 | 390 | 971 | 375 | 953 | 394 | 991 | 450 | 1118 | 489 | 1215 | 491 | 1248 | 416 | 1045 | 306 | 760 | 348 | 866 | 367 | 922 | 383 | 964 |
| **Subtotal** | | **7800** | **7000** | **6500** | **2232** | **5550** | **2218** | **5516** | **2529** | **6358** | **2666** | **6702** | **2629** | **6538** | **2664** | **6624** | **2713** | **6897** | **2098** | **5275** | **2467** | **6135** | **2570** | **6389** | **2620** | **6660** | **2489** | **6257** | **2610** | **6489** | **2758** | **6859** | **2719** | **6914** | **2622** | **6591** | **2604** | **6475** | **2601** | **6468** | **2752** | **6918** | **2796** | **7030** |
| **SGVWC B5 Subproject** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SGVWC B5B | 61900719 | 3,300 | 3,000 | 3,000 | 1067 | 2654 | 810 | 2014 | 497 | 1249 | 1149 | 2887 | 1183 | 2942 | 1154 | 2869 | 861 | 2189 | 1113 | 2799 | 1107 | 2754 | 1068 | 2655 | 846 | 2151 | 1160 | 2915 | 1133 | 2817 | 1100 | 2736 | 1086 | 2761 | 1046 | 2629 | 597 | 1483 | 999 | 2484 | 1016 | 2555 | 1164 | 2926 |
| SGVWC B5E | 08000205 | 3,300 | 3,000 | 3,000 | 1145 | 2848 | 1128 | 2805 | 1071 | 2694 | 1360 | 3420 | 966 | 2402 | 1050 | 2611 | 1071 | 2723 | 1127 | 2834 | 941 | 2340 | 904 | 2249 | 945 | 2403 | 1361 | 3421 | 859 | 2135 | 828 | 2059 | 753 | 1916 | 1134 | 2852 | 703 | 1747 | 114 | 283 | 681 | 1713 | 1232 | 3096 |
| COI 5 | 08000097 | 1,200 | 1,000 | 1,000 | 425 | 1056 | 440 | 1093 | 464 | 1166 | 58 | 147 | 413 | 1028 | 171 | 426 | 383 | 974 | 276 | 694 | 418 | 1038 | 430 | 1070 | 388 | 987 | 0 | 0 | 432 | 1075 | 427 | 1063 | 396 | 1007 | 59 | 148 | 411 | 1021 | 346 | 860 | 367 | 923 | 35 | 88 |
| **Subtotal** | | **7800** | **7000** | **7000** | **2637** | **6558** | **2378** | **5912** | **2032** | **5108** | **2567** | **6454** | **2563** | **6372** | **2376** | **5907** | **2315** | **5886** | **2517** | **6327** | **2466** | **6132** | **2402** | **5973** | **2179** | **5540** | **2520** | **6336** | **2424** | **6027** | **2356** | **5858** | **2236** | **5684** | **2239** | **5629** | **1710** | **4252** | **1459** | **3628** | **2065** | **5191** | **2430** | **6110** |
| **CDWC Project** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CDWC 2 | 01901181 | NA | NA | --- | 548 | 1363 | 156 | 388 | 143 | 359 | 320 | 805 | 172 | 428 | 190 | 472 | 562 | 1429 | 800 | 2010 | 812 | 2020 | 176 | 437 | 134 | 342 | 779 | 1957 | 951 | 2364 | 922 | 2294 | 523 | 1330 | 499 | 1253 | 523 | 1302 | 268 | 666 | 2 | 5 | 839 | 2108 |
| CDWC 3 | 01903057 | NA | NA | --- | 1585 | 3940 | 1551 | 3856 | 1655 | 4161 | 1426 | 3586 | 1533 | 3812 | 1313 | 3264 | 546 | 1389 | 1612 | 4052 | 1570 | 3903 | 1532 | 3809 | 1619 | 4115 | 1638 | 4117 | 1644 | 4089 | 1591 | 3956 | 1650 | 4195 | 1543 | 3878 | 1593 | 3961 | 1652 | 4108 | 1546 | 3888 | 1710 | 4299 |
| CDWC 5A | 08000100 | NA | NA | --- | 1393 | 3464 | 1317 | 3276 | 1418 | 3564 | 1312 | 3298 | 1357 | 3374 | 1271 | 3162 | 1408 | 3579 | 1351 | 3397 | 1305 | 3244 | 1217 | 3026 | 1300 | 3304 | 1267 | 3184 | 1294 | 3219 | 1301 | 3235 | 1328 | 3376 | 1235 | 3105 | 1271 | 3159 | 1321 | 3284 | 943 | 2370 | 1383 | 3477 |
| CDWC 6 | 01902967 | NA | NA | --- | 1289 | 3206 | 726 | 1805 | 330 | 830 | 681 | 1712 | 647 | 1610 | 95 | 236 | 267 | 679 | 549 | 1380 | 711 | 1769 | 699 | 1739 | 385 | 978 | 1126 | 2830 | 753 | 1873 | 443 | 1101 | 270 | 687 | 432 | 1086 | 508 | 1264 | 228 | 567 | 52 | 131 | 311 | 781 |
| CDWC 8 | 01903081 | NA | NA | --- | 941 | 2341 | 704 | 1750 | 458 | 1151 | 816 | 2051 | 807 | 2005 | 616 | 1533 | 852 | 2166 | 855 | 2149 | 566 | 1408 | 119 | 296 | 66 | 167 | 718 | 1806 | 977 | 2429 | 825 | 2052 | 686 | 1745 | 951 | 2391 | 912 | 2268 | 439 | 1091 | 55 | 138 | 380 | 955 |
| **Subtotal** | | **NA** | **NA** | **8000** | **5756** | **14313** | **4454** | **11075** | **4003** | **10064** | **4555** | **11452** | **4516** | **11230** | **3485** | **8666** | **3635** | **9241** | **5166** | **12988** | **4965** | **12344** | **3743** | **9307** | **3503** | **8906** | **5527** | **13895** | **5620** | **13973** | **5082** | **12637** | **4458** | **11333** | **4659** | **11713** | **4807** | **11954** | **3908** | **9716** | **2598** | **6531** | **4622** | **11621** |

**Notes:**
1 - Average production rates estimated by dividing the total monthly well production by the number of minutes in each quarter.
gpm - gallons per minute.
1 acre-foot = 325,851 gallons.
NA - Not Applicable.

**TABLE 4-1**
**CARBON AND RESIN CHANGEOUT SUMMARY 2009 - 2019**
**Baldwin Park Operable Unit**
**Los Angeles County, California**

| Plant | Date | Resin or Carbon | Volume | Certificates Received |
|---|---|---|---|---|
| *VCWD* | 23 to 30-Mar-09 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 1-Apr-09 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 29-Jun-09 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 13-Jul-09 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 21 & 28-Oct-09 | Vapor Phase Carbon | 40,000 lbs | Yes |
| | 10-Feb-10 | Liquid Phase Carbon | 200,000 lbs | Yes |
| | 23, 24 & 28-Sept-10 | Liquid Phase Carbon | 100,000 lbs | Yes |
| | 1, 5 & 7-Oct-10 | Liquid Phase Carbon | 100,000 lbs | Yes |
| | 14 & 15-Oct-10 | Vapor Phase Carbon | 40,000 lbs | Yes |
| | 25 & 26-Jan-11 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 10, 13, 16, 20, 23-June-11 | Liquid Phase Carbon | 200,000 lbs | Yes |
| | 18-Aug-11 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 2-Feb-12 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 8 to 23-March-12 | Liquid Phase Carbon | 200,000 lbs | Yes |
| | 23-Mar-12 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 6-Apr-12 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 21, 22, 23, 24, 25-Oct-12 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 18-Dec-12 | Liquid Phase Carbon | 20,000 lbs | Yes |
| | 5 to 19-Sept-13 | Liquid Phase Carbon | 200,000 lbs | Yes |
| | 5-May-14 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 14-Feb-14 | ISEP Resin | 1,950 cubic feet | Yes |
| | 11-Nov-14 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 27-Jan-15 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 22-29-Sept-15 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 1-6-Oct-15 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 16 to 21-May-16 | SPIX Resin | 5,100 cubic feet | Not Applicable |
| | 12-May-17 | Vapor Phase Carbon | 20,000 lbs | No |
| | 3-Aug-17 | SPIX Resin | 424 cubic feet | No |
| | 12-Oct-17 | SPIX Resin | 424 cubic feet | Yes |
| | 13, 15, 18, 20, 22-Dec-17 | Liquid Phase Carbon | 200,000 lbs | Yes |
| | 8-Dec-17 | SPIX Resin | 424 cubic feet | Yes |
| | 13-Dec-17 | SPIX Resin | 424 cubic feet | Yes |
| | 10-Jul-18 | SPIX Resin | 424 cubic feet | No |
| | 23, 29-Aug-18 | SPIX Resin | 848 cubic feet | No |
| | 8-Oct-18 | SPIX Resin | 424 cubic feet | No |
| | 6-Dec-18 | SPIX Resin | 424 cubic feet | No |
| *LPVCWD* | 9-Mar-09 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 15-May-09 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 23-Jul-09 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 1-Oct-09 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 10-Dec-09 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 18-Feb-10 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 28-Apr-10 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 7-Jul-10 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 14-Sep-10 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 23-Nov-10 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 1-Feb-11 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 11-Apr-11 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 17, 18, 19-May-11 | Resin | 850 cubic feet | Yes |
| | 3-Nov-11 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 19, 20-Dec-11 | Resin | 850 cubic feet | Yes |
| | 4, 5-June-12 | Resin | 850 cubic feet | Yes |
| | 2-Jul-12 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 3-Jan-13 | Resin | 425 cubic feet | Yes |
| | 2-Jul-13 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 8, 28-Aug-13 | Resin | 850 cubic feet | Yes |
| | 15-Jan-14 | Resin | 425 cubic feet | Yes |
| | 17-Mar-14 | Resin | 425 cubic feet | Yes |
| | 25-Jul-14 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 12, 19-Jan-15 | Resin | 850 cubic feet | Yes |
| | 18-Mar-15 | Resin | 425 cubic feet | Yes |
| | 11, 12-Aug-15 | Resin | 425 cubic feet | Yes |
| | 27-Aug-15 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 22-Dec-15 | Resin | 425 cubic feet | Yes |
| | 27, 28-Apr-16 | Resin | 425 cubic feet | Yes |
| | 29, 30-Jun-16 | Resin | 425 cubic feet | Yes |
| | 9, 10-Nov-16 | Resin | 425 cubic feet | Yes |
| | 1, 2-Feb-17 | Resin | 425 cubic feet | Yes |
| | 12, 13-Jun-17 | Resin | 425 cubic feet | Yes |
| | 12, 13-Sep-17 | Resin | 425 cubic feet | Yes |
| | 26-Oct-17 | Vapor Phase Carbon | 27,400 lbs | Yes |
| | 21-Dec-17 | Resin | 425 cubic feet | Yes |
| | 10, 11-Apr-18 | Resin | 425 cubic feet | Yes |
| | 7-Aug-18 | Resin | 425 cubic feet | Yes |
| | 30, 31-Oct-18 | Resin | 425 cubic feet | Yes |
| | 6, 7-Mar-19 | Resin | 425 cubic feet | Yes |
| | 4, 5-Jun-19 | Resin | 425 cubic feet | Yes |

**TABLE 4-1**
**CARBON AND RESIN CHANGEOUT SUMMARY 2009 - 2019**
**Baldwin Park Operable Unit**
**Los Angeles County, California**

| Plant | Date | Resin or Carbon | Volume | Certificates Received |
|---|---|---|---|---|
| | 29-Oct-19 | Vapor Phase Carbon | 27,000 lbs | Yes |
| | 3-Dec-19 | Resin | 425 cubic feet | Yes |
| *B5* | 5-Feb-09 | Liquid Phase Carbon | 320,000 lbs | Yes |
| | 27 & 29-May-09 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 2, 4, 9, 11, 16, 18, 23, 25, & 30 | Liquid Phase Carbon | 200,000 lbs | Yes |
| | 2 & 14-Jul-09 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 19-Oct-09 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 3, 6, 12, 16, 20, 23, & 25-Nov | Liquid Phase Carbon | 140,000 lbs | Yes |
| | 10, 11, & 18-Dec-09 | Resin | 1272 cubic feet | Yes |
| | 5, 12 & 17-Feb-10 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 26-Feb-10 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 30, 31-Mar-10 | Resin | 1272 cubic feet | Yes |
| | 3, 7, 11, 14, 18, 25-Jun-10 | Liquid Phase Carbon | 240,000 lbs | Yes |
| | 29-Jun-10 | Resin | 848 cubic feet | Yes |
| | 2, 12, 17, 24-Aug-10 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 9, 16, 23, 29-Nov-10 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 1, 8, 15, 22-Feb-11 | Liquid Phase Carbon | 140,000 lbs | Yes |
| | 8-Mar-11 | Liquid Phase Carbon | 20,000 lbs | Yes |
| | 15-Mar-11 | Resin | 850 cubic feet | No |
| | 11, 13-Apr-11 | Resin | 1696 cubic feet | ?? |
| | 3-May-11 | Resin | 848 cubic feet | No |
| | 24-May-11 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 1-Jun-11 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 9, 14-June -11 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 10, 16, 23, 30-Aug -11 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 21, 28-Oct -11 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 4, 10-Nov -11 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 20, 26-Jan -12 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 2, 9-Feb -12 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 22-Mar-12 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 3, 10-Apr -12 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 21, 30-May -12 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 22-May-12 | Resin | 850 cubic feet | No |
| | 5, 12-June -12 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 10, 18, 25-July -12 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 6, 24, 26-July -12 | Resin | 2,550 cubic feet | No |
| | 4, 11, 18, 25-Sept -12 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 5, 13, 16, 30-Nov -12 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 9, 12, 18, 23-Jan -13 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 15, 21, 28-Feb -13 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 19-Feb-13 | Resin | 850 cubic feet | No |
| | 5-Mar-13 | Resin | 425 cubic feet | No |
| | 8-Mar-13 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 4, 18, 25, 30-Apr-13 | Liquid Phase Carbon | 320,000 lbs | Yes |
| | 5, 24-Apr-13 | Resin | 1,275 cubic feet | No |
| | 3, 16, 23, 30 -July-13 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 13, 20, 27-Aug-13 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 1, 4, 10, 17-Oct-13 | Liquid Phase Carbon | 140,000 lbs | Yes |
| | 25-Nov-13 | Resin | 848 cubic feet | ?? |
| | 9, 16, 23, 30-Dec-13 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 17-Dec-13 | Resin | 848 cubic feet | No |
| | 19, 20-Dec-13 | Resin | 1,272 cubic feet | No |
| | 23-Jan-14 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 6, 11, 18-Feb-14 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 27-Feb-14 | Resin | 424 cubic feet | No |
| | 4, 9, 15, 22, 24-Apr-14 | Liquid Phase Carbon | 200,000 lbs | Yes |
| | 17, 23-June-14 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 1-Jul-14 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 7-Aug-14 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 2, 11, 18-Sep-14 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 23-Oct-14 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 30-Oct-14 | Resin | 424 cubic feet | No |
| | 6-Nov-14 | Resin | 424 cubic feet | No |
| | 14, 20, 25-Nov-14 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 3,4-Dec-14 | Resin | 848 cubic feet | Yes |
| | 19-Dec-14 | Resin | 848 cubic feet | Yes |
| | 15-Jan-15 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 12, 18, 26-Feb-15 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 24-Mar-15 | Resin | 424 cubic feet | Yes |
| | 2-Apr-15 | Resin | 424 cubic feet | Yes |
| | 2-Apr-15 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 12, 20, 27-May-15 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 7-Jul-15 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 11, 18-Aug-15 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 9, 16-Sept-15 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 16-Nov-15 | Liquid Phase Carbon | 40,000 lbs | Yes |

**TABLE 4-1**
**CARBON AND RESIN CHANGEOUT SUMMARY 2009 - 2019**
**Baldwin Park Operable Unit**
**Los Angeles County, California**

| Plant | Date | Resin or Carbon | Volume | Certificates Received |
|---|---|---|---|---|
| | 19-Nov-15 | Resin | 848 cubic feet | Yes |
| | 24-Nov-15 | Resin | 848 cubic feet | Yes |
| | 2-Dec-15 | Resin | 424 cubic feet | No |
| | 14-Dec-15 | Resin | 848 cubic feet | No |
| | 3, 9, 17-Dec-15 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 12, 18, 23-Feb-16 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 1-Mar-16 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 6-Apr-16 | Resin | 424 cubic feet | No |
| | 28-Apr-16 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 2, 9, 16-May-16 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 5, 12, 19, 26-Jul-16 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 22-Sep-16 | Liquid Phase Carbon | 40,000 lbs | Yes |
| | 6, 13, 20-Oct-16 | Liquid Phase Carbon | 120,000 lbs | Yes |
| | 21, 27-Dec-16 | Resin | 1696 cubic feet | No |
| | 10, 17, 24, 31-Jan-17 | Liquid Phase Carbon | 160,000 lbs | Yes |
| | 6, 9-Mar-17 | Resin | 848 cubic feet | No |
| | 27-Apr-17 | Liquid Phase Carbon | 40,000 lbs | No |
| | 4, 11, 18-May-17 | Liquid Phase Carbon | 120,000 lbs | No |
| | 1, 8, 15, 22-Aug-17 | Liquid Phase Carbon | 160,000 lbs | No |
| | 19-Oct-17 | Resin | 848 cubic feet | No |
| | 31-Oct-17 | Liquid Phase Carbon | 40,000 lbs | No |
| | 6, 11-Nov-17 | Resin | 848 cubic feet | No |
| | 7-Nov-17 | Resin | 848 cubic feet | No |
| | 14, 21, 28-Nov-17 | Liquid Phase Carbon | 120,000 lbs | No |
| | 8, 22-Feb-18 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 1, 8-Mar-18 | Liquid Phase Carbon | 80,000 lbs | Yes |
| | 29-Mar-18 | Resin | 848 cubic feet | No |
| | 22, 29-May-18 | Liquid Phase Carbon | 80,000 lbs | No |
| | 5, 12-Jun-18 | Liquid Phase Carbon | 80,000 lbs | No |
| | 30-Aug-18 | Resin | 848 cubic feet | No |
| | 13, 20-Sep-18 | Liquid Phase Carbon | 80,000 lbs | No |
| | 10, 28-Sep-18 | Resin | 1272 cubic feet | No |
| | 30-Oct-18 | Liquid Phase Carbon | 40,000 lbs | No |
| | 1-Nov-18 | Liquid Phase Carbon | 40,000 lbs | No |
| | 10, 17-Jan-19 | Liquid Phase Carbon | 80,000 lbs | No |
| | 2, 9, 16, 23-Apr-19 | Liquid Phase Carbon | 160,000 lbs | No |
| | 23-Apr-19 | Resin | 424 cubic feet | No |
| | 18, 25-Jun-19 | Liquid Phase Carbon | 80,000 lbs | No |
| | 11, 22-July-19 | Liquid Phase Carbon | 80,000 lbs | No |
| | 27-Aug-19 | Resin | 848 cubic feet | No |
| | 12, 19, 26-Sept-19 | Liquid Phase Carbon | 120,000 lbs | No |
| | 30-Sep-19 | Resin | 424 cubic feet | No |
| | 3-Oct-19 | Liquid Phase Carbon | 40,000 lbs | No |
| | 26-Nov-19 | Resin | 424 cubic feet | No |
| | 10, 17-Dec-19 | Liquid Phase Carbon | 80,000 lbs | No |
| | 6, 12-Dec-19 | Resin | 1272 cubic feet | No |
| B6 | 9-Jan-09 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 30-Jan-09 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 20-Feb-09 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 23-Feb-09 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 4-Nov-09 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 4-Dec-09 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 2-Mar-10 | Vapor Phase Carbon | 40,000 lbs | Yes |
| | 21-May-10 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 4-Nov-10 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 1-Mar-11 | Vapor Phase Carbon | 60,000 lbs | Yes |
| | 1, 27-Dec -11 | Vapor Phase Carbon | 80,000 lbs | Yes |
| | 24-May-12 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 5-Apr-13 | Vapor Phase Carbon | 40,000 lbs | Yes |
| | 21-Jun-13 | Vapor Phase Carbon | 20,000 lbs | Yes |
| | 8, 9-May -14 | Vapor Phase Carbon | 80,000 lbs | Yes |
| | 18-Aug-14 | Resin | 848 cubic feet | Yes |
| | 22-Aug-14 | Resin | 848 cubic feet | Yes |
| | 7, 9, 11-Oct -14 | Vapor Phase Carbon | 80,000 lbs | No |
| | 16-Oct-14 | Resin | 424 cubic feet | Yes |
| | 12-Nov-14 | Resin | 424 cubic feet | Yes |
| | 13-Feb-15 | Resin | 424 cubic feet | Yes |
| | 24-Mar-15 | Resin | 424 cubic feet | Yes |
| | 14-Apr-15 | Resin | 848 cubic feet | Yes |

Geosyntec consultants

# TABLE 5-1
# 2019 VERTICAL HYDRAULIC GRADIENTS
Baldwin Park Operable Unit
San Gabriel Valley, California

**Subarea 1**

| Date | Groundwater Elevation (ft msl)[a] PZ1-1BS | PZ1-1BD | Vertical Distance between Mid-Screens (ft) | Estimated Vertical Hydraulic Gradient (ft/ft)[b,c] |
|---|---|---|---|---|
| 6/11/2019 | 208.57 | 209.02 | 350.00 | -1.3E-03 |
| 12/20/2019 | 222.94 | 223.34 | | -1.1E-03 |

| Date | Groundwater Elevation (ft msl)[a] MW 5-03 Port 9 | MW 5-03 Port 1 | Vertical Distance between Mid-Screens (ft) | Estimated Vertical Hydraulic Gradient (ft/ft)[b,c] |
|---|---|---|---|---|
| 2/1/2019 | 187.82 | 188.17 | 850.00 | -4.1E-04 |
| 5/21/2019 | 203.72 | 204.50 | | -9.2E-04 |
| 12/10/2019 | 220.00 | 221.16 | | -1.4E-03 |

**Subarea 2**

| Date | Groundwater Elevation (ft msl)[a] MW 5-01 Port 13 | MW 5-01 Port 1 | Vertical Distance between Mid-Screens (ft) | Estimated Vertical Hydraulic Gradient (ft/ft)[b,c] |
|---|---|---|---|---|
| 2/1/2019 | 186.09 | 182.85 | 1280.00 | 2.5E-03 |
| 6/21/2019 | 199.17 | 201.39 | | -1.7E-03 |
| 12/12/2019 | 214.40 | 215.93 | | -1.2E-03 |

| Date | Groundwater Elevation (ft msl)[a] MW 5-24 Port 7 | MW 5-24 Port 1 | Vertical Distance between Mid-Screens (ft) | Estimated Vertical Hydraulic Gradient (ft/ft)[b,c] |
|---|---|---|---|---|
| 5/28/2019 | 199.22 | 199.66 | 920.00 | -4.8E-04 |
| 12/11/2019 | 215.12 | 215.07 | | 5.4E-05 |

| Date | Groundwater Elevation (ft msl)[a] MW 5-25 Port 7 | MW 5-25 Port 1 | Vertical Distance between Mid-Screens (ft) | Estimated Vertical Hydraulic Gradient (ft/ft)[b,c] |
|---|---|---|---|---|
| 5/25/2019 | 199.74 | 199.41 | 900.00 | 3.7E-04 |
| 12/11/2019 | 215.02 | 215.14 | | -1.3E-04 |

**Subarea 3**

| Date | Groundwater Elevation (ft msl)[a] PZ3-1BS | PZ3-1BD | Vertical Distance between Mid-Screens (ft) | Estimated Vertical Hydraulic Gradient (ft/ft)[b,c] |
|---|---|---|---|---|
| 6/11/2019 | 179.57 | 177.70 | 425.00 | 4.4E-03 |
| 12/20/2019 | 194.92 | 192.77 | | 5.1E-03 |

| Date | Groundwater Elevation (ft msl)[a] MW 5-20 Port 7 | MW 5-20 Port 1 | Vertical Distance between Mid-Screens (ft) | Estimated Vertical Hydraulic Gradient (ft/ft)[b,c] |
|---|---|---|---|---|
| 6/27/2019 | 187.67 | 183.80 | 720.00 | 5.4E-03 |
| 12/13/2019 | 198.39 | 200.58 | | -3.0E-03 |

**Notes:**

a. Groundwater elevations obtained from the LDC database

b. Differences in mid-screen depth used for all calculations.

c. Negative vertical gradients indicate upward gradient.

ft msl - feet above mean sea level

ft/ft - feet per feet

NC - not calculable

NM - not measured

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

| Well Name | Site ID | Port [a] | Sample Date | Field Duplicate | 1,1,1-Trichloroethane (µg/L) | 1,1-Dichloroethane (µg/L) | 1,1-Dichloroethene (µg/L) | 1,2,3-Trichloropropane [b] (µg/L) | 1,2-Dichloroethane (µg/L) | 1,4-Dioxane (µg/L) | Acetone (µg/L) | Benzene (µg/L) | Carbon Disulfide (µg/L) | Carbon Tetrachloride (µg/L) | Chloroform (µg/L) | cis-1,2-Dichloroethene (µg/L) | Ethylbenzene (µg/L) | Methylene Chloride (µg/L) | NDMA [c] (ng/L) | Perchlorate (µg/L) | Tetrachloroethene (µg/L) | Toluene (µg/L) | trans-1,2-Dichloroethene (µg/L) | Trichloroethene (µg/L) | Xylenes, Total [d] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal or California State MCL (NL) [SMCL] [e]** | | | | | **200** | **5** | **6** | **0.005** | **0.5** | **(1)** | **--** | **1** | **160** | **0.5** | **80** | **6** | **300** | **5** | **(10)** | **6** | **5** | **150** | **10** | **5** | **1750** |
| **Extraction Wells** | | | | | | | | | | | | | | | | | | | | | | | | | |
| COI 5 | 8000097 | | 1/4/2019 | | 0.5 U | 0.5 U | 2 | 0.5 U | 0.5 U | 0.55 | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 2.4 | **10** | 0.5 U | 0.5 U | 3.6 | 1 U |
| | | | 2/4/2019 | | 0.5 U | 0.5 U | 2.2 | 0.5 U | 0.5 U | 0.56 | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 2.1 | **10** | 0.5 U | 0.5 U | 3.2 | 1 U |
| | | | 3/4/2019 | | 0.5 U | 0.5 U | 1.6 | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 2 U | **8.6** | 0.5 U | 0.5 U | 2.5 | 1 U |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 1.8 | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 2.8 | **12** | 0.5 U | 0.5 U | 3.3 | 1 U |
| | | | 6/17/2019 | | 1 U | 1 U | 1 U | 0.005 U | 1 U | 1 U | -- | 1 U | -- | 1 U | 2 U | 1 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 7/2/2019 | | 0.5 U | 0.5 U | 1.8 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | **11** | 0.5 U | 0.5 U | 2.9 | -- |
| | | | 8/5/2019 | | 0.5 U | 0.5 U | 1.6 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | **10** | 0.5 U | 0.5 U | 2.7 | -- |
| | | | 8/12/2019 | | 0.5 U | 0.5 U | 1.8 | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | **10** | 0.5 U | 0.5 U | 2.8 | 0.5 U |
| | | | 9/4/2019 | | 0.5 U | 0.5 U | 2.2 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | **9.6** | 0.5 U | 0.5 U | 2.9 | 0.5 U |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 2.8 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | **10** | 0.5 U | 0.5 U | 3.3 | 0.5 U |
| | | | 11/4/2019 | | 0.5 U | 0.5 U | 1.5 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | **8.4** | 0.5 U | 0.5 U | 2.6 | 0.5 U |
| | | | 11/14/2019 | | -- | -- | 3.6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4 | -- |
| | | | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| LPVCWD 2 | 1901460 | | 1/15/2019 | | 0.5 U | 0.6 | 0.5 U | 0.5 U | **2.2** | **1.4** | -- | 0.5 U | -- | **3.4** | 2.1 | 1.4 | 0.5 U | 0.5 U | **110** | **36** | 4.2 | 0.5 U | 0.5 U | **76** | 0.5 U |
| | | | 2/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 3/5/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | **1.4** | **1** | -- | 0.5 U | -- | **1.7** | 1.4 | 0.73 | 0.5 U | 0.5 U | **76** | **28** | 2.2 | 0.5 U | 0.5 U | **47** | 0.5 U |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | **1.4** | 0.91 | -- | 0.5 U | -- | **2.3** | 1.4 | 1 | 0.5 U | 0.5 U | **91** | **33** | 3.5 | 0.5 U | 0.5 U | **49** | 1 U |
| | | | 5/6/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | **1.3** | 0.96 | -- | 0.5 U | -- | **2.4** | 1.4 | 0.99 | 0.5 U | 0.5 U | **77** | **30** | 3 | 0.5 U | 0.5 U | **51** | 1 U |
| | | | 6/3/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | **1.4** | 1 U | -- | 0.5 U | -- | **2.5** | 1.4 | 0.96 | 0.5 U | 0.5 U | **74** | **24** | 2.8 | 0.5 U | 0.5 U | **44** | 0.5 U |
| | | | 7/1/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | **1.2** | 1 U | -- | 0.5 U | -- | **1.9** | 1.2 | 0.87 | 0.5 U | 0.5 U | **85** | **31** | 2.2 | 0.5 U | 0.5 U | **42** | 0.5 U |
| | | | 8/6/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | **1.2** | 1 U | -- | 0.5 U | -- | **2.6** | 1.3 | 0.68 | 0.5 U | 0.5 U | **65** | **30** | 2.4 | 0.5 U | 0.5 U | **39** | 0.5 U |
| | | | 9/3/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | **1.1** | 1 U | -- | 0.5 U | -- | **2** | 1.2 | 0.72 | 0.5 U | 0.5 U | **67** | **29** | 2.7 | 0.5 U | 0.5 U | **42** | 0.5 U |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | **1.1** | **1** | -- | 0.5 U | -- | **1.8** | 1.2 | 0.64 | 0.5 U | 0.5 U | **68** | **28** | 2.2 | 0.5 U | 0.5 U | **42** | 0.5 U |
| | | | 10/25/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | **1.1** | -- | -- | 0.5 U | -- | **1.8** | 1.3 | 0.73 | 0.5 U | 0.5 U | -- | -- | 2.4 | 0.5 U | 0.5 U | **40** | 0.5 U |
| | | | 11/5/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | **81** | **24** | 0.58 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 12/2/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | **1.3** | 1 U | -- | 0.5 U | -- | **1.8** | 1.3 | 1 | 0.5 U | 0.5 U | **59** | **25** | 2.1 | 0.5 U | 0.5 U | **41** | 0.5 U |
| | | | 12/16/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | **1.3** | -- | -- | 0.5 U | -- | **1.7** | 1.3 | 0.8 | 0.5 U | 0.5 U | 1000 U | -- | 2.6 | 0.5 U | 0.5 U | **41** | 0.5 U |
| LPVCWD 3 | 1902859 | | 1/15/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | **8.3** | 0.5 U | 0.5 U | 0.5 U | 0.95 | 0.5 U |
| | | | 2/12/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1000 U | -- | -- | -- | -- | -- | -- |
| | | | 2/28/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1000 U | -- | -- | -- | -- | -- | -- |
| | | | 3/5/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | **7.4** | 0.5 U | 0.5 U | 0.5 U | 0.59 | 1 U |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 | **9.6** | 0.5 U | 0.5 U | 0.5 U | 1.4 | 1 U |
| | | | 5/6/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 3.4 | **10** | 0.5 U | 0.5 U | 0.5 U | 2.6 | 0.5 U |
| | | | 6/3/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 3.5 | **8.4** | 0.5 U | 0.5 U | 0.5 U | 2.9 | 0.5 U |
| | | | 6/11/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | -- | -- | 0.5 U | 0.5 U | 0.5 U | 2.7 | 0.5 U |
| | | | 7/1/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 3.6 | **11** | 0.5 U | 0.5 U | 0.5 U | 2.8 | 0.5 U |
| | | | 8/6/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 3.8 | **11** | 0.5 U | 0.5 U | 0.5 U | 2.7 | 0.5 U |
| | | | 9/3/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 5.2 | **11** | 0.52 | 0.5 U | 0.5 U | 3.4 | 0.5 U |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 4.5 | **10** | 0.5 U | 0.5 U | 0.5 U | 2.9 | 0.5 U |
| | | | 10/25/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | -- | -- | 0.5 U | 0.5 U | 0.5 U | 2.9 | 0.5 U |
| | | | 11/5/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 4.8 | **8.9** | 0.71 | 0.5 U | 0.5 U | 3 | 0.5 U |
| | | | 12/2/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | -- | 0.5 U | -- | -- | 0.55 | 0.5 U | 0.5 U | 3.1 | 0.5 U |
| | | | 12/16/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.5 U | 0.5 U | 0.5 U | 3 | 0.5 U |
| LPVCWD 5 | 8000209 | | 1/3/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | **19** | **15** | 0.95 | 0.5 U | 0.5 U | **10** | 0.5 U |
| | | | 2/6/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | **23** | **13** | 0.79 | 0.5 U | 0.5 U | **8.5** | 0.5 U |
| | | | 3/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 4/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 5/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 9/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| VCWD SA1-1 | 8000185 | | 1/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 2/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 3/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 4/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 5/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 9/18/2019 | | -- | 0.5 U | 5.5 | 0.005 U | -- | 0.05 U | -- | -- | -- | -- | 0.7 | 0.05 U | -- | -- | 2 U | 4 | 3.1 | -- | -- | 4 | -- |
| | | | 10/14/2019 | | -- | 0.5 U | 5.4 | 0.005 U | -- | 0.05 U | -- | -- | -- | -- | 0.79 | 0.05 U | -- | -- | 2 U | 2.8 | 3.2 | -- | -- | **5.2** | -- |
| | | | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 12/3/2019 | | -- | 0.5 U | **13** | 0.005 U | -- | 0.54 | -- | -- | -- | -- | 1.3 | 0.05 U | -- | -- | 2 U | 2.1 | **5.6** | -- | -- | **10** | -- |
| VCWD SA1-2 | 8000186 | | 1/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 2/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 3/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 4/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

| Well Name | Site ID | Port [a] | Sample Date | Field Duplicate | 1,1,1-Trichloroethane (µg/L) | 1,1-Dichloroethane (µg/L) | 1,1-Dichloroethene (µg/L) | 1,2,3-Trichloropropane [b] (µg/L) | 1,2-Dichloroethane (µg/L) | 1,4-Dioxane (µg/L) | Acetone (µg/L) | Benzene (µg/L) | Carbon Disulfide (µg/L) | Carbon Tetrachloride (µg/L) | Chloroform (µg/L) | cis-1,2-Dichloroethene (µg/L) | Ethylbenzene (µg/L) | Methylene Chloride (µg/L) | NDMA [c] (ng/L) | Perchlorate (µg/L) | Tetrachloroethene (µg/L) | Toluene (µg/L) | trans-1,2-Dichloroethene (µg/L) | Trichloroethene (µg/L) | Xylenes, Total [d] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal or California State MCL (NL) [SMCL] [e]** | | | | | **200** | **5** | **6** | **0.005** | **0.5** | **(1)** | **--** | **1** | **160** | **0.5** | **80** | **6** | **300** | **5** | **(10)** | **6** | **5** | **150** | **10** | **5** | **1750** |
| | | | 5/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 9/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SA1-3 (LANTE) | 8000060 | | 1/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 2/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 3/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 4/1/2018 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 5/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/28/2019 | | 0.5 U | 0.5 U | 1.3 | **10** | 0.5 U | 0.75 | -- | -- | -- | 0.5 U | 1.6 | 2.9 | -- | -- | 2.4 | **7.6** | **110** | -- | -- | **48** | -- |
| | | | 9/18/2019 | | 0.5 U | 0.5 U | 1.4 | **9.6** | 0.5 U | 0.9 | -- | -- | -- | 0.5 U | 1.4 | 2.5 | -- | -- | 2 | **9.7** | **140** | -- | -- | **53** | -- |
| | | | 10/14/2019 | | 0.5 U | 0.5 U | 0.89 | **12** | 0.5 U | **1** | -- | -- | -- | 0.5 U | 1.2 | 2.1 | -- | -- | 2 U | **10** | **120** | -- | -- | **46** | -- |
| | | | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 12/3/2019 | | 0.5 U | 0.5 U | 0.9 | **8.1** | 0.5 U | 0.98 | -- | -- | -- | -- | 1.1 | 2.4 | -- | -- | 2 U | **11** | **110** | -- | -- | **40** | -- |
| SGVWC B25A | 8000187 | | 1/2/2019 | | 0.5 U | 0.63 | 5.4 | 0.005 U | **1.3** | **2.3** | -- | 0.5 U | -- | **1.9** | 2 | 4.4 | 0.5 U | 0.5 U | **76** | **50** | **26** | 0.5 U | 0.5 U | **66** | 0.5 U |
| | | | 2/7/2019 | | 0.5 U | 0.65 | 5 | 0.005 U | **1.2** | **2.3** | -- | 0.5 U | -- | **2.2** | 2.1 | 4 | 0.5 U | 0.5 U | **85** | **51** | **31** | 0.5 U | 0.5 U | **74** | 0.5 U |
| | | | 2/14/2019 | | -- | 0.64 | 4.9 | -- | **1.6** | -- | -- | -- | -- | **2.4** | 2.2 | 4.8 | -- | -- | -- | **47** | **29** | -- | -- | **68** | -- |
| | | | 3/5/2019 | | 0.5 U | 0.73 | 5.2 | 0.0016 J | **1.4** | **2.3** | -- | 0.5 U | -- | **2.7** | 2.2 | 4.7 | 0.5 U | 0.5 U | **87** | **50** | **33** | 0.5 U | 0.5 U | **79** | 0.5 U |
| | | | 4/2/2019 | | 0.5 U | 0.74 | 5.8 | 0.005 U | **1.6** | **2.3** | -- | 0.5 U | -- | **2.8** | 2.5 | 5.7 | 0.5 U | 0.5 U | **81** | **54** | **40** | 0.5 U | 0.5 U | **82** | 0.5 U |
| | | | 5/7/2019 | | 0.5 U | 0.57 | 4.8 | 0.005 U | **1.4** | **2.3** | -- | 0.5 U | -- | **1.8** | 2.1 | 4.2 | 0.5 U | 0.5 U | **85** | **53** | **32** | 0.5 U | 0.5 U | **80** | 0.5 U |
| | | | 5/14/2019 | | 0.5 U | 0.79 | **6.5** | 0.005 U | **1.5** | -- | -- | 0.5 U | -- | **2.3** | 2.4 | 4.9 | 0.5 U | 0.5 U | -- | **55** | **33** | 0.5 U | 0.5 U | **78** | 0.5 U |
| | | | 6/4/2019 | | 0.5 U | 0.69 | 5.9 | 0.005 U | **1.5** | **2.2** | -- | 0.5 U | -- | **2.5** | 2.4 | 5 | 0.5 U | 0.5 U | **85** | **41** | **30** | 0.5 U | 0.5 U | **79** | 0.5 U |
| | | | 7/1/2019 | | 0.5 U | 0.7 | 4.9 | -- | **1.4** | **2.4** | -- | 0.5 U | -- | **2.2** | 2.2 | 5.3 | 0.5 U | 0.5 U | **100** | **57** | **31** | 0.5 U | 0.5 U | **73** | -- |
| | | | 7/2/2019 | | -- | -- | -- | 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/6/2019 | | 0.5 U | 0.69 | 4.7 | 0.005 U | **1.4** | **2.4** | -- | 0.5 U | -- | **2.1** | 2.2 | 4.2 | 0.5 U | 0.5 U | **66** | **55** | **27** | 0.5 U | 0.5 U | **68** | 0.5 U |
| | | | 8/12/2019 | | -- | 0.74 | 5.8 | 0.005 U | **1.4** | -- | -- | -- | -- | **3.2** | 2.2 | 5.2 | -- | -- | -- | **54** | **32** | -- | -- | **78** | -- |
| | | | 9/3/2019 | | 0.5 U | 0.84 | **6.4** | 0.005 U | **1.7** | **2.5** | -- | 0.5 U | -- | **2.5** | 2.5 | **6.1** | 0.5 U | 0.5 U | **86** | **55** | **30** | 0.5 U | 0.5 U | **80** | 0.5 U |
| | | | 10/1/2019 | | 0.5 U | 0.75 | 4.7 | 0.005 U | **1.6** | **2.5** | -- | 0.5 U | -- | **2.3** | 2.2 | 5.5 | 0.5 U | 0.5 U | **87** | **53** | **26** | 0.5 U | 0.5 U | **78** | 0.5 U |
| | | | 11/6/2019 | | 0.5 U | 0.77 | 5.3 | 0.005 U | **1.6** | **2.7** | -- | 0.5 U | -- | **2.2** | 2.4 | 4.9 | 0.5 U | 0.5 U | **99** | **48** | **31** | 0.5 U | 0.5 U | **75** | 0.5 U |
| | | | 11/14/2019 | | -- | 0.92 | **8.7** | 0.005 U | **2** | -- | -- | -- | -- | **2.9** | 3.2 | 6 | -- | -- | -- | **48** | **37** | -- | -- | **110** | -- |
| | | | 12/3/2019 | | 0.5 U | 0.75 | 5.4 | 0.005 U | **1.8** | **2.6** | -- | 0.5 U | -- | **2.1** | 2.2 | 5.7 | 0.5 U | 0.5 U | **82** | **47** | **26** | 0.5 U | 0.5 U | **82** | 0.5 U |
| | | | 12/10/2019 | | 0.5 U | 0.76 | **6.4** | 0.5 U | **1.5** | -- | -- | 0.5 U | -- | **2.2** | 2.4 | 5 | 0.5 U | 0.5 U | -- | -- | **32** | 0.5 U | 0.5 U | **82** | 0.5 U |
| SGVWC B25B | 8000188 | | 1/2/2019 | | 0.5 U | 0.5 U | 2.2 | 0.005 U | **0.9** | **1.4** | -- | 0.5 U | -- | **4.2** | 1.2 | 2.4 | 0.5 U | 0.5 U | **43** | **28** | **7.5** | 0.5 U | 0.5 U | **39** | 0.5 U |
| | | | 2/7/2019 | | 0.5 U | 0.5 U | 1.6 | 0.005 U | **0.71** | **1.3** | -- | 0.5 U | -- | **3.8** | 1 U | 1.7 | 0.5 U | 0.5 U | **66** | **27** | **6.8** | 0.5 U | 0.5 U | **35** | 0.5 U |
| | | | 2/14/2019 | | -- | -- | 1.7 | 0.005 U | **0.92** | -- | -- | -- | -- | **4.4** | -- | 2.1 | -- | -- | -- | **25** | **7** | -- | -- | **35** | -- |
| | | | 3/5/2019 | | 0.5 U | 0.5 U | 1.9 | 0.005 U | **0.73** | **1.2** | -- | 0.5 U | -- | **4.2** | 1 | 2 | 0.5 U | 0.5 U | **43** | **26** | **7.8** | 0.5 U | 0.5 U | **40** | 0.5 U |
| | | | 4/2/2019 | | 0.5 U | 0.5 U | 1.6 | 0.005 U | **0.93** | 1 U | -- | 0.5 U | -- | **4.4** | 1.1 | 2.3 | 0.5 U | 0.5 U | **38** | **27** | **8.7** | 0.5 U | 0.5 U | **38** | 0.5 U |
| | | | 5/7/2019 | | 0.5 U | 0.5 U | 1.2 | 0.5 U | **0.69** | **1.1** | -- | 0.5 U | -- | **2.6** | 0.8 | 1.5 | 0.5 U | 0.5 U | **43** | **23** | **6** | 0.5 U | 0.5 U | **32** | 1 U |
| | | | 5/14/2019 | | 0.5 U | 0.5 U | 1.7 | 0.005 U | **0.73** | -- | -- | 0.5 U | -- | **3.6** | 1 U | 1.7 | 0.5 U | 0.5 U | -- | **24** | **6.5** | 0.5 U | 0.5 U | **34** | 0.5 U |
| | | | 6/4/2019 | | 0.5 U | 0.5 U | 1.7 | 0.005 U | **0.75** | **1** | -- | 0.5 U | -- | **4** | 1 U | 1.8 | 0.5 U | 0.5 U | **36** | **19** | **6.1** | 0.5 U | 0.5 U | **33** | 0.5 U |
| | | | 7/1/2019 | | 0.5 U | 0.5 U | 1.2 | -- | **0.72** | **1.1** | -- | 0.5 U | -- | **3.3** | 1 U | 1.8 | 0.5 U | 0.5 U | **32** | **26** | **6.1** | 0.5 U | 0.5 U | **31** | -- |
| | | | 7/2/2019 | | -- | -- | -- | 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/6/2019 | | 0.5 U | 0.5 U | 1.2 | 0.005 U | **0.68** | **1.1** | -- | 0.5 U | -- | **3.3** | 1 U | 1.5 | 0.5 U | 0.5 U | **37** | **25** | **5.4** | 0.5 U | 0.5 U | **28** | 0.5 U |
| | | | 8/12/2019 | | -- | -- | 1.8 | 0.005 U | **0.85** | -- | -- | -- | -- | **4.9** | -- | 2.1 | -- | -- | -- | **25** | **7.2** | -- | -- | **36** | -- |
| | | | 9/3/2019 | | 0.5 U | 0.5 U | 1.5 | 0.005 U | **0.85** | **1.2** | -- | 0.5 U | -- | **3.7** | 1 U | 2 | 0.5 U | 0.5 U | **37** | **24** | 4.7 | 0.5 U | 0.5 U | **30** | 0.5 U |
| | | | 10/1/2019 | | 0.5 U | 0.5 U | 1.1 | 0.005 U | **0.81** | **1.2** | -- | 0.5 U | -- | **3.4** | 1 U | 1.8 | 0.5 U | 0.5 U | **34** | **24** | 4.2 | 0.5 U | 0.5 U | **29** | 0.5 U |
| | | | 11/6/2019 | | 0.5 U | 0.5 U | 1.2 | 0.005 U | **0.78** | **1.3** | -- | 0.5 U | -- | **3.7** | 1 U | 1.4 | 0.5 U | 0.5 U | **45** | **21** | 5 | 0.5 U | 0.5 U | **30** | 0.5 U |
| | | | 11/14/2019 | | -- | -- | 2.2 | 0.005 U | **1** | -- | -- | -- | -- | **4.7** | -- | 2 | -- | -- | -- | **21** | **5.8** | -- | -- | **41** | -- |
| | | | 12/3/2019 | | 0.5 U | 0.5 U | 1.2 | 0.005 U | **0.91** | **1.2** | -- | 0.5 U | -- | **3.2** | 1 U | 1.7 | 0.5 U | 0.5 U | **40** | **20** | 4.8 | 0.5 U | 0.5 U | **30** | 0.5 U |
| | | | 12/10/2019 | | 0.5 U | 0.5 U | 1.4 | 0.5 U | **0.74** | -- | -- | 0.5 U | -- | **3.3** | 0.87 | 1.5 | 0.5 U | 0.5 U | -- | -- | **5.3** | 0.5 U | 0.5 U | **29** | 0.5 U |
| SGVWC B26A | 8000189 | | 1/2/2019 | | 0.5 U | 0.5 U | 0.73 | 0.5 U | **1.7** | **1.3** | -- | 0.5 U | -- | **1.4** | 1.8 | 1.3 | 0.5 U | 0.5 U | **82** | **41** | 3.1 | 0.5 U | 0.5 U | **39** | 1 U |
| | | | 2/7/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.59 | 0.5 U | 0.5 U | 0.5 U | **24** | **19** | 0.5 U | 0.5 U | 0.5 U | 2.8 | 1 U |
| | | | 2/14/2019 | | -- | 0.5 U | 0.72 | 0.005 U | **1.7** | -- | -- | -- | -- | **1.6** | -- | 1.2 | -- | -- | -- | **39** | 3.1 | -- | -- | **35** | -- |
| | | | 3/5/2019 | | 0.5 U | 0.5 U | 0.75 | 0.5 U | **1.3** | **1.2** | -- | 0.5 U | -- | **1.5** | 1.5 | 1.1 | 0.5 U | 0.5 U | **120** | **38** | 3.4 | 0.5 U | 0.5 U | **38** | 1 U |
| | | | 4/2/2019 | | 0.5 U | 0.5 U | 0.8 | 0.5 U | **1.8** | **1.2** | -- | 0.5 U | -- | **1.7** | 1.8 | 1.5 | 0.5 U | 0.5 U | **110** | **44** | 4.4 | 0.5 U | 0.5 U | **43** | 1 U |
| | | | 5/7/2019 | | 0.5 U | 0.5 U | 0.61 | 0.5 U | **1.4** | **1.1** | -- | 0.5 U | -- | **1.3** | 1.6 | 1.1 | 0.5 U | 0.5 U | **110** | **39** | 3.2 | 0.5 U | 0.5 U | **36** | 1 U |
| | | | 5/14/2019 | | 0.5 U | 0.5 U | 0.62 | 0.005 U | **1.4** | -- | -- | 0.5 U | -- | **1.1** | 1.5 | 1 | 0.5 U | 0.5 U | -- | **42** | 2.9 | 0.5 U | 0.5 U | **34** | 0.5 U |
| | | | 6/4/2019 | | 0.5 U | 0.5 U | 0.75 | 0.005 U | **1.4** | **1** | -- | 0.5 U | -- | **1.4** | 1.5 | 1.1 | 0.5 U | 0.5 U | **110** | **29** | 3.1 | 0.5 U | 0.5 U | **34** | 0.5 U |
| | | | 7/1/2019 | | 0.5 U | 0.5 U | 0.5 | -- | **1.3** | 1 U | -- | 0.5 U | -- | **1.1** | 1.4 | 1.1 | 0.5 U | 0.5 U | **100** | **39** | 3 | 0.5 U | 0.5 U | **31** | -- |
| | | | 7/2/2019 | | -- | -- | -- | 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/6/2019 | | 0.5 U | 0.5 U | 0.52 | 0.005 U | **1.3** | **1.1** | -- | 0.5 U | -- | **1.1** | 1.4 | 0.96 | 0.5 U | 0.5 U | **76** | **39** | 2.8 | 0.5 U | 0.5 U | **29** | 0.5 U |
| | | | 8/12/2019 | | -- | 0.5 U | 0.82 | 0.005 U | **1.5** | -- | -- | -- | -- | **1.8** | -- | 1.3 | -- | -- | -- | **38** | 3.6 | -- | -- | **37** | -- |
| | | | 9/25/2019 | | 0.5 U | 0.5 U | 0.67 | 0.005 U | **1.3** | **1.2** | -- | 0.5 U | -- | **1.3** | 1.4 | 1.3 | 0.5 U | 0.5 U | **97** | **37** | 2.9 | 0.5 U | 0.5 U | **30** | 0.5 U |
| | | | 10/1/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | **1.4** | **1.1** | -- | 0.5 U | -- | **1** | 1.3 | 1.1 | 0.5 U | 0.5 U | **91** | **37** | 2.3 | 0.5 U | 0.5 U | **29** | 0.5 U |
| | | | 11/6/2019 | | 0.5 U | 0.5 U | 0.52 | 0.005 U | **1.3** | **1.1** | -- | 0.5 U | -- | **1.1** | 1.5 | 0.88 | 0.5 U | 0.5 U | **93** | **32** | 2.5 | 0.5 U | 0.5 U | **30** | 0.5 U |
| | | | 11/14/2019 | | -- | 0.5 U | 0.84 | 0.005 U | **1.5** | -- | -- | -- | -- | **1.3** | -- | 1.2 | -- | -- | -- | **32** | 3 | -- | -- | **39** | -- |

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

| Well Name | Site ID | Port [a] | Sample Date | Field Duplicate | 1,1,1-Trichloroethane (µg/L) | 1,1-Dichloroethane (µg/L) | 1,1-Dichloroethene (µg/L) | 1,2,3-Trichloropropane [b] (µg/L) | 1,2-Dichloroethane (µg/L) | 1,4-Dioxane (µg/L) | Acetone (µg/L) | Benzene (µg/L) | Carbon Disulfide (µg/L) | Carbon Tetrachloride (µg/L) | Chloroform (µg/L) | cis-1,2-Dichloroethene (µg/L) | Ethylbenzene (µg/L) | Methylene Chloride (µg/L) | NDMA [c] (ng/L) | Perchlorate (µg/L) | Tetrachloroethene (µg/L) | Toluene (µg/L) | trans-1,2-Dichloroethene (µg/L) | Trichloroethene (µg/L) | Xylenes, Total [d] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal or California State MCL (NL) [SMCL] [e]** | | | | | **200** | **5** | **6** | **0.005** | **0.5** | **(1)** | **--** | **1** | **160** | **0.5** | **80** | **6** | **300** | **5** | **(10)** | **6** | **5** | **150** | **10** | **5** | **1750** |
| | | | 12/3/2019 | | 0.5 U | 0.5 U | 0.54 | 0.005 U | **1.4** | **1.1** | -- | 0.5 U | -- | **0.89** | 1.3 | 0.99 | 0.5 U | 0.5 U | **82** | **31** | 2 | 0.5 U | 0.5 U | **28** | 0.5 U |
| | | | 12/10/2019 | | 0.5 U | 0.5 U | 0.66 | 0.5 U | **1.2** | -- | -- | 0.5 U | -- | **1** | 1.4 | 0.95 | 0.5 U | 0.5 U | -- | -- | 2.9 | 0.5 U | 0.5 U | **30** | 0.5 U |
| SGVWC B26B | 8000190 | | 1/2/2019 | | 0.5 U | 0.5 | 0.55 | 0.5 U | **2.8** | **3** | -- | 0.5 U | -- | **10** | 2.7 | 1.6 | 0.5 U | 0.5 U | **91** | **66** | 2.9 | 0.5 U | 0.5 U | **100** | 1 U |
| | | | 2/7/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | **2.1** | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | **110** | **37** | 0.5 U | 0.5 U | 0.5 U | 0.68 | 1 U |
| | | | 2/14/2019 | | -- | -- | 0.55 | 0.005 U | **3** | -- | -- | -- | -- | **10** | -- | 1.4 | -- | -- | -- | **61** | 2.9 | -- | -- | **91** | -- |
| | | | 3/5/2019 | | 0.5 U | 0.5 U | 0.6 | 0.005 U | **2.3** | **2.8** | -- | 0.5 U | -- | **9.7** | 2.3 | 1.2 | 0.5 U | 0.5 U | **170** | **63** | 3 | 0.5 U | 0.5 U | **96** | 0.5 U |
| | | | 4/2/2019 | | 0.5 U | 0.5 U | 0.56 | 0.5 U | **2.9** | **2.3** | -- | 0.5 U | -- | **11** | 2.5 | 1.5 | 0.5 U | 0.5 U | **130** | **63** | 3.6 | 0.5 U | 0.5 U | **92** | 1 U |
| | | | 5/7/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | **2.5** | **2.8** | -- | 0.5 U | -- | **8.9** | 2.4 | 1.3 | 0.5 U | 0.5 U | **140** | **58** | 2.6 | 0.5 U | 0.5 U | **82** | 0.5 U |
| | | | 5/14/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | **2.3** | -- | -- | 0.5 U | -- | **9.9** | 2.2 | 1.2 | 0.5 U | 0.5 U | -- | **59** | 2.7 | 0.5 U | 0.5 U | **80** | 0.5 U |
| | | | 6/4/2019 | | 0.5 U | 0.5 U | 0.52 | 0.005 U | **2.4** | **2.6** | -- | 0.5 U | -- | **10** | 2.3 | 1.3 | 0.5 U | 0.5 U | **140** | **45** | 2.8 | 0.5 U | 0.5 U | **87** | 0.5 U |
| | | | 7/1/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | **2.3** | **2.6** | -- | 0.5 U | -- | **8.4** | 2.1 | 1.4 | 0.5 U | 0.5 U | **140** | **61** | 2.8 | 0.5 U | 0.5 U | **76** | -- |
| | | | 7/2/2019 | | -- | -- | -- | 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/6/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | **2.1** | **2.7** | -- | 0.5 U | -- | **8.3** | 2.2 | 1.1 | 0.5 U | 0.5 U | **100** | **60** | 2.6 | 0.5 U | 0.5 U | **74** | 0.5 U |
| | | | 8/12/2019 | | -- | -- | 0.63 | 0.005 U | **2.7** | -- | -- | -- | -- | **12** | -- | 1.6 | -- | -- | -- | **59** | 3.4 | -- | -- | **98** | -- |
| | | | 9/25/2019 | | 0.5 U | 0.5 U | 0.6 | 0.005 U | **2.6** | **2.9** | -- | 0.5 U | -- | **10** | 2.4 | 1.6 | 0.5 U | 0.5 U | **130** | **63** | 2.9 | 0.5 U | 0.5 U | **84** | 0.5 U |
| | | | 10/1/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | **3** | **2.9** | -- | 0.5 U | -- | **8.5** | 2.4 | 1.6 | 0.5 U | 0.5 U | **130** | **63** | 2.4 | 0.5 U | 0.5 U | **92** | 0.5 U |
| | | | 11/6/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | **2.6** | **3.1** | -- | 0.5 U | -- | **8.8** | 2.4 | 1.3 | 0.5 U | 0.5 U | **150** | **55** | 3.2 | 0.5 U | 0.5 U | **86** | 0.5 U |
| | | | 11/14/2019 | | -- | -- | 0.77 | 0.005 U | **3.7** | -- | -- | -- | -- | **12** | -- | 1.7 | -- | -- | -- | **55** | 3.4 | -- | -- | **140** | -- |
| | | | 12/3/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | **2.7** | **2.9** | -- | 0.5 U | -- | **7.8** | 2.2 | 1.4 | 0.5 U | 0.5 U | **120** | **53** | 2.1 | 0.5 U | 0.5 U | **89** | 0.5 U |
| | | | 12/10/2019 | | 0.5 U | 0.5 U | 0.55 | 0.5 U | **2.4** | -- | -- | 0.5 U | -- | **8.9** | 2.4 | 1.3 | 0.5 U | 0.5 U | -- | -- | 3.1 | 0.5 U | 0.5 U | **92** | 0.5 U |
| SGVWC B5B | 61900719 | | 1/4/2019 | | 0.5 U | 0.5 U | 1.1 | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 5.8 | **6.9** | 0.5 U | 0.5 U | 2.8 | 0.5 U |
| | | | 2/4/2019 | | 0.5 U | 0.5 U | 0.98 | 0.5 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.46 J | 0.6 | 0.13 J | 0.5 U | 0.5 U | 2 U | 6 | 4.6 | 0.5 U | 0.5 U | 2.7 | 1 U |
| | | | 2/14/2019 | | -- | -- | 0.83 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | **6.1** | 4.2 | -- | -- | 2.5 | -- |
| | | | 3/4/2019 | | 0.5 U | 0.5 U | 0.62 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 5 | 3.2 | 0.5 U | 0.5 U | 2.1 | 0.5 U |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 0.85 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | **6.6** | 4 | 0.5 U | 0.5 U | 2.9 | 0.5 U |
| | | | 5/6/2019 | | 0.5 U | 0.5 U | 0.61 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 5.7 | 2.7 | 0.5 U | 0.5 U | 2.4 | 0.5 U |
| | | | 5/13/2019 | | 0.5 U | 0.5 U | 0.61 | 0.5 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.55 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 2.5 | 0.5 U | 0.5 U | 2.2 | 1 U |
| | | | 5/14/2019 | | -- | -- | 0.81 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | 5.2 | 2.9 | -- | -- | 2.7 | -- |
| | | | 6/3/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/2/2019 | | 0.5 U | 0.5 U | 0.83 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | **7.2** | 3 | 0.5 U | 0.5 U | 2.5 | -- |
| | | | 8/5/2019 | | 0.5 U | 0.5 U | 0.64 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | **6.5** | 2.7 | 0.5 U | 0.5 U | 2.3 | 0.5 U |
| | | | 8/12/2019 | | 0.5 U | 0.5 U | 0.69 | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | -- | **7.3** | 2.6 | 0.5 U | 0.5 U | 2.3 | 0.5 U |
| | | | 9/4/2019 | | 0.5 U | 0.5 U | 0.92 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | **6.7** | 2.5 | 0.5 U | 0.5 U | 2.5 | 0.5 U |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 0.98 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | **6.6** | 2.6 | 0.5 U | 0.5 U | 2.8 | 0.5 U |
| | | | 11/4/2019 | | 0.5 U | 0.5 U | 0.64 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 5.6 | 2.4 | 0.5 U | 0.5 U | 2.7 | 0.5 U |
| | | | 11/14/2019 | | -- | -- | 1.1 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | 5.7 | 3.1 | -- | -- | 3.1 | -- |
| | | | 12/2/2019 | | 0.5 U | 0.5 U | 1 | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 5.7 | 2.5 | 0.5 U | 0.5 U | 2.7 | 0.5 U |
| SGVWC B5D | 8000160 | | 1/4/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.8** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 2/4/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.84** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 2/14/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | **0.86** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 3/4/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | **0.61** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | **0.94** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 2 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 5/6/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.69** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 5/13/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | -- | 0.5 U | -- | **0.64** | 1 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/2/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.74** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 8/5/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.73** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 8/12/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | -- | 0.5 U | -- | **0.84** | 1 U | 0.5 U | 0.5 U | 0.5 U | -- | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 9/4/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.95** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.78** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 11/4/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.87** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 11/14/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | **0.99** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 12/2/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 1 U | -- | 0.5 U | -- | **0.75** | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| SGVWC B5E | 8000205 | | 1/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 2/11/2019 | | 0.5 U | 0.14 J | 0.79 | 0.005 U | **0.95** | 1 U | -- | 0.5 U | -- | **2.2** | 0.86 | 1 | 0.5 U | 0.5 U | **150** | **21** | 3.2 | 0.5 U | 0.5 U | **18** | 1 U |
| | | | 2/14/2019 | | -- | -- | 0.87 | -- | **1.1** | -- | -- | -- | -- | **2.2** | -- | 1 | -- | -- | -- | **20** | 3.1 | -- | -- | **18** | -- |
| | | | 3/4/2019 | | 0.5 U | 0.15 J | 0.66 | 0.5 U | **1** | 1 U | -- | 0.5 U | -- | **1.6** | 0.87 | 0.83 | 0.5 U | 0.5 U | **140** | **20** | 2.5 | 0.5 U | 0.5 U | **17** | 1 U |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 0.9 | 0.005 U | **1** | 1 U | -- | 0.5 U | -- | **2.2** | 1 U | 1.2 | 0.5 U | 0.5 U | **140** | **20** | 4.1 | 0.5 U | 0.5 U | **20** | 0.5 U |
| | | | 5/6/2019 | | 0.5 U | 0.5 U | 0.69 | 0.005 U | **0.97** | 0.52 | -- | 0.5 U | -- | **1.8** | 1 U | 0.99 | 0.5 U | 0.5 U | **170** | **19** | 3.1 | 0.5 U | 0.5 U | **18** | 0.5 U |
| | | | 5/13/2019 | | 0.5 U | 0.5 U | 0.74 | 0.5 U | **0.94** | -- | -- | 0.5 U | -- | **1.6** | 0.86 | 0.94 | 0.5 U | 0.5 U | 1000 U | -- | 3 | 0.5 U | 0.5 U | **17** | 1 U |
| | | | 5/14/2019 | | -- | -- | 0.94 | -- | 0.5 U | -- | -- | -- | -- | **2.2** | -- | 0.97 | -- | -- | -- | **18** | 3.5 | -- | -- | **20** | -- |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/2/2019 | | 0.5 U | 0.5 U | 0.85 | 0.005 U | **1** | 1 U | -- | 0.5 U | -- | **1.9** | 1 U | 1 | 0.5 U | 0.5 U | **160** | **21** | 3.7 | 0.5 U | 0.5 U | **19** | -- |
| | | | 8/5/2019 | | 0.5 U | 0.5 U | 0.76 | 0.005 U | **0.8** | 1 U | -- | 0.5 U | -- | **1.8** | 1 U | 0.95 | 0.5 U | 0.5 U | **97** | **21** | 3.3 | 0.5 U | 0.5 U | **17** | 0.5 U |
| | | | 8/12/2019 | | 0.5 U | 0.5 U | 0.88 | 0.005 U | **0.79** | -- | -- | 0.5 U | -- | **1.9** | 1 U | 1.1 | 0.5 U | 0.5 U | 2 U | **21** | 3.3 | 0.5 U | 0.5 U | **17** | 0.5 U |
| | | | 9/4/2019 | | 0.5 U | 0.5 U | 1.1 | 0.005 U | **1.1** | 1 U | -- | 0.5 U | -- | **2.2** | 1 | 1.5 | 0.5 U | 1.3 | **110** | **21** | 3.2 | 0.5 U | 0.5 U | **19** | 0.5 U |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 1.4 | 0.005 U | **1.1** | 1 U | -- | 0.5 U | -- | **2.3** | 1 U | 1.7 | 0.5 U | 0.5 U | **100** | **22** | 4.5 | 0.5 U | 0.5 U | **21** | 0.5 U |
| | | | 11/4/2019 | | 0.5 U | 0.5 U | 1.1 | 0.005 U | **0.87** | 1 U | -- | 0.5 U | -- | **2.5** | 1 U | 1.4 | 0.5 U | 0.5 U | **150** | **19** | **5.4** | 0.5 U | 0.5 U | **18** | 0.5 U |
| | | | 11/14/2019 | | -- | -- | 1.6 | -- | **1.4** | -- | -- | -- | -- | **2.7** | -- | 1.5 | -- | -- | -- | **19** | 4.1 | -- | -- | **27** | -- |
| | | | 12/2/2019 | | 0.5 U | 0.5 U | 1.3 | 0.005 U | **1.1** | 1 U | -- | 0.5 U | -- | **2.1** | 1.1 | 1.7 | 0.5 U | 0.5 U | **120** | **19** | 3.2 | 0.5 U | 0.5 U | **21** | 0.5 U |
| CDWC 2 | 1901181 | | 1/7/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 U | 4 U | -- | -- | -- | -- | -- | -- |
| | | | 1/8/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | 0.5 U | -- |

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

| Well Name | Site ID | Port [a] | Sample Date | Field Duplicate | 1,1,1-Trichloroethane (µg/L) | 1,1-Dichloroethane (µg/L) | 1,1-Dichloroethene (µg/L) | 1,2,3-Trichloropropane [b] (µg/L) | 1,2-Dichloroethane (µg/L) | 1,4-Dioxane (µg/L) | Acetone (µg/L) | Benzene (µg/L) | Carbon Disulfide (µg/L) | Carbon Tetrachloride (µg/L) | Chloroform (µg/L) | cis-1,2-Dichloroethene (µg/L) | Ethylbenzene (µg/L) | Methylene Chloride (µg/L) | NDMA [c] (ng/L) | Perchlorate (µg/L) | Tetrachloroethene (µg/L) | Toluene (µg/L) | trans-1,2-Dichloroethene (µg/L) | Trichloroethene (µg/L) | Xylenes, Total [d] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal or California State MCL (NL) [SMCL] [e]** | | | | | **200** | **5** | **6** | **0.005** | **0.5** | **(1)** | **--** | **1** | **160** | **0.5** | **80** | **6** | **300** | **5** | **(10)** | **6** | **5** | **150** | **10** | **5** | **1750** |
| | | | 1/10/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | 0.5 U | -- |
| | | | 2/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4 U | 0.5 U | -- | -- | -- | -- |
| | | | 3/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | 2 U | 4 U | 0.5 U | -- | 0.5 U | 0.5 U | -- |
| | | | 4/8/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 2 U | 4 U | 0.5 U | 0.5 U | -- | 0.5 U | 0.5 U |
| | | | 5/6/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.8 | 0.5 U | -- | -- | 0.5 U | -- |
| | | | 6/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | 2 U | 4 U | 0.5 U | -- | 0.5 U | 0.5 U | -- |
| | | | 6/6/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | 0.5 U | -- | -- | 0.58 | 0.5 U | -- | 0.5 U | 0.5 U |
| | | | 7/1/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 2 | 0.5 U | -- | -- | 0.5 U | -- |
| | | | 7/8/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | 0.59 | -- | -- | 0.5 U | -- |
| | | | 8/5/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 2.6 | 0.54 | -- | -- | 0.57 | -- |
| | | | 9/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 2.4 | 1 | -- | 0.5 U | 0.87 | -- |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | -- | 2 U | 4 U | 2.4 | 0.5 U | -- | 2.1 | 0.5 U |
| | | | 11/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4 U | 1.3 | -- | -- | 1.1 | -- |
| | | | 12/2/2019 | | -- | -- | -- | -- | 0.5 U | 1 U | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4 U | 0.58 | -- | -- | 0.5 U | -- |
| | | | 12/18/2019 | | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| CDWC 3 | 1903057 | | 1/7/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **20** | **13** | -- | -- | -- | -- | -- |
| | | | 1/8/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.5** | -- | -- | -- | -- | -- | -- | **16** | -- | -- | **26** | -- |
| | | | 1/10/2019 | | -- | -- | 3.3 | -- | -- | -- | -- | -- | -- | **1.9** | -- | 1.9 | -- | -- | -- | -- | **20** | -- | -- | 0.5 U | -- |
| | | | 2/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.4** | -- | -- | -- | -- | **15** | **12** | **14** | -- | -- | **23** | -- |
| | | | 3/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.3** | -- | -- | -- | -- | **13** | **12** | **13** | -- | -- | 0.5 U | -- |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 3 | -- | 0.5 U | -- | -- | 0.5 U | -- | **1.2** | 1 U | 2.2 | 0.5 U | 0.5 U | **12** | **9.3** | **14** | 0.5 U | 0.5 U | **22** | 0.5 U |
| | | | 4/3/2019 | | 0.5 U | 0.5 U | 2.9 | -- | 0.5 U | -- | -- | 0.5 U | -- | **1.2** | 1 U | 2.1 | 0.5 U | 0.5 U | -- | -- | **15** | 0.5 U | -- | 0.5 U | -- |
| | | | 5/6/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.2** | -- | -- | -- | -- | **14** | **10** | **14** | -- | -- | 0.5 U | -- |
| | | | 6/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.2** | -- | -- | -- | -- | **17** | **13** | 0.5 U | -- | 0.5 U | **24** | 0.5 U |
| | | | 7/1/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.3** | -- | -- | -- | -- | **20** | **15** | **16** | -- | -- | **29** | -- |
| | | | 7/8/2019 | | -- | -- | 4.8 | -- | -- | -- | -- | -- | -- | **1.7** | -- | 2.8 | -- | -- | -- | -- | **24** | -- | -- | 0.5 U | -- |
| | | | 7/18/2019 | | -- | -- | -- | -- | -- | 0.85 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.57 | -- |
| | | | 8/5/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.5** | -- | -- | -- | -- | **17** | **14** | **20** | -- | -- | **32** | -- |
| | | | 9/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.8** | -- | -- | -- | -- | **25** | **14** | **23** | -- | 0.5 U | 2.1 | 0.5 U |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 4.6 | -- | -- | -- | -- | 0.5 U | -- | **1.5** | 1 U | 2.8 | -- | -- | **14** | **12** | **23** | -- | -- | 1.1 | -- |
| | | | 10/25/2019 | | 0.5 U | 0.5 U | 5.5 | -- | 0.5 U | -- | -- | 0.5 U | -- | **1.6** | 1 U | 3.8 | 0.5 U | 0.5 U | -- | -- | **16** | 0.5 U | 0.5 U | **24** | 0.5 U |
| | | | 11/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.4** | -- | -- | -- | -- | **19** | **16** | **19** | -- | -- | **29** | -- |
| | | | 12/2/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.5** | -- | -- | -- | -- | **16** | **13** | **18** | -- | -- | **26** | -- |
| | | | 12/18/2019 | | -- | -- | -- | -- | -- | 0.95 J | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| CDWC 5A | 8000100 | | 1/7/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4 U | -- | -- | -- | -- | -- |
| | | | 1/8/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **0.55** | -- | -- | -- | -- | 2 U | 4 U | -- | -- | -- | **8.5** | -- |
| | | | 1/10/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | 0.68 | -- | -- | 2.1 U | 4 U | **7.9** | -- | -- | **10** | -- |
| | | | 2/4/2019 | | -- | -- | 1.6 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.8 | **10** | -- | -- | **8** | -- |
| | | | 3/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2.1 U | 2 | **7.5** | -- | -- | **8.3** | -- |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | -- | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.89 | 0.5 U | -- | 2 U | 1.7 | **7.8** | 0.5 U | 0.5 U | **8.5** | 0.5 U |
| | | | 4/3/2019 | | 0.5 U | 0.5 U | 1.6 | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.86 | 0.5 U | 0.5 U | 2 U | 4 U | **7.5** | 0.5 U | 0.5 U | **8.4** | 0.5 U |
| | | | 5/6/2019 | | -- | -- | 1.5 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.4 | **8.4** | -- | -- | **7.5** | -- |
| | | | 6/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.5 | **7.1** | -- | -- | **7.5** | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4 U | **6.5** | -- | -- | **7.7** | -- |
| | | | 7/8/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | 0.7 | -- | -- | 2.1 U | 4 U | **6.5** | -- | -- | **8** | -- |
| | | | 8/5/2019 | | -- | -- | 1.6 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.4 | **8.3** | -- | -- | **7.6** | -- |
| | | | 9/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2.1 U | 1.2 | **6.9** | -- | -- | **7.5** | -- |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | -- | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 1.5 | 0.5 U | -- | 2.1 U | 1.4 | **7.7** | 0.5 U | 0.5 U | **16.7** | 0.5 U |
| | | | 11/4/2019 | | -- | -- | 3.4 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.7 | **16.7** | -- | -- | **7.3** | -- |
| | | | 12/2/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **7.5** | -- | -- | **7.7** | -- |
| | | | 12/18/2019 | | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **7.8** | -- | -- | -- | -- |
| CDWC 6 | 1902967 | | 1/7/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 3.4 | -- | -- | -- | **14** | -- |
| | | | 1/8/2019 | | -- | -- | -- | -- | -- | 0.97 | -- | -- | -- | 0.5 U | -- | 0.97 | -- | -- | 2 U | -- | **12** | -- | -- | **12** | -- |
| | | | 1/10/2019 | | -- | -- | 1.8 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | -- | **12** | -- | -- | **13** | -- |
| | | | 2/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4.5 | **12** | -- | -- | **15** | -- |
| | | | 3/4/2019 | | -- | -- | -- | -- | 0.5 U | **1.2** | -- | -- | -- | 0.5 U | -- | 1.2 | -- | -- | 2 U | 5.1 | **13** | -- | 0.5 U | **11** | 0.5 U |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 1.8 | -- | 0.5 U | 0.99 | -- | 0.5 U | -- | 0.5 U | 1 U | 0.99 | 0.5 U | -- | 2.1 | 4 U | **9.2** | 0.5 U | 0.5 U | **8.8** | 0.5 U |
| | | | 4/3/2019 | | 0.5 U | 0.5 U | 1.4 | -- | 0.5 U | -- | -- | 0.5 U | -- | **0.6** | 1 U | -- | 0.5 U | 0.5 U | 2 U | -- | **8.5** | 0.5 U | -- | **23** | -- |
| | | | 5/6/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 5.6 | **18** | -- | -- | **12** | -- |
| | | | 6/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 3.8 | **10** | -- | -- | **5.6** | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | 0.5 U | 0.5 U | -- | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | 2 U | 3 | 4.3 | -- | -- | 0.5 U | -- |
| | | | 7/8/2019 | | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | -- | 0.5 U | -- | -- | 3.5 | -- |
| | | | 8/5/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4 U | 3 | -- | -- | 0.5 U | -- |
| | | | 9/3/2019 | | -- | -- | -- | -- | 0.5 U | 0.5 U | -- | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | 2 U | 2.4 | 0.54 | -- | 0.5 U | 1 | 0.5 U |
| | | | 10/7/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | -- | 0.5 U | -- | 2 U | 2.6 | 1.2 | 0.5 U | -- | 0.5 U | -- |
| | | | 11/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 2.8 | 0 | -- | -- | 0.76 | -- |
| | | | 12/2/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4 U | 0.96 | -- | -- | -- | -- |
| | | | 12/18/2019 | | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| CDWC 8 | 1903081 | | 1/7/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2.1 U | 1.7 | 2.6 | -- | -- | 0.5 U | -- |
| | | | 1/8/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3.4 | -- | -- | 0.5 U | -- |
| | | | 1/10/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | 2.4 | -- | -- | 0.5 U | -- |
| | | | 2/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.7 | 2.6 | -- | -- | 0.5 U | -- |
| | | | 3/4/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | -- | -- | 2 U | 4 U | 1.1 | -- | 0.5 U | 0.5 U | 0.5 U |

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

| Well Name | Site ID | Port [a] | Sample Date | Field Duplicate | 1,1,1-Trichloroethane (µg/L) | 1,1-Dichloroethane (µg/L) | 1,1-Dichloroethene (µg/L) | 1,2,3-Trichloropropane [b] (µg/L) | 1,2-Dichloroethane (µg/L) | 1,4-Dioxane (µg/L) | Acetone (µg/L) | Benzene (µg/L) | Carbon Disulfide (µg/L) | Carbon Tetrachloride (µg/L) | Chloroform (µg/L) | cis-1,2-Dichloroethene (µg/L) | Ethylbenzene (µg/L) | Methylene Chloride (µg/L) | NDMA [c] (ng/L) | Perchlorate (µg/L) | Tetrachloroethene (µg/L) | Toluene (µg/L) | trans-1,2-Dichloroethene (µg/L) | Trichloroethene (µg/L) | Xylenes, Total [d] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal or California State MCL (NL) [SMCL] [e]** | | | | | **200** | **5** | **6** | **0.005** | **0.5** | **(1)** | **--** | **1** | **160** | **0.5** | **80** | **6** | **300** | **5** | **(10)** | **6** | **5** | **150** | **10** | **5** | **1750** |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 1.4 | 1.2 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 4/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | 0.5 U | -- | -- | -- | 2.4 | 0.5 U | -- | 0.5 U | -- |
| | | | 5/6/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.6 | 1.7 | -- | -- | 0.5 U | -- |
| | | | 6/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.6 | 0.79 | -- | -- | 0.5 U | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 U | 1.4 | 1.1 | -- | -- | 0.5 U | -- |
| | | | 7/8/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | 0.84 | -- | -- | 0.5 U | -- |
| | | | 8/5/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 1.3 | 1.1 | -- | -- | 0.5 U | -- |
| | | | 9/3/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | -- | -- | 2.1 U | 1.5 | 4.6 | -- | 0.5 U | 0.5 U | 0.5 U |
| | | | 10/7/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | 0.5 U | -- | 2 U | 4 U | 1.8 | 0.5 U | -- | 0.5 U | -- |
| | | | 11/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4 U | 2.1 | -- | -- | 0.5 U | -- |
| | | | 12/2/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 U | 4 U | 2.1 | -- | -- | -- | -- |
| | | | 12/18/2019 | | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| CDWC 10 | CDWC10 | | 1/7/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1** | -- | -- | -- | -- | 3.4 | **6.8** | **31** | -- | -- | **40** | -- |
| | | | 1/8/2019 | | -- | -- | **8.2** | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | 4.8 | -- | -- | -- | -- | **58** | -- | -- | **57** | -- |
| | | | 1/10/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | **7.2** | **29** | -- | -- | **32** | -- |
| | | | 2/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2.1 U | 5.9 | **30** | -- | -- | **32** | -- |
| | | | 3/4/2019 | | 0.5 U | 0.5 U | 3.4 | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | -- | 2.4 | 0.5 U | -- | 2 U | **7.2** | **30** | 0.5 U | 0.5 U | **32** | -- |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 3.4 | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 2.4 | 0.5 U | 0.5 U | 2 U | 4.1 | **17** | 0.5 U | 0.5 U | **20** | 0.5 U |
| | | | 4/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | 1 U | -- | -- | -- | -- | 4 U | **16** | -- | -- | **19** | 0.5 U |
| | | | 5/6/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1** | -- | -- | -- | -- | 2 U | 4 U | **27** | -- | -- | **35** | -- |
| | | | 6/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1** | -- | -- | -- | -- | 5.6 | **9.4** | **25** | -- | -- | **36** | -- |
| | | | 7/1/2019 | | -- | -- | 3.6 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | 1.9 | -- | -- | 5 | **10** | **19** | -- | -- | **21** | -- |
| | | | 7/8/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1.3** | -- | -- | -- | -- | -- | 4 U | **29** | -- | -- | **39** | -- |
| | | | 8/5/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.3** | -- | -- | -- | -- | 6.4 | **10** | **29** | -- | -- | **39** | -- |
| | | | 9/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **1.4** | -- | -- | -- | -- | 9.2 | **9.6** | **25** | -- | -- | **33** | -- |
| | | | 10/7/2019 | | -- | -- | 5.9 | -- | -- | -- | -- | -- | -- | **0.74** | -- | 4.6 | -- | -- | 3.2 | **7** | **43** | -- | -- | **40** | -- |
| | | | 10/9/2019 | | 0.5 U | 0.5 U | **6.5** | -- | -- | -- | -- | 0.5 U | -- | **1.1** | -- | 4 | 0.5 U | -- | -- | -- | **19** | 0.5 U | 0.5 U | **26** | -- |
| | | | 10/25/2019 | | 0.5 U | 0.5 U | **6.5** | -- | 0.5 U | -- | -- | 0.5 U | -- | **1.1** | 1.2 | 4 | 0.5 U | 0.5 U | -- | -- | **19** | 0.5 U | 0.5 U | **26** | 0.5 U |
| | | | 11/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 3.8 | **15** | -- | -- | **16** | -- |
| | | | 12/2/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4.9 | **21** | -- | -- | **24** | -- |
| | | | 12/18/2019 | | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| CDWC 14 | 8000174 | | 1/7/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2.1 | **7.9** | 2.7 | -- | -- | -- | -- |
| | | | 1/8/2019 | | -- | -- | 0.89 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | -- | -- | **11** | -- | -- | -- | -- |
| | | | 1/10/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | **8** | -- | -- | -- | -- | -- |
| | | | 2/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2.1 U | **7.7** | **5.5** | -- | -- | -- | -- |
| | | | 3/4/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | -- | 2.1 U | **7.7** | -- | 0.5 U | -- | 0.5 U | 0.5 U |
| | | | 4/1/2019 | | 0.5 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 5.2 | 3 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 4/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | -- | -- | 2 U | 4.9 | 2 | -- | 0.5 U | -- | -- |
| | | | 5/6/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | **0.51** | -- | -- | -- | -- | 2 U | 4.9 | **11** | -- | -- | -- | -- |
| | | | 6/3/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | **6.6** | **6.5** | -- | -- | -- | -- |
| | | | 7/1/2019 | | -- | -- | 0.52 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | 2 U | **6.6** | **12** | -- | -- | -- | -- |
| | | | 7/8/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | **8.9** | **11** | -- | -- | -- | -- |
| | | | 8/5/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | **8.9** | **6.2** | -- | -- | -- | -- |
| | | | 9/3/2019 | | 0.5 U | 0.5 U | 2.87 | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | 1 U | 1.73 | 0.5 U | -- | 2 U | **9.5** | -- | 0.5 U | -- | 0.5 U | 0.5 U |
| | | | 10/7/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | -- | -- | -- | -- | 4 U | **10** | **18** | -- | 0.5 U | -- | -- |
| | | | 11/4/2019 | | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | **12** | -- | -- | -- | -- | -- |
| | | | 12/2/2019 | | -- | -- | -- | -- | 0.5 U | 1 U | -- | -- | -- | 0.5 U | -- | -- | -- | -- | 2 U | -- | **7.5** | -- | -- | -- | -- |
| | | | 12/18/2019 | | -- | -- | -- | -- | -- | 0.5 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| **Multiport Monitoring Wells** | | | | | | | | | | | | | | | | | | | | | | | | | |
| EPA MW 5-01 | EPAW51 | 1 | 6/21/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 0.91 J | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.51 J | 0.7 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 6/21/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.59 J | 0.035 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 3 | 6/21/2019 | | 1 U | 1 U | 1 U | -- | **0.68** | -- | 5 U | 1 U | 1.1 | 0.5 U | 1 U | 0.75 J | 0.7 J | 1 U | 0.64 J | 0.021 J | 1 U | 1 U | 1 U | 0.98 J | 0.63 J |
| | | 4 | 6/21/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2.2 | **14** | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 5 | 6/21/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 6 UJ | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1.7 J | **14** | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 6 | 6/21/2019 | | 1 U | 1 U | 1 U | -- | 0.45 J | -- | 24 UJ | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1.4 J | 1 U | 0.76 J | **7.2** | 1 U | 0.52 J | 1 U | 0.7 J | 1 U |
| | | 7 | 6/21/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5.8 UJ | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2.1 | **11** | 1 U | 1 U | 1 U | 0.57 J | 1 U |
| | | 8 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 4.7 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 5.2 | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 9 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 3.4 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.92 J | 1.3 J | 1 U | 1 U | 1 U | 0.75 J | 1 U |
| | | 10 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 3.5 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.44 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 11 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 4.4 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1.2 J | 0.15 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 12 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 2.6 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.19 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 13 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 2.8 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1.8 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| MW 5-03 | BPW503 | 1 | 5/21/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 1 | 12/9/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.7 | 0.5 U |
| | | 2 | 5/21/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1.3 J | **11** | 0.54 J | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 12/9/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 1.1 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | 3 | 5/21/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **11** | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 3 | 12/10/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.65 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | 4 | 5/21/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | -- | 3.2 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1.9 J | 3.4 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 4 | 12/10/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.87 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | 5 | 5/21/2019 | | 1 U | 1 U | 1 U | 0.0016 J | 0.5 U | -- | 1.5 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 5.5 | 0.53 J | 1 U | 1 U | 1 U | 1 U |
| | | 5 | 12/10/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 1.6 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

| Well Name | Site ID | Port [a] | Sample Date | Field Duplicate | 1,1,1-Trichloroethane (µg/L) | 1,1-Dichloroethane (µg/L) | 1,1-Dichloroethene (µg/L) | 1,2,3-Trichloropropane [b] (µg/L) | 1,2-Dichloroethane (µg/L) | 1,4-Dioxane (µg/L) | Acetone (µg/L) | Benzene (µg/L) | Carbon Disulfide (µg/L) | Carbon Tetrachloride (µg/L) | Chloroform (µg/L) | cis-1,2-Dichloroethene (µg/L) | Ethylbenzene (µg/L) | Methylene Chloride (µg/L) | NDMA [c] (ng/L) | Perchlorate (µg/L) | Tetrachloroethene (µg/L) | Toluene (µg/L) | trans-1,2-Dichloroethene (µg/L) | Trichloroethene (µg/L) | Xylenes, Total [d] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal or California State MCL (NL) [SMCL] [e]** | | | | | **200** | **5** | **6** | **0.005** | **0.5** | **(1)** | **--** | **1** | **160** | **0.5** | **80** | **6** | **300** | **5** | **(10)** | **6** | **5** | **150** | **10** | **5** | **1750** |
| | | 6 | 5/21/2019 | | 1 U | 1 U | 1 U | 0.0021 J | 0.5 U | 1 U | 1.5 J | 1 U | 1 U | 0.5 U | 0.65 J | 1 U | 1 U | 1 U | 2 U | 1.4 J | 0.82 J | 1 U | 1 U | 1 U | 1 U |
| | | 6 | 12/11/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1.1 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 3.4 | 0.5 U | 0.5 U | 1.2 | 0.5 U |
| | | 7 | 5/21/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 0.65 J | 1 U | 1 U | 1 U | 2 U | 1.7 J | 0.55 J | 1 U | 1 U | 0.5 J | 1 U |
| | | 7 | 12/11/2019 | | 0.5 U | 0.5 U | 0.99 | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1.5 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 1.6 | 0.5 U | 0.5 U | 0.83 | 0.5 U |
| | | 8 | 5/21/2019 | | 1 U | 1 U | 1.2 | 0.005 U | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 0.69 J | 1 U | 1 U | 1 U | 2 U | 1.5 J | 0.52 J | 1 U | 1 U | 1.6 | 1 U |
| | | 8 | 12/12/2019 | | 0.5 U | 0.5 U | **7.3** | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 2.2 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 3.9 | 0.5 U | 0.5 U | **5.2** | 0.5 U |
| | | 9 | 5/21/2019 | | 1 U | 1 U | **8.8** | 0.005 U | 0.5 U | 0.77 J | 0.8 J | 1 U | 1 U | 0.5 U | 0.78 J | 1 U | 1 U | 1 U | 2 U | 2.4 J | 3.3 | 1 U | 1 U | **15** | 1 U |
| | | 9 | 12/12/2019 | | 0.5 U | 0.5 U | **6.1** | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.88 | 0.82 | 0.5 U | 0.5 U | 3.2 | -- | **39** | 0.5 U | 0.5 U | **15** | 0.5 U |
| | | 10 | 5/21/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW 5-05 | BPW505 | 1 | 5/22/2019 | | 1 U | 1.3 | **6.1** | -- | **4** | **6.6** | 5 U | 1 U | 1 U | **3.8** | 8.8 | **7.6** | 1 U | 1 U | **660** | **130** | **41** | 1 U | 1 U | **190** | 1 U |
| | | 1 | 11/11/2019 | | 0.5 U | 0.89 | **11** | **0.5 U** | **4.3** | -- | -- | 0.5 U | -- | **7.8** | 11 | **7.1** | 0.5 U | 0.5 U | 1000 U | -- | **93** | 0.5 U | 0.5 U | **330** | 0.5 U |
| | | 2 | 5/22/2019 | | 1 U | 3.3 | **16** | -- | **2.2** | **14** | 1.4 J | 1 U | 1 U | **1.2** | 5.6 | 20 | 1 U | 1 U | **200** | **59** | **140** | 1 U | 1 U | **160** | 1 U |
| | | 2 | 11/11/2019 | | 0.5 U | 3.7 | **25** | **0.5 U** | **1.8** | -- | -- | 0.5 U | -- | **1.9** | 4.9 | 16 | 0.5 U | 0.5 U | 1000 U | -- | **200** | 0.5 U | 0.5 U | **180** | 0.5 U |
| | | 3 | 5/22/2019 | | 1 U | 2.9 | **7.6** | -- | **0.82** | **6** | 0.91 J | 1 U | 1 U | 0.5 U | 2.9 | 17 | 1 U | 1 U | 8.5 | **35** | **34** | 1 U | 1 U | **77** | 1 U |
| | | 3 | 11/11/2019 | | 0.5 U | 3.4 | **17** | **0.5 U** | **0.82** | -- | -- | 0.5 U | -- | 0.5 | 3.7 | 14 | 0.5 U | 0.5 U | 1000 U | -- | **82** | 0.5 U | 0.5 U | **120** | 0.5 U |
| | | 4 | 5/22/2019 | | 1 U | 1 U | 1.3 | -- | 0.5 U | **1.2** | 1.9 J | 1 U | 1 U | 0.5 U | 1 | 3.7 | 1 U | 1 U | 2 U | **18** | **7.1** | 1 U | 1 U | **20** | 1 U |
| | | 4 | 11/11/2019 | | 0.5 U | 0.5 U | 4.3 | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1.8 | 4.7 | 0.5 U | 0.5 U | 1000 U | -- | **22** | 0.5 U | 0.5 U | **47** | 0.5 U |
| MW 5-08 | BPW508 | 1 | 5/22/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 3.4 J | 1.4 | 1 U | 1 U | 1.4 | 1 U |
| | | 1 | 10/31/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | 0.5 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | **5.8** | 0.5 U | 0.5 U | 4.6 | 0.5 U |
| | | 2 | 5/22/2019 | | 1 U | 1 U | 0.94 J | -- | 0.5 U | 0.2 J | 2 J | 1 U | 1 U | 0.5 U | 0.52 J | 1.1 | 1 U | 1 U | 2 U | 4.5 | **9.1** | 1 U | 1 U | **9.1** | 1 U |
| | | 2 | 10/31/2019 | | 0.5 U | 0.5 U | 1.6 | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.65 | 1 | 0.5 U | 0.5 U | 1000 U | -- | **17** | 0.5 U | 0.5 U | **15** | 0.5 U |
| | | 3 | 5/22/2019 | | 1 U | 1 U | 0.88 J | -- | 0.5 U | 1 U | 1.1 J | 1 U | 1 U | 0.5 U | 1 U | 0.93 J | 1 U | 1 U | 2 U | 5.7 | **5.9** | 1 U | 1 U | **6.3** | 1 U |
| | | 3 | 10/31/2019 | | 0.5 U | 0.5 U | 4.9 | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | **0.9** | 1.2 | 3 | 0.5 U | 0.5 U | 1000 U | -- | **34** | 0.5 U | 0.5 U | **29** | 0.5 U |
| | | 4 | 5/22/2019 | | 1 U | 1 | **9** | -- | **0.59** | **6** | 1.2 J | 1 U | 1 U | 0.5 U | 8.3 | 12 | 1 U | 1 U | 8.2 | **22** | **71** | 1 U | 1 U | **82** | 1 U |
| | | 4 | 10/31/2019 | | 0.5 U | 1.9 | **27** | **0.5 U** | **1** | -- | -- | 0.5 U | -- | **0.56** | 10 | 18 | 0.5 U | 0.5 U | 1000 U | -- | **260** | 0.5 U | 0.5 U | **150** | 0.5 U |
| MW 5-11 | BPW511 | 1 | 5/23/2019 | | 1 U | 1 U | 1 U | 0.0016 J | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4 U | 2 | 1 U | 1 U | 0.66 J | 1 U |
| | | 1 | 12/16/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.62 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 4.8 | 0.5 U | 0.5 U | 0.57 | 0.5 U |
| | | 2 | 5/23/2019 | | 1 U | 1 U | 1 U | 0.0023 J | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1.1 | 1 U | 1 U | 1 U | 2 U | 4 U | 4.4 | 1 U | 1 U | 3 | 1 U |
| | | 2 | 12/16/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.83 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | **9.2** | 0.5 U | 0.5 U | **6.8** | 0.5 U |
| | | 3 | 5/23/2019 | | 1 U | 1 U | 1 U | 0.0032 J | 0.5 U | **8.9** | 5 U | 1 U | 0.48 J | 0.5 U | 0.5 J | 0.53 J | 1 U | 1 U | 1.4 J | **13 J** | **16** | 1 U | 1 U | **5.6** | 1 U |
| | | 3 | 12/18/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.84 | 1.8 | 0.5 U | 0.5 U | 4.5 | -- | **47** | 0.5 U | 0.5 U | **21** | 0.5 U |
| MW 5-13 | BPW513 | 1 | 5/23/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 0.58 J | 1 U | 1 U | 1 U | 2 U | 4 U | 1.8 | 1 U | 1 U | 1.5 | 1 U |
| | | 1 | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | 2 | 5/23/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 0.54 J | 1 U | 1 U | 1 U | 2 U | 4 U | 3 | 1 U | 1 U | 3.2 | 1 U |
| | | 2 | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | 3 | 5/23/2019 | | 1 U | 1 U | 1 U | 0.0031 J | 0.5 U | 0.83 J | 5 U | 1 U | 1 U | 0.5 U | 0.66 J | 0.66 J | 1 U | 1 U | 2 U | **16 J** | **8.9** | 1 U | 1 U | 4.8 | 1 U |
| | | 3 | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW 5-15 | BPW515 | 1 | 5/31/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 0.19 J | 2.5 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.65 J | **6.9** | 0.64 J | 1 U | 1 U | **5.7** | 1 U |
| | | 1 | 10/30/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.68 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 2.4 | 0.5 U | 0.5 U | **15** | 0.5 U |
| | | 2 | 5/31/2019 | | 1 U | 0.82 J | 2.2 J | -- | 0.5 U | 0.79 J | 3 J | 1 U | 1 U | 0.5 U | 1 U | 0.77 J | 1 U | 1 U | 2 U | 3.8 J | 1.2 J | 1 U | 1 U | 2.2 J | 1 U |
| | | 2 | 10/30/2019 | | 0.5 U | 2.2 | **13** | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 | 1.5 | 0.5 U | 0.5 U | 1000 U | -- | **7.2** | 0.5 U | 0.5 U | **7.8** | 0.5 U |
| | | 3 | 5/31/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 0.25 J | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **7** | 1.8 | 1 U | 1 U | 1.2 | 1 U |
| | | 3 | 10/30/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 4.6 | 0.5 U | 0.5 U | 2.6 | 0.5 U |
| MW 5-17 | BPW517 | 1 | 5/24/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 0.7 J | 1 U | 1 U | 1 U | 0.54 J | 3 J | 1.6 | 1 U | 1 U | 1 | 1 U |
| | | 1 | 12/13/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | 2 | 5/24/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | 1 U | 1.6 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1.3 J | 0.92 J | 1 U | 1 U | 0.99 J | 1 U |
| | | 2 | 12/13/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | 3 | 5/24/2019 | | 1 U | 1 U | 1 U | 0.0015 J | 0.5 U | **1.2** | 1.1 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 3 J | 1.2 J | 1 U | 1 U | 0.68 J | 1 U |
| | | 3 | 12/19/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 1.8 | 0.5 U | 0.5 U | 1.9 | 0.5 U |
| MW 5-18 | BPW518 | 1 | 5/24/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | -- | 5.2 | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 3.2 J | 0.66 J | 1 U | 1 U | 1 U | 1 U |
| | | 1 | 12/14/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 1.3 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | 2 | 5/24/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | 1 U | 2.3 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 3.2 J | 0.74 J | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 12/14/2019 | | 0.5 U | 0.5 U | 0.68 | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.95 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 1.2 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | 3 | 5/24/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | 1 U | 3.6 J | 1 U | 1 U | 0.5 U | 1.2 | 1 U | 1 U | 1 U | 2 U | 2 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 3 | 12/15/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 1.7 | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 1.6 | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| MW 5-19 | BPW519 | 1 | 12/27/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.69 J | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | 3 | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | 4 | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | 5 | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | 6 | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW 5-20 | BPW520 | 1 | 6/27/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | **130** | 0.26 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 6/27/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | **2.2** | 1 U | 1 U | 1 U | 1 U | 2 U | 3.8 J | 1 U | 1 U | 1 U | 1.8 | 1 U |
| | | 3 | 6/27/2019 | | 1 U | 1.3 | 1.9 | -- | **3.4** | **3.1** | 5 U | 1 U | 1 U | **3.7** | 3.1 | 5.8 | 1 U | 1 U | **200** | 4.8 | **6.8** | 1 U | 1 U | **82** | 1 U |
| | | 4 | 6/27/2019 | | 1 U | 0.47 J | 1 U | -- | **1.9** | **1.8** | 5 U | 1 U | 1 U | **0.76** | 1.4 | 1.7 | 1 U | 1 U | **220** | **48** | 2.1 | 1 U | 1 U | **27** | 1 U |
| | | 5 | 6/27/2019 | | 1 U | 1 U | 1 U | -- | **3** | **1.4** | 5 U | 1 U | 1 U | **1.1** | 1.6 | 1.2 | 1 U | 1 U | **390** | **36 J** | 1.8 | 1 U | 1 U | **30** | 1 U |
| | | 6 | 6/27/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.58 J | **16** | 1 U | 1 U | 1 U | 1 | 1 U |
| | | 7 | 6/27/2019 | | 1 U | 1 U | 0.47 J | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 0.64 J | 1 U | 1 U | 1 U | 2 U | 4.2 | 1.3 | 1 U | 1 U | 3 | 1 U |
| MW 5-22 | BPW522 | 1 | 5/30/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | -- | 5 U | 1 U | 1 U | **1.1** | 1 U | 1 U | 1 U | 1 U | 2 U | 0.29 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 1 | 11/12/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | 0.5 U | -- | 0.5 U | -- | **2.3 J** | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | 2 | 5/30/2019 | | 1 U | 1 U | 0.77 J | 0.005 U | **0.9 J** | -- | 5 U | 1 U | 1 U | **2.8 J** | 0.89 J | 1.5 J | 1 U | 1 U | **100** | **24** | 2 J | 1 U | 1 U | **15 J** | 1 U |
| | | 2 | 11/12/2019 | | 0.5 U | 0.5 U | 2.7 | 0.005 U | **1.2** | **1.2** | -- | 0.5 U | -- | **6.5 J** | 1.3 | 2.4 | 0.5 U | 0.5 U | 1000 U | -- | **5.4** | 0.5 U | 0.5 U | **30** | 0.5 U |

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

| Well Name | Site ID | Port [a] | Sample Date | Field Duplicate | 1,1,1-Trichloroethane (µg/L) | 1,1-Dichloroethane (µg/L) | 1,1-Dichloroethene (µg/L) | 1,2,3-Trichloropropane [b] (µg/L) | 1,2-Dichloroethane (µg/L) | 1,4-Dioxane (µg/L) | Acetone (µg/L) | Benzene (µg/L) | Carbon Disulfide (µg/L) | Carbon Tetrachloride (µg/L) | Chloroform (µg/L) | cis-1,2-Dichloroethene (µg/L) | Ethylbenzene (µg/L) | Methylene Chloride (µg/L) | NDMA [c] (ng/L) | Perchlorate (µg/L) | Tetrachloroethene (µg/L) | Toluene (µg/L) | trans-1,2-Dichloroethene (µg/L) | Trichloroethene (µg/L) | Xylenes, Total [d] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal or California State MCL (NL) [SMCL] [e]** | | | | | **200** | **5** | **6** | **0.005** | **0.5** | **(1)** | **--** | **1** | **160** | **0.5** | **80** | **6** | **300** | **5** | **(10)** | **6** | **5** | **150** | **10** | **5** | **1750** |
| | | 3 | 5/30/2019 | | 1 U | 1 U | 1.3 | 0.005 U | **3.3** | -- | 5 U | 1 U | 1 U | **2.9** | 2.5 | 3 | 1 U | 1 U | **440** | **67** | 4.2 | 1 U | 1 U | **44** | 1 U |
| | | 3 | 11/12/2019 | | 0.5 U | 0.5 U | 3.3 | **0.5 U** | **3.2** | **3** | -- | 0.5 U | -- | **5.4 J** | 2.5 | 3.4 | 0.5 U | 0.5 U | 1000 U | -- | **7.8** | 0.5 U | 0.5 U | **65** | 0.5 U |
| | | 4 | 5/30/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | -- | 5 U | 1 U | 1 U | **0.71 J** | 1 U | 1 U | 1 U | 1 U | 2 U | 3.7 J | 1 U | 1 U | 1 U | 2 J | 1 U |
| | | 5 | 5/30/2019 | | 1 U | 1 U | 1 U | 0.005 U | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 0.7 J | 1 U | 1 U | 1 U | 2 U | 4.2 | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 6 | 5/30/2019 | | 1 U | 1 U | 0.71 J | 0.005 U | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 3.1 J | 0.89 J | 1 U | 1 U | 0.53 J | 1 U |
| MW 5-23 | BPW523 | 1 | 5/31/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 4.3 J | 1 U | 1 U | **2.7** | 1 U | 1 U | 1 U | 1 U | 2 U | 3.4 J | 0.57 J | 1 U | 1 U | 1.9 | 1 U |
| | | 2 | 5/31/2019 | | 1 U | 1 U | 0.63 J | -- | 0.5 U | 0.19 J | 2.7 J | 1 U | 1 U | **3.4** | 0.53 J | 1.1 | 1 U | 1 U | **13** | **11** | 1.8 | 1 U | 1 U | **8.3** | 1 U |
| | | 3 | 5/31/2019 | | 1 U | 1 | 1.6 | -- | **3.5** | **3.8** | 3.4 J | 1 U | 1 U | **1.1** | 3.2 | **6.5** | 1 U | 1 U | **650** | **79** | **7.5** | 1 U | 1 U | **56** | 1 U |
| | | 4 | 5/31/2019 | | 1 U | 1 U | 1 U | -- | **2.2** | 0.88 J | 2.8 J | 1 U | 1 U | **0.59** | 1.2 | 1 U | 1 U | 1 U | **550** | **29** | 0.66 J | 1 U | 1 U | **13** | 1 U |
| | | 5 | 5/31/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 0.068 J | 3.4 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **10** | 1.3 | 1 U | 1 U | 2.4 | 1 U |
| | | 6 | 5/31/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 3.4 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1.7 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| MW 5-24 | BPW524 | 1 | 5/28/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | **7.8** | 5 U | 1 U | 1 U | **1.4** | 1 U | 1 U | 1 U | 1 U | 0.52 J | 1.3 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 5/28/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | **3.4** | 5 U | 1 U | 1 U | **2.7** | 1 U | 1 U | 1 U | 1 U | 2 U | 1.8 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 3 | 5/28/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 0.063 J | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2.1 J | 4.3 | 1 U | 1 U | 4.5 | 1 U |
| | | 4 | 5/28/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 0.3 J | 5 U | 1 U | 1 U | 0.5 U | 1 U | 0.64 J | 1 U | 1 U | 0.51 J | 5.5 | **32** | 1 U | 1 U | **46** | 1 U |
| | | 5 | 5/28/2019 | | 1 U | 1 U | 0.69 J | -- | 0.5 U | 0.04 J | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1.3 | 1 U | 1 U | 2 U | **7.3** | **73** | 1 U | 1 U | **49** | 1 U |
| | | 6 | 5/28/2019 | | 1 U | 1 U | 1.8 | -- | 0.5 U | 0.92 J | 5 U | 1 U | 1 U | 0.5 U | 1.1 | **9.6** | 1 U | 1 U | 3.5 | **7.7** | **260** | 1 U | 1 U | **130** | 1 U |
| | | 7 | 5/28/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | **1.9** | 5 U | 1 U | 1 U | 0.5 U | 0.72 J | 1 U | 1 U | 1 U | 2 U | **8.5** | **16** | 1 U | 1 U | **6.5** | 1 U |
| MW 5-25 | BPW525 | 1 | 5/29/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 0.92 J | 1 U | 1 U | **2.5** | 1 U | 1 U | 1 U | 1 U | 2 U | 3.4 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 5/29/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.71 J | 2.8 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 3 | 5/29/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 2.9 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **15** | 3.2 | 1 U | 1 U | 1 U | 1 U |
| | | 4 | 5/29/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 3.6 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **15** | 1.3 | 1 U | 1 U | 1 U | 1 U |
| | | 5 | 5/30/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **10** | 0.66 J | 1 U | 1 U | 1 U | 1 U |
| | | 6 | 5/30/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2.2 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 7 | 5/30/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1.7 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| MW 5-26 | BPW526 | 1 | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.28 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.28 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 3 | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.29 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 4 | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.3 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 5 | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.89 J | 0.77 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 6 | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1.1 J | 0.81 J | 0.52 J | 1 U | 1 U | 1 U | 1 U |
| | | 7 | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1.2 J | 0.97 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| MW 5-27 | BPW527 | 1 | 6/6/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 2.6 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2.2 | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 2 | 6/6/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 3 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1.4 J | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 3 | 6/6/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 4.3 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 4 | 6/6/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 3.4 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1.6 J | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 5 | 6/6/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 6.4 | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 6 | 6/6/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.89 J | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 7 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 4 J | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.26 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| WHICO MP-1 | W10WHMP1 | 1 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 2.9 J | 1 U | 1 U | 0.5 U | 0.7 J | 1 U | 1 U | 1 U | 2 U | 4 U | 5 | 1 U | 1 U | 2.2 | 1 U |
| | | 2 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 4 J | 1 U | 1 U | 0.5 U | 0.49 J | 1 U | 1 U | 1 U | 2 U | 0.98 J | 0.98 J | 1 U | 1 U | 1.8 J | 1 U |
| | | 3 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 35 | 1 U | 1 U | 0.5 U | 0.45 J | 1 U | 1 U | 1 U | 2 U | 0.023 J | 4.3 | 1 U | 1 U | 3 | 1 U |
| | | 4 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 0.075 J | 4.3 J | 1 U | 1 U | 0.5 U | 0.47 J | 0.91 J | 1 U | 1 U | 2 U | 0.97 J | **13** | 1 U | 1 U | **8.7** | 1 U |
| | | 5 | 6/26/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | **3.8** | 5.5 | 1 U | 1 U | 0.5 U | 0.79 J | 1 | 1 U | 1 U | 5.5 | **16** | **18** | 1 U | 1 U | **8.6** | 1 U |
| | | 6 | 6/26/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| **Other Monitoring Wells** | | | | | | | | | | | | | | | | | | | | | | | | | |
| AJ MW-2R | W11AJMW2R | | 1/14/2019 | | 1.3 U | 1.3 U | 2.8 | **2.5 U** | 1.3 U | 0.58 | -- | 1.3 U | -- | 1.3 U | 3.2 | **7.4** | 1.3 U | 5 U | 2 U | 4.9 | **170** | 1.3 U | 1.3 U | **57** | 1.3 U |
| | | | 4/26/2019 | | 0.5 U | 0.5 U | 0.8 | **1 U** | 0.5 U | 0.49 | -- | 0.5 U | -- | 0.5 U | 3 | 4.5 | 0.5 U | 2 U | 2 U | **6.5** | **37** | 0.5 U | 0.5 U | **40** | 0.5 U |
| | | | 8/16/2019 | | 0.5 U | 0.5 U | 0.5 U | **1 U** | 0.5 U | 0.34 | -- | 0.5 U | -- | 0.5 U | 3.3 | 1.7 | 0.5 U | 2 U | 2 U | 2.7 | **22** | 0.5 U | 0.5 U | **20** | 0.5 U |
| | | | 11/11/2019 | | 0.5 U | 0.5 U | 0.5 U | **1 U** | 0.5 U | **15** | -- | 0.5 U | -- | 0.5 U | 74 | 3.1 | 0.5 U | 2 U | **420** | **6600** | 3.8 | 0.5 U | 0.5 U | **10** | 0.5 U |
| AJ MW-6 | W11AJMW6 | | 1/14/2019 | | 0.5 U | 0.5 U | 0.5 U | **1 U** | 0.5 U | 0.29 | -- | 0.5 U | -- | **0.51** | 1 | 1.8 | 0.5 U | 2 U | 2 U | **6.9** | **61** | 0.5 U | 0.5 U | **49** | 0.5 U |
| | | | 4/26/2019 | | 0.5 U | 0.5 U | 0.5 U | **1 U** | 0.5 U | 0.2 U | -- | 0.5 U | -- | 0.5 U | 2.8 | 0.67 | 0.5 U | 2 U | 2 U | **8.3** | 4.8 | 0.5 U | 0.5 U | **10** | 0.5 U |
| | | | 8/16/2019 | | 0.5 U | 0.5 U | 0.5 U | **1 U** | 0.5 U | 0.2 U | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 2 U | 1.6 | 0.5 U | 0.62 | 0.5 U | 0.89 | 0.5 U |
| | | | 11/11/2019 | | 0.5 U | 0.5 U | 0.5 U | **1 U** | 0.5 U | 0.2 U | -- | 0.5 U | -- | 0.5 U | 19 | 0.5 U | 0.5 U | 2 U | 2 U | **10** | 0.9 | 0.5 U | 0.5 U | 2.1 | 0.5 U |
| ALR MW-1R | W11AZW1R | | 4/17/2019 | | 0.5 U | 0.5 U | 1.5 | **0.02 U** | 0.14 J | 1 U | 10 U | 0.5 U | 1 U | 0.5 U | 1.3 | 0.41 J | 0.5 U | 1 U | 2 U | 1.2 J | 0.96 | 0.5 U | 0.5 U | 1.3 | 1 U |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| ALR MW-2R | W11AZW2R | | 4/17/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.02 U** | 0.13 J | 1 U | 10 U | 0.5 U | 1 U | 0.5 U | 1.2 | 0.5 U | 0.5 U | 1 U | 2 U | 1.9 J | 0.34 J | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| ALR MW-3 | W11AZW03 | | 4/18/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.02 U** | 0.5 U | 0.023 J | 10 U | 0.5 U | 1 U | 0.5 U | 0.41 J | 0.33 J | 0.5 U | 1 U | 2 U | 2.1 J | **15** | 0.5 U | 0.5 U | **15** | 1 U |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

| Well Name | Site ID | Port [a] | Sample Date | Field Duplicate | 1,1,1-Trichloroethane (µg/L) | 1,1-Dichloroethane (µg/L) | 1,1-Dichloroethene (µg/L) | 1,2,3-Trichloropropane [b] (µg/L) | 1,2-Dichloroethane (µg/L) | 1,4-Dioxane (µg/L) | Acetone (µg/L) | Benzene (µg/L) | Carbon Disulfide (µg/L) | Carbon Tetrachloride (µg/L) | Chloroform (µg/L) | cis-1,2-Dichloroethene (µg/L) | Ethylbenzene (µg/L) | Methylene Chloride (µg/L) | NDMA [c] (ng/L) | Perchlorate (µg/L) | Tetrachloroethene (µg/L) | Toluene (µg/L) | trans-1,2-Dichloroethene (µg/L) | Trichloroethene (µg/L) | Xylenes, Total [d] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal or California State MCL (NL) [SMCL] [e]** | | | | | **200** | **5** | **6** | **0.005** | **0.5** | **(1)** | **--** | **1** | **160** | **0.5** | **80** | **6** | **300** | **5** | **(10)** | **6** | **5** | **150** | **10** | **5** | **1750** |
| ALR MW-8 | W11AZW08 | | 4/17/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.02 U** | 0.5 U | 1 U | 10 U | 0.5 U | 1 U | 0.5 U | 0.98 | 0.5 U | 0.5 U | 1 U | 2 U | 2 J | 0.69 | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 4/17/2019 | X | 0.5 U | 0.5 U | 0.5 U | **0.02 U** | 0.5 U | 1 U | 10 U | 0.5 U | 1 U | 0.5 U | 1.1 | 0.5 U | 0.5 U | 1 U | 1.1 J | 1.9 J | 0.84 | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| ALR MW-9 | W11AZW09 | | 4/18/2019 | | 0.5 U | 0.5 U | 1.3 | **0.02 U** | 0.5 U | 1 U | 10 U | 0.5 U | 1 U | 0.5 U | 1.8 | 0.55 | 0.5 U | 1 U | 2 U | 4 U | **16** | 0.5 U | 0.5 U | 3.4 | 1 U |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| ALR MW-10R | W11AZW10R | | 4/18/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.02 U** | 0.5 U | 1 U | 10 U | 0.5 U | 1 U | 0.5 U | 1.5 | 0.5 U | 0.5 U | 1 U | 2 U | 0.97 J | 0.36 J | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| **Monitoring Well Cluster** | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW 5-28D | BPW528D | | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.33 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| MW 5-28I | BPW528I | | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 5.4 | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | | 6/14/2019 | X | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4.9 | 1 U | 1 U | 1 U | 1 U | 1 U |
| MW 5-28S | BPW528S | | 6/14/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 0.53 J | **14** | 1 U | 1 U | 1 U | 1 U | 1 U |
| **Production Wells** | | | | | | | | | | | | | | | | | | | | | | | | | |
| LACO SANTA FE 1 | 8000070 | | 6/13/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.24 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | | 6/13/2019 | X | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 0.24 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| SGVWC B6D | 78000098 | | 1/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SWS 121W1 [f] | 8000181 | | 2/8/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | **11** | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U |
| SWS 139W2 | 1901599 | 285 | 6/13/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **18** | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 285 | 6/13/2019 | X | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **18** | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | 370 | 6/13/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **18** | 1 U | 1 U | 1 U | 1 U | 1 U |
| SWS 139W6 | 8000152 | | 6/13/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1.6 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | | 6/13/2019 | X | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1.6 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| SWS 140W5 [f] | 8000145 | | 1/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 2/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 3/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 4/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 5/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 9/25/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 2 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 10/10/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 2 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| | | | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SWS 142W2 | 8000183 | | 1/11/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 U | 3.2 | -- | -- | -- | -- | -- |
| | | | 1/21/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 2/8/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 3.4 | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 3/4/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 3.3 | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 4/8/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 4.1 | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 5/7/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2 U | 3.5 | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 9/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SWS 151W2 | 21902518 | | 1/11/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4.2 | 4.5 | -- | -- | -- | -- | -- |
| | | | 1/21/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | -- | 0.5 U | 0.5 U | 0.5 U | 4.6 | 1 U |
| | | | 2/8/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 3.8 | 4 | 0.5 U | 0.5 U | 0.5 U | 3.7 | 1 U |
| | | | 3/11/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 2.8 | 3.9 | 0.6 | 0.5 U | 0.5 U | 4.2 | 1 U |
| | | | 3/25/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | -- | -- | 0.53 | 0.5 U | 0.5 U | 4.4 | 1 U |
| | | | 4/8/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 3.4 | 5 | 0.5 U | 0.5 U | 0.5 U | 4 | 1 U |
| | | | 5/7/2019 | | 0.5 U | 0.5 U | 0.5 U | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 3.4 | 4 | 0.5 U | 0.5 U | 0.5 U | 4.2 | 1 U |
| | | | 6/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 7/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 8/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 9/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 10/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 11/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | 12/1/2019 | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| VCWD BIG DALTON | 1900035 | 225 | 6/12/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **7.8** | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | | 6/12/2019 | X | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | **6.7** | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | | 7/23/2019 | | 0.5 U | 0.5 U | 0.5 U | 0.005 U | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1 U |
| VCWD E MAINE | 1900027 | | 6/12/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | | 6/12/2019 | X | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| VCWD MORADA | 1900029 | 430 | 6/12/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 0.55 J | 1 U | 1 U | 1 U | 2 U | **9.9** | 1.2 | 1 U | 1 U | 1 U | 1 U |
| | | 510 | 6/12/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | 1 U | 5 U | 1 U | 1 U | 0.5 U | 0.52 J | 1 U | 1 U | 1 U | 2 U | **8.7** | 1.1 | 1 U | 1 U | 1 U | 1 U |
| VCWD PADDY LN | 1900031 | | 6/12/2019 | | 1 U | 1 U | 1 U | -- | **0.76** | 0.64 J | 5 U | 1 U | 1 U | 0.5 U | 0.73 J | 1 U | 1 U | 1 U | 12 | **18** | 0.6 J | 1 U | 1 U | 4.9 | 1 U |
| | | | 10/23/2019 | | 0.5 U | 0.5 U | 0.68 | **0.5 U** | 0.5 U | -- | -- | 0.5 U | -- | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 1000 U | -- | 0.64 | 0.5 U | 0.5 U | 3.1 | 0.5 U |
| VCWD W MAINE | 1900028 | | 6/12/2019 | | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| | | | 6/12/2019 | X | 1 U | 1 U | 1 U | -- | 0.5 U | -- | 5 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 2 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U |

**TABLE 5-2**
**2019 GROUNDWATER QUALITY MONITORING RESULTS**
Baldwin Park Operable Unit
San Gabriel Valley, California

Geosyntec consultants

**Notes:**

a. For inactive production wells, depth (feet) of discrete low-flow sample.

b. In some instances, samples are submitted for 1,2,3-Trichloropropane (1,2,3-TCP) analysis for both the standard EPA Method 524.2, which has a reporting limit of 0.50 µg/L, and the modified low-level Sanitation and Radiation Laboratories (SRL) modified Method 524.2, which has a reporting limit of 0.005 µg/L. Where available, this table shows the results associated with the low-level SRL method.

c. In some instances, samples are submitted for NDMA analysis by two methods, EPA Method 8270C that has a reporting limit of 1 µg/L (1,000 ng/L) and EPA Method 1625C that has a reporting limit of 0.0020 µg/L (2 ng/L).

d. Total xylenes calculated as sum of xylene isomers if total xylene results not reported by laboratory.

e. Federal or California State Maximum Contaminant Level (MCL), Notification Level (NL) or Secondary MCL (SMCL).

f. Production wells SWS 121W1 and SWS 140W5 were sampled on an approximately weekly basis throughout 2017. Consistent with project extraction wells, only monthly sampling results are reported here.

-- Sample not collected, or sample not analyzed.

B - Laboratory blank contamination reported.

U - Analyte not detected at the reported quantitation limit shown in the result.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - Analyte not detected at the reported quantitation limit shown in the result; the reported quantitation limit is estimated.

NDMA = N-Nitrosodimethylamine

Results in bold indicate MCL, NL, or SMCL exceeded.

# PHASE II

# ENVIRONMENTAL SITE ASSESSMENT

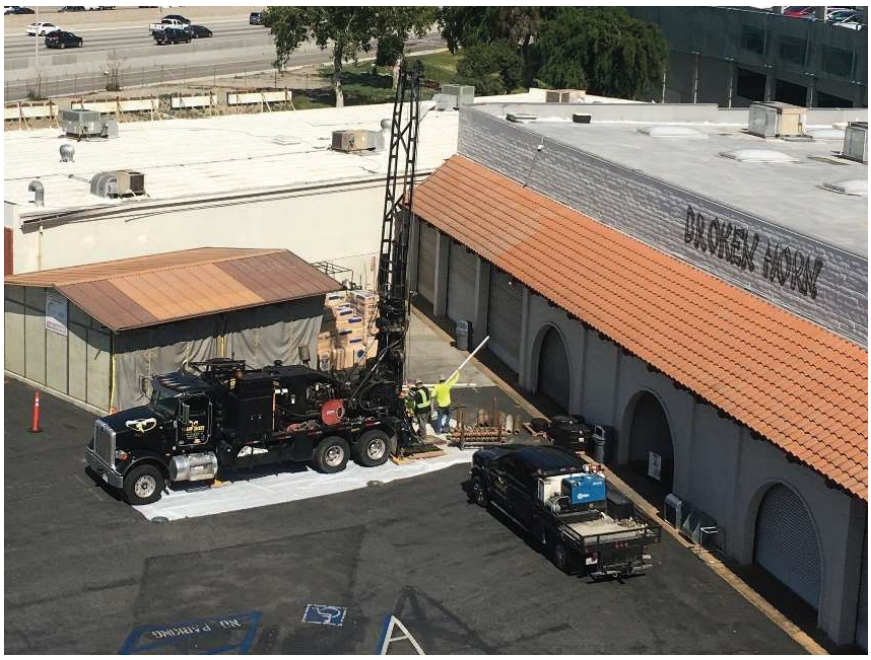
**SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land**

**1022-1026 Leorita Street**

**Baldwin Park, Los Angeles County, California**

**April 29, 2021**

Terracon Project No. CB21P020




**Prepared for:**
Kaiser Permanente
Pasadena, California

**Prepared by:**
Terracon Consultants, Inc.
Colton, California

terracon.com

Terracon

Environmental ■ Facilities ■ Geotechnical ■ Materials

April 29, 2021

Kaiser Permanente
393 East Walnut Street, 4th Floor
Pasadena, California 91188

Attn: Mr. Jason Gancarczyk
P: (626) 405-5274
E: jason.e.gancarczyk@kp.org

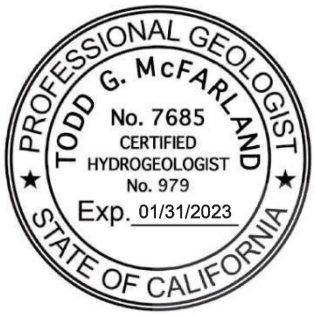
Re: Phase II Environmental Site Assessment
SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706
Terracon Project No. CB21P020

Dear Mr. Gancarczyk:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase II Environmental Site Assessment (ESA) report for the above referenced Property. This assessment was performed in general accordance with Terracon's Master Services Agreement, dated June 3, 2016, and Work Authorization No. SCAL-BP-0160 (CCAP-1) CO#1, dated March 12, 2021.

We appreciate the opportunity to perform these services for Kaiser Permanente (KP). Please contact the undersigned at (909) 824-7311 if you have questions regarding the information provided in the report.

Sincerely,
**Terracon Consultants, Inc.**




Prepared by:

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Attachments

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# EXECUTIVE SUMMARY

This Phase II Environmental Site Assessment (ESA) was performed in accordance with Terracon's Master Services Agreement, dated June 3, 2016, and Work Authorization No. SCAL-BP-0160 (CCAP-1), CO#1, dated March 12, 2021, and was conducted in general accordance with the procedures included in ASTM E1903-11, *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process* and Client Scope of Work, Terracon proposal dated March 9, 2021. The Phase II ESA was conducted under the supervision of a California-licensed Professional Geologist, Todd G. McFarland.

Terracon conducted the Phase II ESA at the Property, located at 1022-1026 Leorita Street, in Baldwin Park, Los Angeles County, California 91706. The scope of work conducted at the Client's request, was in response to Terracon's Phase I ESA report (Terracon Project No. CB21P020), dated March 22, 2021, which identified the following REC:

- Gabriel Valley Area 2 Superfund Site, also known as the Baldwin Park Operable Unit (OU), a chlorinated solvent groundwater plume mapped beneath the Property.

The primary contaminants detected in groundwater for the Baldwin Park OU are trichloroethene (TCE), tetrachloroethene (PCE), carbon tetrachloride, perchlorate, n-nitrosodimethylamine (NDMA), and 1,4-dioxane, which have been mapped beneath the Property at concentrations that exceed Maximum Contaminant Levels (MCLs) and/or other regulatory levels. The Phase II ESA was intended to assess potential for impact to soil, soil gas, and groundwater beneath the Property; and assess the potential for vapor intrusion into indoor air.

In order to assess the identified REC and presence of constituents of the concern beneath the Property, Terracon conducted site assessment activities to collect soil, water, soil gas, subslab soil gas and indoor/outdoor air data.

## Findings and Opinions

A summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Terracon's field activities consisted of the advancement of a total of eleven (11) soil borings, six (6) subslab probes (SSP-1 through SSP-6), collection of four (4) indoor air samples (IAS-1 through IAS-4), and collection of two (2) outdoor air samples (OAS-1 and OAS-2). Five (5) soil borings were converted into multi-depth soil gas probes (SGP-1 through SGP-5) set at depths of 5 and 20 feet below ground surface (bgs), and six (6) soil borings (B-1 through B-6) were advanced to a maximum depth of approximately 135 feet bgs and converted into temporary

groundwater sampling wells (TSW-1 through TSW-6). To evaluate the REC and evaluate impacts to the Property, analytical results were compared to applicable and published environmental screening levels (ESLs) from the State Water Board (SFB-RWQCB ESLs) and California Environmental Protection Agency, Department of Toxic Substance Control (DTSC).

Soil Conditions

During sample collection, the soil encountered to a depth of 135 feet bgs (total depth) consisted primarily of silty sand and poorly graded sand with gravel to 2-inch in diameter from beneath the pavement to total depth. No odors or staining were observed in the encountered soils, and the maximum photoionization detector (PID) reading measured was 2.3 parts per million by volume (ppmv).

The soil analytical results for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), herbicides, organochlorinated pesticides (OCPs) and metals were either below the specified laboratory reporting limit, were below residential, commercial, and construction worker ESLs, and/or for metals, were below concentrations established to be naturally occurring "background" levels.

Groundwater Conditions

Groundwater was encountered beneath the Property at a depth of approximately 120 feet bgs with a west-northwest flow, which is toward the nearby active production wells.

The groundwater analytical results for TPH and VOCs were below the specified laboratory reporting limit except for several low-level detections TPH which are below residential and commercial screening levels. Perchlorate and 1,4-dioxane were detected in one or more of the groundwater samples at concentrations above regulatory screening levels (which are primary contaminants identified for the Baldwin Park OU).

Soil Gas Conditions

The soil gas sample analytical results from the soil gas probes within the parking lot indicated VOCs above ESLs (including PCE, which is primary contaminant identified for the Baldwin Park OU) above residential land use, but below the commercial land use ESL. An evaluation of the PCE results indicate that in general, VOC concentrations increase with depth, i.e., the 20-foot PCE concentration is higher than the 5-foot PCE concentration, which indicates a deeper source, such as the regional Baldwin Park OU groundwater plume.

The subslab soil gas samples collected beneath the buildings indicate PCE and TCE concentrations were detected in one sample (SSP-1) above residential and commercial ESLs, respectively. The remaining detected VOC concentrations did not exceed their respective residential or commercial ESLs.

Indoor Air Conditions

The indoor air analytical results indicated detectable concentrations of VOCs, including 1,2-dichloroethane, benzene, bromodichloromethane, carbon tetrachloride, chloroform, methylene chloride, and TCE (primary contaminant identified for the Baldwin Park OU) above residential and/or commercials ESLs. Other detectable VOC concentrations did not exceed their respective residential or commercial ESLs. In general, the detections of VOCs (except for TCE) in indoor air where detected in the outdoor air samples at comparable concentrations (within same order of magnitude), indicating a regional outdoor source of VOCs, which is typical for the developed urban setting of the Property.

## Conclusions

Based on the historical (non-industrial) and current commercial/retail Property use, and a review of the soil, groundwater, soil gas and indoor/outdoor air data, a source of VOCs, 1,4-dioxane and perchlorate on the Property is not evident. The lack of documented use or storage of these constituents on the Property indicates the likely source of these constituents is the regional Baldwin Park OU plume beneath the Property. Furthermore, based on the results of the Phase II ESA, the Property does not appear to be a contributor to the Baldwin Park OU groundwater plume.

## Recommendations

It is Terracon's understanding that the Property is intended to either remain occupied as a commercial business, unoccupied or redeveloped in the future. Based on the findings and conclusions, Terracon has the following recommendations:

- In response to the potential for a complete vapor intrusion exposure pathway from the documented VOCs concentrations, including TCE above the respective residential and/or commercial ESLs identified at the Property in subslab soil gas and indoor air, engineered control measures should be evaluated and implemented to mitigate the vapor intrusion risk based on the future use of the Property.
- Based on the potential for residual impacts to be encountered during demolition and/or redevelopment, a Soil and Groundwater Management Plan is recommended.
- Additional soil, groundwater, or soil gas assessment at the Property do not appear warranted at this time.

**PHASE II ENVIRONMENTAL SITE ASSESSMENT**
**SBPK 2021 MFL 1022-1026 LEORITA STREET BROKEN HORN LAND**
**1022-1026 LEORITA STREET**
**BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA**
**Terracon Project No. CB21P020**
**April 29, 2021**

# 1.0 INTRODUCTION

## 1.1 Property Description

| | |
|---|---|
| **Property Name** | SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land |
| **Property Location/Address** | 1022-1026 Leorita Street, Baldwin Park, Los Angeles County, California 91706 (Los Angeles County Assessor Parcel Numbers [APNs]: 8559-008-005 and 8559-008-011, the Property) |
| **General Site Description** | The Property consist of an approximately 1.54-acre tract of land improved with an approximately 13,440-square-foot (with a mezzanine level) commercial buildings. The Property is further improved with asphalt-paved parking lot, landscaped areas, and utilities. During the site assessment activities, the Property was observed to be occupied by Broken Horn Saddlery, a western apparel and supply retailer. |

A topographic map and property diagram are included as **Exhibits 1** and **2**, respectively.

## 1.2 Scope of Work

Terracon conducted a Phase II Environmental Site Assessment (Phase II ESA) at the Property. The scope of work conducted at the request of Kaiser Permanente, was in response to Terracon's Phase I Environmental Site Assessment (ESA) report (Terracon Project No. CB21P020), dated March 22, 2021, which identified the following recognized environmental conditions (RECs), vapor encroachment conditions (VEC), and/or Business Environmental Risks (BER).

- **San Gabriel Valley Area 2 Superfund Site / Baldwin Park OU, a chlorinated solvent groundwater plume is mapped beneath the Property**. The primary constituents of concern include trichloroethene (TCE), tetrachloroethene (PCE), carbon tetrachloride, perchlorate, n-nitrosodimethylamine (NDMA), and 1,4-dioxane, which have been detected in nearby wells at concentrations that exceed MCLs and/or other regulatory levels, and represents a REC to the Property.

The objective of the Phase II ESA was to assess the presence of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), perchlorate, and 1,4-dioxane in groundwater beneath

the Property; TPH, VOCs, organochlorine pesticides (OCPs), herbicides, and metals in soil beneath the Property; and VOCs in the soil gas and indoor air for the Property.

Terracon understands the expected future use of the Property is unknown. Based on the unknown intended future use of the Property, Terracon applied the residential and commercial land use environmental screening levels (ESLs), which includes healthcare, daycare and other sensitive uses when evaluating sample results.

## 1.3 Standard of Care

Terracon's services were performed in accordance with the standard of care as stated in Article 9 of the Master Professional Services Agreement – Environmental Services, Agreement No. 2016EHSTERRACON. These assessment services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and may not strictly adhere to ASTM E1903-11 *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*.

## 1.4 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services, and we cannot represent that the Property contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this assessment. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

## 1.5 Reliance

This report has been prepared for the exclusive use of Kaiser Permanente, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Property) is prohibited without the express written authorization of Kaiser Permanente and Terracon. Any unauthorized distribution or reuse is Kaiser Permanente's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, report, and our Master Services Agreement, dated June 3, 2016. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Kaiser Permanente and all relying parties unless otherwise agreed in writing.

## 2.0 FIELD ACTIVITIES

Terracon's field activities were conducted from March 18 to April 9, 2021, by a field geologist under the oversight of a California-licensed Professional Geologist (P.G.) with Terracon. A site-specific health and safety plan was utilized by Terracon and subcontractors during field activities for all phases of this assessment.

The field activities consisted of the advancement of a total of eleven (11) soil borings, five (5) subslab probes (SSP), and collection of six (6) air samples. Five (5) borings were advanced to a maximum depth of approximately 20.5 feet below ground surface (bgs) and converted into multi-depth soil gas probes (SGPs) set at depths of 5 and 20 feet bgs, and six (6) soil borings were advanced to a maximum depth of approximately 135 feet bgs and converted into temporary groundwater sampling wells (TSWs).

A photographic log of the field activities conducted is included as **Appendix A**. The approximate soil boring and sampling locations are shown on **Exhibit 3** and are summarized below.

| Location ID | Sample Depth (Feet bgs) | Sample Type | Assessment Area |
|---|---|---|---|
| SGP-1 | 5, 20 | Soil and Soil Gas | 1026 Leorita Street; southwest of the building |
| SGP-2 | 5, 20 | Soil and Soil Gas | 1026 Leorita Street; north of the building |
| SGP-3 | 5, 20 | Soil and Soil Gas | 1022 Leorita Street; west of the building |
| SGP-4 | 5, 20 | Soil and Soil Gas | 1022 Leorita Street; central portion of the parking lot |
| SGP-5 | 5, 20 | Soil and Soil Gas | 1022 Leorita Street; northwestern portion of the parking lot |
| B-1/TPW-1 | 5, 10 | Soil and Groundwater | 1022 Leorita Street; west of the building |
| B-2/TPW-2 | 5, 110 | Soil and Groundwater | 1022 Leorita Street; southern portion of the parking lot |
| B-3/TPW-3 | 5, 12, 110 | Soil and Groundwater | 1022 Leorita Street; western portion of the parking lot |
| B-4/TPW-4 | 5, 115 | Soil and Groundwater | 1022 Leorita Street; north-central portion of the parking lot |
| B-5/TPW-5 | 5, 115 | Soil and Groundwater | 1026 Leorita Street; north of the building |
| B-6/TPW-6 | 5, 115 | Soil and Groundwater | 1026 Leorita Street; western portion of the parking lot |
| SSP-1 | 0.5 | Soil Gas | 1022 Leorita Street; southern portion of the building interior |
| SSP-2 | 0.5 | Soil Gas | 1022 Leorita Street; central portion of the building interior |
| SSP-3 | 0.5 | Soil Gas | 1022 Leorita Street; central portion of the building interior |
| SSP-4 | 0.5 | Soil Gas | 1026 Leorita Street; central portion of the building interior |
| SSP-5 | 0.5 | Soil Gas | 1026 Leorita Street; southern portion of the building interior |
| SSP-6 | 0.5 | Soil Gas | 1026 Leorita Street; western portion of the building interior |
| IAS-1 | -- | Indoor Air | 1022 Leorita Street; central portion of the building interior |
| IAS-2 | -- | Indoor Air | 1022 Leorita Street; central portion of the building interior |
| IAS-3 | -- | Indoor Air | 1026 Leorita Street; central portion of the building interior |
| IAS-4 | -- | Indoor Air | 1026 Leorita Street; central portion of the building interior |
| OAS-1 | -- | Outdoor Air | 1022 Leorita Street; southwestern portion of the parking lot |
| OAS-2 | -- | Outdoor Air | 1026 Leorita Street; northern portion of the parking lot |

## 2.1 Pre-Mobilization

On March 5, 2021 and March 16, 2021, the soil boring locations were marked and Underground Service Alert, a California public utility locating service (DigAlert Ticket No: A210640379-00A and B210750214-00B, respectively), were requested by Terracon personnel for clearance of public underground utilities.

In addition, a Work Plan Approval (boring permit) was obtained from the County of Los Angeles Department of Environmental Health, Drinking Water Program, on March 19, 2021, to conduct drilling and groundwater sampling operations. A copy of the Work Plan Approval (Permit No.SR0248160) is provided as **Appendix B**.

## 2.2 Geophysical Survey

On March 18, 2021, Terracon mobilized to the Property with a subcontracted geophysical professional from GPRS to perform the geophysical survey of selected Property areas. The survey utilized a ground-penetrating radar (GPR) and electromagnetic survey methods. The purpose of the survey was to attempt to identify the location of possible subsurface utilities in the area of proposed boring locations. The survey also including identifying and tracing the primary utility lines for the Property.

The geophysical survey consisted of scanning the areas of interest with electromagnetic meter (EM) followed by a GPR scan to further evaluate EM anomalies, if present. Tracer wire was also utilized for accessible sewer clean out vaults. Minor adjustments were made to the proposed boring locations based on the geophysical survey findings. The identified utility alignments are included in **Appendix C**.

## 2.3 Soil Gas Probe Installation, Soil and Soil Gas Sampling

### 2.3.1 Shallow Soil Borings Advancement and Soil Sampling

On March 23, 2021, BC2 Environmental, a State-of-California C-57 licensed driller, advanced a total of five (5) soil borings (SGP-1 to SGP-5) using a direct-push technology (DPT) drill rig. Each soil boring was advanced to a depth of approximately 20.5 feet bgs and converted into a multi-depth nested soil gas probe (SGP), set at depths of approximately 5 and 20 feet bgs, for collection of soil gas samples. The approximate soil gas probe boring locations are shown on **Exhibit 3.**

Soil samples were collected using new single-use acetate sleeves to prevent cross contamination. Reusable drilling and sampling equipment were cleaned using an Alconox® or similar wash and potable water rinse prior to the beginning of the project and before collecting each soil sample, as needed.

Soil samples were collected continuously to document soil lithology, color, moisture content, or evidence of impairment (i.e., odors and staining). The soil samples were field-screened using a

calibrated MiniRae 3000 photoionization detector (PID) with a 10.6eV lamp to indicate the presence of total organic vapors (TOV).

During sample collection, the soil encountered within the top 20 feet bgs consisted primarily of silty sand and poorly graded sand with gravel to 2-inch in diameter from beneath the pavement to total depth. Detailed lithologic descriptions are presented on the soil boring logs included in **Appendix D**.

Staining or odors were not observed in the soils encountered. The maximum concentration by PID (0.6 ppmv) was detected in the soil collected from boring SGP-4 at a depth of approximately 20 feet bgs. The PID readings are recorded on the soil boring logs included in **Appendix D**.

Terracon's soil sampling analytical program for the soil gas probe installation consisted of the collection of two (2) soil samples for laboratory analysis from each of the five (5) soil gas probe borings, for a total of ten (10) soil samples collected for laboratory analysis. Soil samples from the borings were collected from approximately 5 and 20 feet bgs. Collected soil sample intervals for each boring are provided on the lithologic boring logs included in **Appendix D**.

Soil samples were packaged in the new acetate liners capped with Teflon and new caps, properly labeled and placed on ice in a cooler for transportation to the laboratory. Soil samples were also collected using U.S. Environmental Protection Agency (EPA) field sampling method 5035, using laboratory provided preservation VOA kits. The samples and completed chain-of-custody forms were relinquished for analysis to Eurofins Calscience, a State-of-California certified laboratory located in Irvine, California. Soil samples were submitted for analysis on a 5-day turnaround time (TAT).

Following completion of soil sampling, soil borings SGP-1 through SGP-5 were converted into multi-depth nested soil gas probes, with sampling probes set at depths of approximately 5 and 20 feet bgs, for collection of soil gas samples.

Terracon's temporary vapor probes were constructed in general accordance with California Environmental Protection Agency (CAL-EPA), Department of Toxic Substance Control (DTSC), Los Angeles and San Francisco Bay Regional Water Quality Control Board (LA- and SFB-RWQCB) *Advisory – Active Soil Gas Investigation* guidance document, dated July 2015 (CAL-EPA/DTSC Guidance Document), as described in the following sections.

### 2.3.2 Soil Gas Probe Installation

- At each soil gas probe (SGP) location, an approximately 0.5-inch diameter probe tip approximately 4-inches long was installed at the target depths of approximately 5 and 20 feet bgs within the same borehole. The probe tips were placed approximately in the mid-point of a 1-foot thick sand pack extending from 0.5-feet above to 0.5-feet below the probe tip.

- At each probe depth, new 0.25-inch outer-diameter nylon (Nylaflow) tubing was connected to each probe tip (5 and 20 feet bgs) and cut to length leaving approximately one foot of tubing extending from the surface for each of the two probes. A gas tight three-way in-line check valve was fitted to the up-hole end of the tubing to prevent ambient air from infiltrating the probe installation through the sample line. The sampling line was labeled with the probe location and depth.
- At each probe tip depth, beginning at 20 feet bgs, sand was added to the boring to create a sand pack surrounding the probe tip to 0.5-foot above the top of the probe. 1.0 foot of dry granular bentonite chips were used to fill the borehole annular space above the sand pack, followed by a layer of hydrated granular bentonite chips added from the top of the dry granular bentonite to approximately 0.5-foot below the target depth of the next probe tip or, in the case of the uppermost probe, to within one foot of surface.

### 2.3.3 Subslab Probe Installation

- At each subslab soil gas probe (SSP) location within the buildings, Terracon drilled a 5/8-inch diameter hole through the concrete slab to expose the underlying soils. No indications of a vapor or moisture barrier were observed. A new VaporPin probe and seal were emplaced within the slab at each of the six (6) proposed locations. Terracon placed a new cap on the probe and covered the probe with a traffic cone to warn third parties of the probe location.

### 2.3.4 Soil Gas and Subslab Probe Sampling

On March 24 and 25, 2021, a minimum of 2 hours following soil gas probe or subslab soil gas probe installation to allow the bentonite seal to cure and to allow for subsurface conditions to equilibrate, Terracon collected soil gas samples from the five (5) multi-depth nested soil gas probes, and from the six (6) subslab soil gas probes. A replicate soil gas sample was collected from the 20-foot probe in SGP-2 (Sample ID: SGP-2-20 DUP) to evaluate quality control. The soil vapor samples were collected in general accordance with CAL-EPA/DTSC Guidance Document, as described in the following sections.

- Each temporary soil gas probe and subslab soil gas probe was purged prior to sample collection. The purge volume of each soil vapor probe installation was estimated as the summation of the volumes of the sample tubing, dry bentonite, sand pack and probe. Three purge volumes were removed using a purge pump set at a flow rate of approximately 200 milliliters per minute (mL/min) for the soil gas probes and using a syringe for the subslab soil gas probes.

- Following the purge of the soil gas probes, the complete sampling train was subjected to a vacuum of approximately 15 to 20 inches of mercury (inHg) and the system was “shut-in”. After approximately 1 minute the vacuum gauge was read. If the sampling train held a steady vacuum during the shut-in test, the system passed. If not, all connections were

tightened, and the shut-in test was performed again. Soil gas samples were not collected until the shut-in test passed.

- A leak test was performed in conjunction with each collected soil gas sample during sampling to verify that ambient air was not diluting the sample or compromising it with external contaminants. The sampling train and soil gas sampling point were tested for leaks using a sampling shroud and rag with 1,1-difluoroethane (1,1-DFA) placed in close proximity to fittings and probe connections.

- Once the sampling assembly was purged, shut-in test completed, and the leak test conducted, the samples were collected from the sample line using laboratory provided 1-Liter Summa™ stainless-steel canisters fitted with a particulate filter regulated at a flow rate of 150 to 200 mL/min.

### 2.3.5 Indoor and Outdoor Air Sampling

On March 24, 2021, Terracon collected four (4) indoor air samples (IAS-1 through IAS-4) and two (2) outdoor air samples (OAS-1 and OAS-2). The approximate sample locations are shown on **Exhibit 3**. Terracon collected the indoor air samples from the retail space of the two primary buildings.

Terracon conducted the indoor air and outdoor air sampling program in general accordance with the California Environmental Protection Agency (Cal-EPA), Department of Toxic Substance Control (DTSC) Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance), dated October 2011, and DTSC/Regional Water Quality Control Board (RWQCB) Advisory Active Soil Gas Investigations, dated July 2015. Terracon's sampling protocol is summarized below.

- Terracon identified locations within each building to be generally representative of indoor air, which were away from high traffic areas and open doorways. The northern and southwestern portion of the Property were selected for the outdoor air samples.

- Terracon collected the indoor air and outdoor air samples in individual certified, 6-liter Summa canisters and flow regulators provided by the laboratory. An 8-hour flow regulator was used to collect time weighted samples. Prior to sample collection, the Summa canisters were labeled and logged on field sampling logs and the laboratory chain-of-custody.

- Terracon placed the Summa canisters at a normal breathing height for each location, approximately 4 to 5 feet above the ground surface.

- At the start of sampling and once during sample collection, Terracon collected vacuum readings from the Summa canisters to verify the integrity of the sample collection process. Upon completion of the sample collection, Terracon closed the valves on the Summa canisters and recorded the final time and vacuum readings.

Field data sheets are included as **Appendix E.** The soil gas samples were collected in laboratory-provided, labeled, individual certified 1-Liter or 6-Liter Summa stainless steel canisters. The completed chain-of-custody forms were relinquished to Eurofins Calscience, a State-of-California certified laboratory located in Irvine, California. Samples were submitted for analysis on a 5-day TAT.

## 2.4 Deep Soil Borings Advancement and Soil Sampling

From March 22 to 31, 2021, a total of six (6) soil borings were advanced at the Property (B-1 through B-6) to a maximum depth of approximately 135 feet bgs. Upon completion of the soil sampling activities, each boring was converted into a temporary sampling well (TSW-1 through TSW-6, respectively) for collection of groundwater samples. The surveyed TSW boring locations are shown on **Exhibit 3**.

Drilling services were performed by Yellow Jacket Drilling Services, LLC (Yellow Jacket), a State-of-California C-57 licensed driller, using a truck-mounted CME 95 hollow stem auger (HSA) drill rig under the supervision of a Terracon environmental professional. Soil samples were collected using split-spoon sampler. Soil samples were collected at 5-foot intervals starting at 5 feet bgs to a depth of 20 feet bgs, and then at 10-foot intervals to total depth. Terracon used the soil samples to document soil lithology, color, moisture content, and sensory evidence of impairment. The soil samples were field-screened using a PID – MiniRae for the presence of TOV. Drilling and sampling equipment were cleaned using an Alconox® wash, or similar and two potable water rinses prior to the beginning of the project and before collecting each soil sample. In addition, the auger flights were steam cleaned prior to and between boring locations.

No odors or staining were observed in the sampled soils. PID readings in the soil samples collected and screened in the field indicate that the maximum reading of 2.3 ppmv was detected in the soil sample retrieved from 110 feet bgs in soil boring B-1. The PID readings are recorded on the soil boring logs included in **Appendix D**.

During sample collection, the soil encountered within the soil borings consisted primarily of silty sand underlain by poorly graded sand with gravel to 2-inch in diameter from beneath the pavement to total depth. Detailed lithologic descriptions are presented on the soil boring logs included as **Appendix D**.

Terracon's soil sampling analytical program from the deep borings consisted of the collection of two (2) soil samples for laboratory analysis from each boring location (B-1 through B-6), for a total of 12 soil samples collected for laboratory analysis. Soil samples from the soil borings were

collected from the intervals with the highest PID reading or the interval of most likely environmental impact based on the field professional's judgment. Collected soil sample intervals for each boring are provided on the lithologic boring logs included in **Appendix D**. Soil samples and completed chain-of-custody forms were relinquished to Eurofins Calscience, a State-of-California certified laboratory located in Irvine, California. Samples were submitted for analysis on a 5-day TAT.

## 2.5 Temporary Groundwater Sampling Well Installation and Sampling

Soil borings B-1 through B-6 were advanced to a maximum depth of approximately 135 feet bgs. Saturated soil was identified during advancement of the borings at a depth of approximately 120 feet bgs and, upon the completion of drilling activities, each soil boring was converted into a temporary groundwater sampling well (TSW-1 through TSW-6, respectively). The TSW locations are shown on **Exhibit 3**. The TSW installation and groundwater sampling program was conducted as described in the following sections.

TSWs were constructed with the following materials:

- 10 feet of new 2-inch diameter, 0.020-inch machine-slotted poly-vinyl chloride (PVC) well screen with a threaded bottom cap; and
- 2-inch diameter, threaded, flush-joint PVC riser pipe to surface.

Following installation of the temporary casing, the depth to groundwater was allowed to equilibrate for a minimum of 30 minutes, and the depth to water was recorded using an electronic sounder. Terracon recorded the depth to water in reference to the finished ground surface. In order to reduce the turbidity of the groundwater, a new dedicated disposable polypropylene bailer was used to bail 1 to 3 gallons of water from each TSW.

A groundwater sample was collected from each TSW, for a total of six (6) groundwater samples, using the new dedicated disposable polypropylene bailer. Samples were collected in laboratory provided containers, placed in an iced cooler, and relinquished under chain of custody procedures to Eurofins Calscience, a State-of-California certified laboratory located in Irvine, California. Samples were submitted for analysis on a 5-day TAT. The samples for perchlorate analysis were field filtered using sterile sampling kits provided by the laboratory.

Although partial development was conducted by bailing water from each TSW, the groundwater was observed to be turbid, which can contain suspended colloids, such sediment interference may influence the analytical results. Therefore, without the benefit of permanent groundwater monitoring wells that are properly installed and fully developed prior to groundwater sampling, the groundwater analytical results may not be completely representative of groundwater conditions beneath the Property.

## 2.6 Land Survey and Groundwater Gauging

On March 31, 2021, the ground surface for the TSWs were surveyed by Cal Vada Surveying Inc., a licensed land surveyor in the state of California. Latitude and longitude, based on north and east coordinates, as well as the elevations for the finished surface were surveyed and documented. The elevations are based upon static GPS observation, holding the CSRC data point "CASF"; elevation = 157.90 feet (NAVD 88) , benchmark. The well survey report is provided in **Appendix F**.

Following the TSW installation and stabilization of the water table, Terracon measured the static groundwater level for each TSW relative to the finished ground surface, using a Solinst Interface Probe. Depth to water was measured to the nearest 0.01 foot for each TSW, collected at least three readings to ensure an accurate depth. The probe and upper section of the tape was decontaminated between measurements at each TSW. The groundwater gauging measurements and calculated groundwater elevations are provided in **Table 1**. The depth to groundwater measured in each TSW was used to prepare a groundwater elevation contour map showing the estimated direction and gradient of groundwater flow beneath the Property at the time of the assessment. Groundwater elevation contours, flow direction, and gradient are shown on **Exhibit 4**.

## 2.7 Probe and Temporary Sampling Well Abandonment

Following completion of the soil, soil gas, and groundwater assessment activities, the TSW materials were removed and the borings were closed in place by backfilling with Portland cement grout mix (maximum of 6% Bentonite) using a tremie pipe from the bottom of the borehole to approximately 0.5 feet bgs and completed with quick setting concrete at the surface, in accordance with permit requirements. In addition, the vapor probes materials were removed, and the borings were backfilled with hydrated bentonite and completed at surface with quick setting concrete to match the existing surface.

## 2.8 Investigation Derived Waste

The investigation-derived waste (IDW) generated during the investigation activities were placed in Department of Transportation (DOT) approved roll-off containers. Two, partially full 20-yard bins containing IDW were labeled and temporarily stored on the Property pending laboratory analytical results, profiling of the IDW, and transportation and disposal to an authorized facility. Based on laboratory analysis of soil samples collected during this Phase II ESA, the IDW was profiled as non-hazardous waste. On April 9, 2021, Belshire Environmental Services (Belshire) from Foothill Ranch, California, transported the two bins of soil under non-hazardous waste manifests to Soil Safe in Adelanto, California for recycling using thermal desorption. The completed manifests are included as **Appendix G.**

# 3.0 LABORATORY ANALYTICAL METHODS

Soil and groundwater samples were collected in laboratory-provided containers, EPA 5035 sampling kits, or new acetate sleeves provided by BC2 Environmental for the soil sampling performed with the DPT drill rig. The soil and groundwater samples were sealed, properly labeled, and placed on ice in a cooler for transportation to the laboratory. The soil gas and air samples were collected in individually certified 1-Liter or 6-Liter Summa canisters (and flow regulators) provided by the laboratory. The samples and completed chain-of-custody forms were relinquished under chain of custody procedures to Eurofins Calscience, a State-of-California certified laboratory located in Irvine, California. Samples were submitted for analysis on a 5-day TAT. The samples were analyzed using standard EPA or ASTM test methods, as detailed below.

**Soil Analytical Program**

- TPH-GRO/DRO/ORO by EPA Method 8015;
- Volatile organic compounds (VOCs) by EPA Method 8260;
- Herbicides by EPA Method 8151A;
- Organochlorinated Pesticides (OCPs) by EPA Method 8081A; and
- California Administrative Manual (CAM) 17 Metals by EPA Methods 6010B/7471A.

**Groundwater Analytical Program**

- TPH-GRO/DRO/ORO by EPA Method 8015;
- VOCs by EPA Method 8260;
- Perchlorate by EPA Method 314.0; and
- 1,4-Dioxane by EPA Method 8270C.

**Soil Gas Analytical Program**

- VOCs by EPA Method TO-15; and
- Fixed Gases (carbon monoxide, carbon dioxide, oxygen, nitrogen, and methane) by ASTM D1946D.

**Indoor And Outdoor Air Analytical Program**

- VOCs by EPA Method TO-15 SIM

The soil, groundwater, soil gas, and air sample laboratory analytical results are summarized in **Tables 2** through **9**. The laboratory analytical reports and executed chain-of-custody forms are provided in **Appendices H, I**, and **J**.

# 4.0 DATA EVALUATION

The regulatory agency having jurisdiction over this Property potentially include the DTSC and the Los Angeles Region Water Quality Control Board (LARWQCB). The LARWQCB has not specified or published specific environmental screening levels (ESLs) for evaluating potential impacts that may be found as part of this Phase II ESA. DTSC has developed modified screening levels based on the U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for use in the human health risk assessment process at hazardous waste sites and permitted facilities, known as Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note Number: 3, DTSC-modified Screening Levels (DTSC-SLs), or "HERO Note 3" for short. The results from the laboratory analyses of these media samples collected will be compared to the HERO Note 3 values, the San Francisco Bay Regional Water Quality Control Board (RWQCB) ESLs (2019, Rev.2)[1], and DTSC established background values for arsenic and thallium in soil, as applicable and as indicated herein.

These exposure assumptions may not match current and/or planned land uses for the Property; however, these criteria are included to provide a comparison for the potential future land uses. Based on the proposed use of the Property to remain as is" or to be redeveloped as a medical facility, Terracon used the residential and commercial land use ESLs when evaluating sample results. The following summarizes the exposure categories.

**Residential Land Use**: This ESL category is used for comparison for sites where unrestricted future land-use is sought. Unrestricted land uses may include residential, healthcare, day-care centers and other sensitive purposes. The ESLs for the Residential Land Use category incorporate assumptions of long-term, frequent exposure of children and adults in a residential setting. These ESL are appropriate for unrestricted use of a property.

**Commercial or Industrial Use**: This ESL category assumes working-age adults are regularly present at the Property. The direct-exposure assumptions in these ESLs assume shorter, less frequent exposure for receptors compared to residential land use receptors.

**Any Land Use/Any Soil Depth Construction Worker**: Construction Workers may have the potential for substantial exposures to surface and subsurface soil during excavation, maintenance and building construction projects. The exposure scenarios include contact with impacted soil via incidental ingestion, dermal contact, and inhalation due to volatilization and fugitive dust are the main routes of exposure. Soil direct contact ESLs are considered under this scenario.

## 4.1 Groundwater Elevation and Flow Direction

Groundwater elevations were calculated with respect to the survey data provided relative to the NAVD-88 datum in feet relative to mean sea level (rmsl), by subtracting the depth to groundwater

[1] https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

in each TSW from the elevation of the surveyed finished surface. Depth to water measurements and calculated groundwater elevations data are summarized in **Table 1**.

Groundwater gauging measurements collected on March 22 to March 31, 2021, from the TSWs indicate that the depth to groundwater ranged from 117.44 to 129.95 feet bgs. Based on the measurements, the groundwater flow direction was calculated to be toward the west-northwest at an average gradient of approximately 0.03 feet per foot (ft/ft). The depth to groundwater is consistent with recent gauging data in piezometer PZ3-1BD, located approximately 390 feet west of the Property, which indicated a depth to groundwater of 130 feet bgs in July 2020. Regional data indicated a groundwater flow direction toward the southwest. The site-specific west-northwest groundwater flow direction may be attributed to the active municipal groundwater wells (Nos. B25A and B25B), located approximately 550 feet to the west of the Property. Based on the operational data[2], the combined production rate of the two wells is approximately 4,700 gallons per minute. The extraction/production from these two wells is part of the remedial action for the Baldwin Park OU, as such, the extraction from these wells is sufficient to create a cone of depression, thereby generating a localized westerly flow toward the production wells. A groundwater elevation contour map is provided as **Exhibit 4**.

## 4.2 Soil Sample Analytical Results

Total Petroleum Hydrocarbons (TPH) and Volatile Organic Compounds (VOCs)
The soil analytical results for TPH were below the specified laboratory reporting limit except for several detections of diesel range organics (TPH-DRO) and motor oil range organics (TPH-MORO) at maximum concentrations of 14 and 140 milligrams per kilogram (mg/Kg), respectively. The soil analytical results for VOCs were below the specified laboratory reporting limit except for several low-level detections of acetone, benzene and tert-Butyl alcohol (TBA), and one low-level detection of ethanol. Based on the screening levels outlined above, the detectable concentrations of TPH and VOCs are below residential and commercial screening levels.

Soil sample analytical results for TPH and VOCs, and their respective ESLs, are summarized in **Tables 2** and **3**. The laboratory analytical reports and executed chain-of-custody forms are included in **Appendix H**.

Metals
Select soil samples were analyzed for California Administrative Manual (CAM) 17 metals. Concentrations of antimony, selenium, silver and thallium metals were not detected above the specified reporting limits. The metal concentrations detected above laboratory reporting limits appear to be within naturally occurring “background” concentrations and are below their respective ESLs for residential and commercial use, except for arsenic as noted below.

[2] *GeoSyntec Consultants and ERM, 2020. 2019 Annual Performance Evaluation Report, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, dated April 30, 2020.*

Arsenic was detected in several samples with a maximum concentration of 4.1 mg/Kg in soil sample SGP-5-5. The ESLs are based on toxicity values and as such, the arsenic ESLs are very low. Since the naturally occurring arsenic concentrations in soil for southern California (and other regions) are often 100 times greater than screening levels, based on analyses of soil data, DTSC[3] established a regional background arsenic concentration. Based on statistically review of arsenic data sets, the DTSC established an upper-bound arsenic concentration of *12 mg/Kg* for Los Angeles County. Based on this regional background concentration the detected arsenic concentrations are within the naturally occurring "background" concentrations.

Although thallium was not detected above laboratory report limits, the ESLs are based on toxicity values and as such, the thallium ESLs are very low, and the laboratory reporting limits exceed the residential ESL. Since the naturally occurring thallium concentrations in California (and other regions) and/or the laboratory reporting limit can be greater than screening levels, the DTSC and the Air Force Center for Environmental Excellence (AFCEE)[4] established an upper-bound thallium concentration of *25 mg/Kg* for California to evaluate regional background thallium concentrations. Based on this upper-bound concentration, the laboratory reporting limits are below the threshold.

Soil sample analytical results for metals, and their respective ESLs, are summarized in **Table 4**. The laboratory analytical report and executed chain-of-custody forms are included in **Appendix H**.

Organochlorinated Pesticides (OCPs) and Herbicides

The soil analytical results indicated one or more OCPs at concentrations above the specified laboratory reporting limits. Detectable concentrations of OCPs were limited to dichlorodiphenyldichloroethylene (4,4'-DDE), dichlorodiphenyltrichloroethane (4,4'-DDT), dieldrin and gamma-Chlordane. The detections of OCPs were below residential and commercial ESLs. The soil analytical results for herbicides were below the specified laboratory reporting limits.

Soil sample analytical results for OCPs and herbicides, and their respective ESLs, are summarized in **Table 5**. The laboratory analytical reports and executed chain-of-custody forms are included in **Appendix H**.

## 4.3 Groundwater Analytical Results

TPH and VOCs

The groundwater analytical results for TPH were below the specified laboratory reporting limit except for several low-level detections of TPH-DRO and TPH-MORO at maximum concentrations of 160 and 99 micrograms per liter (µg/L), respectively. The groundwater analytical results for VOCs were below the specified laboratory reporting limits. Based on the screening levels outlined

[3] *Chernoff, G., Bosan, W., and Oudiz, D. Determination of a Southern California Regional Background Arsenic Concentration in Soil.*

[4] *Hunter, P.M., Davis, B.K., and Roach, F., 2005. Inorganic Chemicals in Ground Water and Soil: Background Concentrations at California Air Force Bases.*

above, the detectable concentrations of TPH are below the residential, commercial and construction worker screening levels.

The nearest municipal water wells are identified as well Nos. B25A and B25B, located approximately 550 feet to the west of the Property. Water quality data from well No. B25A indicates the following recent (December 1, 2020) target VOC concentrations in groundwater compared to the groundwater analytical results for the Property, as summarized in the following table.

| Analyte | Off-site: Municipal Well B25A (µg/L) [1] | Property: TSW-1 through TSW-6 (µg/L) | MCL (µg/L) |
|---|---|---|---|
| Carbon Tetrachloride | **2.3** | ND<0.25 to ND<0.69* | *0.50* |
| PCE | **35** | ND<0.25 to ND<0.70 | *5.0* |
| TCE | **81** | ND<0.25 to ND<0.70 | *5.0* |

*µg/L = micrograms per liter*
*ND = Not detected above stated laboratory reporting limit*
*[1] GeoSyntec Consultants and ERM, 2020. 2019 Annual Performance Evaluation Report, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, dated April 30, 2020.*
**Non-detectable sample result for TSW-1 above MCL. Remaining target analytes meet data quality objectives.*

Based on a comparison of the analytical results for the data collected for this assessment compared to the data for the off-site municipal well, first encountered groundwater beneath the Property does not appear to be impacted with the target VOC analytes identified for the Baldwin Park OU.

Groundwater sample analytical results for TPH and VOCs, and their respective ESLs, are summarized in **Table 6**. The laboratory analytical reports and executed chain-of-custody forms are included in **Appendix I**.

Perchlorate and 1,4-Dioxane

The groundwater analytical results for perchlorate were below the specified laboratory reporting limit except for two detections, with a maximum concentration of 1.1 µg/L, which is slightly above California's Public Health Goal (PHG) of *1.0 µg/L*, but below the Maximum Contaminant Level (MCL) of *6.0 µg/L.*

The groundwater analytical results for 1,4-dioxane were below the specified laboratory reporting limits except for two detections, with a maximum concentration of 0.95 µg/L, which is slightly above the MCL of *0.38 µg/L.*

Water quality data from off-site municipal well No. B25A indicates the following recent (December 1, 2020) target concentrations in groundwater compared to the groundwater analytical results for the Property, as summarized in the following table.

| Analyte | Off-site: Municipal Well B25A (µg/L) [1] | Property: TSW-1 through TSW-6 (µg/L) | MCL (µg/L) |
|---|---|---|---|
| Perchlorate | **53** | ND<0.91 to **1.1*** | *6.0* |
| 1,4-Dioxane | **2.8** | ND<0.34 to **0.95** | *0.38* |

*µg/L = micrograms per liter*
*ND = Not detected above stated laboratory reporting limit*
*[1] GeoSyntec Consultants and ERM, 2020. 2019 Annual Performance Evaluation Report, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, dated April 30, 2020.*
**Above* California's PHG of *1.0 µg/L.*

Based on a comparison of the analytical results for the data collected for this assessment compared to the data for the off-site municipal well, first encountered groundwater beneath the Property is impacted with perchlorate and 1,4-dioxane, which are primary contaminants identified for the Baldwin Park OU. Based on the screening levels outlined above, one or more of the detectable concentrations of perchlorate and 1,4-dioxane collected on the Property are above a screening level, but the maximum on-site concentrations are below the concentrations reported for the Municipal Well B25A.

Groundwater sample analytical results for perchlorate and 1,4-dioxane, and their respective screening levels, are summarized in **Table 6**. The laboratory analytical reports and executed chain-of-custody forms are included in **Appendix I**.

## 4.4 Soil Gas Probe and Subslab Probe Sample Analytical Results

Soil gas probe (SGP) sample analytical results indicate that several VOCs were detected above their respective laboratory reporting limits. The soil gas sample analytical results were compared to the ESLs, which revealed that concentrations of bromodichloromethane, chloroform, and PCE detected in one or more samples exceed their respective ESLs for residential land use, as detailed below:

- The bromodichloromethane concentration detected in soil gas sample SGP-5-20 at 3.1 micrograms per cubic meter (µg/m$^3$), exceeds the residential ESL (*2.5 µg/m$^3$*), but below the commercial ESL.
- The chloroform concentration detected in soil gas sample SGP-5-20 at 9.8 µg/m$^3$, exceeds the residential ESL (*4.1 µg/m$^3$*), but below the commercial ESL.
- The PCE concentration detected in soil gas sample SGP-3-20 at 17 µg/m$^3$, exceeds the residential ESL (*15 µg/m$^3$*), but below the commercial ESL.
- Other detectable VOC concentrations did not exceed their respective residential or commercial ESLs.

Bromodichloromethane and chloroform are typically related to the chlorination and treatment of tap water and are not considered to be directly related to a VOC release.

Subslab probe (SSP) sample analytical results indicate that several VOCs were detected above their respective laboratory reporting limits. The soil gas sample analytical results were compared to the ESLs, which revealed that concentrations of PCE and TCE detected in one sample (SSP-1) exceed their respective ESLs for residential and/or commercial land use, as detailed below:

- The PCE concentration detected in subslab probe sample SSP-1 at 18 µg/m$^3$, exceeds the residential ESL (*15 µg/m$^3$*), but is below the commercial ESL (*67 µg/m$^3$*).
- The TCE concentration detected in subslab probe sample SSP-1 at 130 µg/m$^3$, exceeds the commercial ESL (*100 µg/m$^3$*).
- The remaining detected VOC concentrations did not exceed their respective residential or commercial ESLs.

Laboratory analytical results for the fixed gases analysis of the samples collected from soil gas probe SGP-1 through SGP-5 and subslab probes SSP-1 through SSP-6 indicate that oxygen + argon ($O_2$) ranged from 18 to 23%, carbon monoxide (CO) was not detected above the laboratory reporting limit of 0.12%, carbon dioxide ($CO_2$) ranged from 0.32 to 2.5%, and methane was not detected above the laboratory detection limit of 0.0069%. The fixed gases appear to be in alignment of expected concentrations and evidence of biodegradation of subsurface contaminants, depleted oxygen levels and methanogenesis are not evident.

A summary of the soil gas probe and subslab probe sample analytical results are presented in **Tables 7** and **8**, respectively, together with the applicable ESLs. The corresponding laboratory analytical reports and executed chain-of-custody forms are provided in **Appendix J**.

## 4.5 Indoor and Outdoor Air Sample Analytical Results

Indoor air sample analytical results indicate that several VOCs were detected above their respective laboratory reporting limits. The soil gas sample analytical results were compared to the ESLs, which revealed that concentrations of 1,2-dichloroethane, benzene, bromodichloromethane, carbon tetrachloride, chloroform, methylene chloride, and TCE detected in one or more samples exceed their respective ESLs for residential and/or commercial land use, as detailed below:

- The 1,2-dichloroethane concentrations detected in indoor air samples IAS-1 through IAS-4, exceed the residential ESL (*0.11 µg/m$^3$*). However, outdoor air

sample OAS-1 also exceeds the residential ESL, and is within the same order of magnitude.

- The benzene concentrations detected in indoor air samples IAS-1 through IAS-4, exceed the commercial ESL (*0.42 $\mu g/m^3$*). However, outdoor air samples OAS-1 and OAS-2 also exceed the commercial ESL, and are within the same order of magnitude.

- The bromodichloromethane concentration detected in indoor air sample IAS-1 at 0.081 $\mu g/m^3$, exceeds the residential ESL (*0.076 $\mu g/m^3$*), but below the commercial ESL.

- The carbon tetrachloride concentrations detected in indoor air samples IAS-1 through IAS-4, exceed the residential ESL (*0.47 $\mu g/m^3$*). However, outdoor air samples OAS-1 and OAS-2 also exceed the residential ESL, and are within the same order of magnitude.

- The chloroform concentrations detected in indoor air samples IAS-1 through IAS-3, exceed the residential ESL of (*0.12 $\mu g/m^3$*). However, outdoor air samples OAS-1 and OAS-2 are within the same order of magnitude.

- The methylene chloride concentrations detected in indoor air samples IAS-1 through IAS-4, exceed the residential ESL (*1.0 $\mu g/m^3$*), but below the commercial ESL.

- The TCE concentrations detected in indoor air samples IAS-1, IAS-3, and IAS-4, exceed the residential ESL (*0.48 $\mu g/m^3$*), and the TCE concentration detected in indoor air sample IAS-2 of 4.6 $\mu g/m^3$ exceeds the commercial ESL (*3.0 $\mu g/m^3$*).

- Other detectable VOC concentrations did not exceed their respective residential or commercial ESLs.

Overall, the detections of VOCs in indoor air where also detected in the outdoor air samples at comparable concentrations (within same order of magnitude). The only anomalous data identified are the detection of TCE concentrations in the indoor air samples above residential and commercial ESLs. TCE was not detected above the laboratory reporting limit in the outdoor air samples. As indicated in **Section 4.4** above, PCE and TCE were also detected above residential and commercial screening levels, respectively, in subslab probe SSP-1. The detections of PCE and TCE in the subslab sample, detection of TCE in indoor air, and absence of TCE detections in outdoor indicates a potential for a complete vapor intrusion exposure pathway for TCE.

A summary of the indoor and outdoor air sample analytical results are presented in **Table 9**, together with the applicable ESLs. The corresponding laboratory analytical reports and executed chain-of-custody forms are provided in **Appendix J**.

## 4.6 Quality Control/Quality Assurance

Field quality control (QC) included the use of proper sampling hygiene, decontamination of equipment between sampling locations or events, and use of dedicated (disposable) sampling equipment. Further, QC also included the collection and analyses of additional samples to measure the representativeness of analytical test results to actual Property conditions, and potential bias or false-positive indications that may be introduced through sampling techniques, storage of samples, or transportation from and to the laboratory. The following quality control samples were collected for soil gas and groundwater samples:

- **Soil Gas** – one replicate soil gas sample was collected and analyzed for VOCs, sample IDs SGP-2-20 and SGP-2-20 DUP. Laboratory results of the replicate sample were within 10% or less of the primary sample.

- **Groundwater** - one duplicate groundwater sample was collected and analyzed for VOCs, sample IDs TSW-5 and TSW-5 DUP. Laboratory results of the duplicate sample were within acceptable limits of the primary sample. One trip blank was shipped with the laboratory-supplied sampling containers, and returned to the laboratory with the groundwater samples for each day of sampling. The four trip blanks were analyzed for VOCs. No VOCs were detected above laboratory reporting limits.

Laboratory quality assurance (QA) processes include sample custody, and the processes of equipment calibrations, laboratory control samples (LCS), matrix spikes/matrix spike duplicates (MS/MSD), and other processes document in the California Environmental Laboratory Accreditation Program (ELAP) certification process. These processes are used to evaluate test results for representativeness of Property conditions. The laboratory QA documentation is provided in the attached laboratory reports.

Additional QC/QA protocol implemented during the sampling activities at the Property included low-flow 3-volume purge, flow controllers, shut-in test, and leak test for the soil gas probe and subslab probe sampling. The soil gas samples were collected using a sampling shroud and 1,1-DFA. The estimated concentration of 1,1-DFA within the shroud during sampling is conservatively estimated to be 500,000 $\mu g/m^3$. The maximum concentration of 1,1-DFA was detected in SSP-6 at 1,600 $\mu g/m^3$, which is 0.32% and under the allowable 5% established in CAL-EPA/DTSC Guidance Document when using a shroud.

# 5.0 FINDINGS AND CONCLUSIONS

Terracon conducted a Phase II ESA at the Property, located at 1022-1026 Leorita Street, in Baldwin Park, Los Angeles County, California 91706. The scope of work conducted at your request, was in response to Terracon's Phase I ESA report (Terracon Project No. CB21P020), dated March 22, 2021, which identified the following REC:

- Gabriel Valley Area 2 Superfund Site, also known as the Baldwin Park Operable Unit (OU), a chlorinated solvent groundwater plume mapped beneath the Property.

The primary contaminants detected in groundwater for the Baldwin Park OU are TCE, PCE, carbon tetrachloride, perchlorate, NDMA, and 1,4-dioxane, which have been mapped beneath the Property at concentrations that exceed MCLs and/or other regulatory levels.

Based on our review of the regulatory data and historical information, the impacted groundwater represents a REC to the Property. Therefore, Terracon recommended additional assessment to assess the potential for impact to soil, soil gas, and groundwater beneath the Property; and assess the potential for vapor intrusion into indoor air.

The objective of the Phase II ESA was to assess the presence of TPH, VOCs, perchlorate, and 1,4-dioxane in groundwater beneath the Property; TPH, VOCs, OCPs, herbicides, and metals in soil beneath the Property; and VOCs in the soil gas and indoor air for the Property.

Terracon understands the expected future use of the Property is unknown. Based on the unknown intended future use of the Property, Terracon applied the residential and commercial land use ESLs, which also includes healthcare, daycare, and other sensitive uses when evaluating sample results.

Between March 18 and April 9, 2021, Terracon conducted site assessment activities by a field geologist under the oversight of a California-licensed Professional Geologist (P.G.). Prior to conducting invasive field activities, Terracon contacted DigAlert for utility notifications, contracted a geophysical survey to further locate utilities, and obtained a drilling permit from the County.

The drilling field activities consisted of the advancement of a total of eleven (11) soil borings, six (6) subslab probes (SSP), and collection of six (6) air samples. Five (5) borings were advanced to a maximum depth of approximately 20.5 feet below ground surface (bgs) and converted into multi-depth soil gas probes (SGPs) set at depths of 5 and 20 feet bgs, and six (6) soil borings were advanced to a maximum depth of approximately 135 feet bgs and converted into temporary groundwater sampling wells (TSWs).

Terracon collected the following samples/data:

- 23 - Soil samples
- 6 - Groundwater samples and groundwater elevations
- 10 - Soil gas probe samples
- 6 - Subslab probe samples
- 4 - Indoor air samples
- 2 - Outdoor air samples
- 6 - QA/QC samples

During sample collection, the soil encountered to a depth of 135 feet bgs (total depth) consisted primarily of silty sand and poorly graded sand with gravel to 2-inch in diameter from beneath the pavement to total depth. No odors or staining were observed in the sampled soils. The soil samples were field-screened using a calibrated MiniRae 3000 PID with a 10.6eV lamp to indicate the presence of TOV. PID readings in the soil samples collected and screened in the field indicate that the maximum reading of 2.3 ppmv was detected in the soil sample retrieved from 110 feet bgs in soil boring B-1.

Following installation of temporary PVC screen and casing in each TSW, Terracon measured depth to groundwater relative to the finished surface using a Solinst Interface probe. A licensed land-surveyor collected latitude, longitude and elevation data for the TSW locations and groundwater elevation contours were produced to evaluate groundwater flow direction and gradient.

Soil and groundwater samples were analyzed for VOCs using USEPA Method 8260, and for TPH-GRO, -DRO, -ORO by USEPA Method 8015M. Soil samples were additionally analyzed for herbicides by EPA Method 8151A, OCPs by EPA Method 8081A, and CAM 17 Metals by EPA Methods 6010B/7471A. Groundwater samples were additionally analyzed for perchlorate by EPA Method 314.0, and 1,4-dioxane by EPA Method 8270C. Soil gas samples and indoor/outdoor air samples were analyzed for VOCs by EPA Method TO-15 or TO-15 SIM. Soil gas samples were additionally analyzed for fixed gases (carbon dioxide, oxygen, nitrogen, and methane) by ASTM Method D1946D. The samples were analyzed on a 5-day TAT by Eurofins Calscience, a State-of-California certified laboratory located in Irvine, California.

Terracon evaluated the results of soil and soil gas analytical testing in comparison to the most applicable, published screening levels for the Property. Soil, groundwater, and soil gas sample results were compared to the SFB-RWQCB ESLs. These ESLs exposure assumptions are conservative, and assumptions may not match planned land uses for the Property; however, these criteria are included to provide a comparison for the potential future land uses. Based on the proposed future use of the Property to remain as it is or potentially redeveloped as a Medical Office Building or other sensitive use, Terracon used the residential, commercial, and construction worker land use ESLs when evaluating sample results, as detailed in **Section 4.0**.

The findings and conclusions of this Phase II ESA are as follows:

## 5.1 Soil Sampling

Laboratory analytical results for the soil samples collected from B-1 through B-6, and SGP-1 through SGP-5 (**Tables 2** through **5**) indicate that:

- The soil analytical results for TPH were below the specified laboratory reporting limit except for several detections of TPH-DRO and TPH-MORO at maximum concentrations of 14 and 140 milligrams per kilogram (mg/Kg), respectively, which are below residential, commercial, and construction worker screening levels.

- The soil analytical results for VOCs were below the specified laboratory reporting limit except for several low-level detections of acetone, benzene and TBA, and one low-level detection of ethanol. The detectable VOC concentrations are below residential, commercial, and construction worker screening levels.

- The soil analytical results for metals were below the specified laboratory reporting limit or appear to be within naturally occurring "background" concentrations and are below their respective ESLs for residential, commercial, and construction worker screening levels, except for arsenic and thallium. Arsenic was detected in several samples above residential, commercial, and construction worker screening levels with a maximum concentration of 4.1 mg/Kg in soil sample SGP-5-5. Based on statistically review of arsenic data sets, the DTSC established an upper-bound arsenic concentration of *12 mg/Kg* for Los Angeles County. Based on this regional background concentration the detected arsenic concentrations are within the naturally occurring "background" concentrations. Although thallium was not detected above laboratory report limits, the ESLs are based on toxicity values and as such, the thallium ESLs are very low, and the laboratory reporting limits exceed the residential ESL, but are below the DTSC established upper-bound thallium concentration of *25 mg/Kg*.

- The soil analytical results indicated one or more OCPs at concentrations above the specified laboratory reporting limits. Detectable concentrations of OCPs were limited to 4,4'-DDE, 4,4'-DDT, dieldrin and gamma-Chlordane. The detections of OCPs were below residential and commercial ESLs. The soil analytical results for herbicides were below the specified laboratory reporting limits.

Based on the soil samples analytical results and PID readings to the maximum depth explored of approximately 135 feet bgs, soil beneath the Property does not appear to be impacted at concentrations above the shallow soil direct exposure ESL for residential and commercial land use, or for construction workers. The soil data does not support evidence that a release occurred at the Property.

## 5.2 Groundwater Sampling

Recorded groundwater measurements and laboratory analytical results for the groundwater samples collected from TSW-1 through TSW-6 (see **Tables 1** and **6**) indicate that:

- Groundwater beneath the Property occurs at a depth of approximately 117.44 to 129.95 feet bgs (**Table 1**) and locally flows toward the west-northwest at an average gradient of approximately 0.03 feet per foot (ft/ft). The depth to groundwater is consistent with recent gauging data in off-site piezometer PZ3-1BD, located approximately 390 feet west of the Property, which indicated a depth to groundwater of 130 feet bgs in July 2020. Regional data indicated a groundwater flow direction toward the southwest. The site-specific west-northwest groundwater flow direction is likely attributed to the active municipal groundwater wells (Nos. B25A and B25B), located approximately 550 feet to the west of the Property, which have a combined production rate of 4,700 gallons per minute (gpm), which is sufficient to alter the regional groundwater flow at the Property.

- The groundwater analytical results for TPH were below the specified laboratory reporting limit except for several low-level detections of TPH-DRO and TPH-MORO at maximum concentrations of 160 and 99 micrograms per liter (µg/L), respectively, which are below residential and commercial screening levels (**Table 6**).

- The groundwater analytical results for VOCs were below the specified laboratory reporting limit for the analytes. The detectable VOC concentrations are below residential and commercial screening levels.

The nearest municipal water wells are identified as well Nos. B25A and B25B, located approximately 550 feet to the west of the Property. Water quality data from well No. B25A indicates the following recent (December 1, 2020) target VOC concentrations in groundwater compared to the groundwater analytical results for the Property and the Maximum Contaminant Level (MCL).

| Analyte | Off-site: Municipal Well B25A (µg/L) [1] | Property: TSW-1 through TSW-6 (µg/L) | MCL (µg/L) |
|---|---|---|---|
| Carbon Tetrachloride | **2.3** | ND<0.25 to ND<0.69* | *0.50* |
| PCE | **35** | ND<0.25 to ND<0.70 | *5.0* |
| TCE | **81** | ND<0.25 to ND<0.70 | *5.0* |

*µg/L = micrograms per liter*
*ND = Not detected above stated laboratory reporting limit*
*(1) GeoSyntec Consultants and ERM, 2020. 2019 Annual Performance Evaluation Report, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, dated April 30, 2020.*
**Non-detectable sample result for TSW-1 above MCL. Remaining target analytes meet data quality objectives.*

Based on a comparison of the analytical results for the data collected for this assessment compared to the data for the off-site municipal well, first encountered groundwater beneath the Property does not appear to be impacted with the target VOC analytes identified for the Baldwin Park OU.

The distribution of the TPH concentrations detected in the groundwater samples collected from TSW-1 through TSW-6 were compared to the soil analytical results and the calculated groundwater flow for the property. Based on the comparison, no direct correlation between the soil analytical results and groundwater analytical results for TPH are evident; therefore, TPH impacts to groundwater from the Property are not evident. A comparison of groundwater analytical results and the groundwater flow indicate a potential correlation supported by TPH concentrations in groundwater that appear to decrease down-gradient (toward west-northwest ).

The groundwater analytical results for perchlorate were below the specified laboratory reporting limit except for two detections of 1.1 and 0.91 µg/L in TSW-1 and TSW-4, respectively. The detection of 1.1 µg/L in TSW-1 is slightly above California's Public Health Goal (PHG) of *1.0 µg/L,* but below the MCL of *6.0 µg/L.*

The groundwater analytical results for 1,4-dioxane were below the specified laboratory reporting limits except for two detections, TSW-5 and TSW-5 DUP (duplicate sample), with concentrations of 0.95 and 0.60 µg/L, respectively, which are slightly above the MCL of *0.38 µg/L.*

Water quality data from off-site municipal well No. B25A indicates the following recent (December 1, 2020) target concentrations in groundwater compared to the groundwater analytical results for the Property and the MCL.

| Analyte | Off-site: Municipal Well B25A (µg/L) (1) | Property: TSW-1 through TSW-6 (µg/L) | MCL (µg/L) |
|---|---|---|---|
| Perchlorate | **53** | ND<0.91 to **1.1*** | *6.0* |
| 1,4-Dioxane | **2.8** | ND<0.34 to **0.95** | *0.38* |

*µg/L = micrograms per liter*
*ND = Not detected above stated laboratory reporting limit*
*(1) GeoSyntec Consultants and ERM, 2020. 2019 Annual Performance Evaluation Report, Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles County, California, dated April 30, 2020.*
**Above* California's PHG of *1.0 µg/L.*

Based on a comparison of the analytical results for the data collected for this assessment compared to the data for the off-site municipal well, first encountered groundwater beneath the

Property is impacted with perchlorate and 1,4-dioxane, which are primary contaminants identified for the Baldwin Park OU, but at concentrations less than identified for the plume and nearby production well. Based on the screening levels outlined above, one or more of the detectable concentrations of perchlorate and 1,4-dioxane collected on the Property are above a screening level.

The distribution of the perchlorate and 1,4-dioxane concentrations detected in the groundwater samples collected from TSW-1 through TSW-6 were compared to the groundwater flow (west-northwest), which similar to the TPH data, indicate a potential correlation supported by perchlorate and 1,4-dioxane concentrations in groundwater that appear to decrease down-gradient (toward west-northwest).

Given the low-level distribution of TPH concentrations in soil and groundwater beneath the Property without an identified point of release, and with a groundwater flow direction to the west-northwest, a source of the low-level dissolved phase TPH concentrations has not been identified and is likely attributed to a regional condition.

Based on the low-level distribution of perchlorate and 1,4-dioxane in groundwater beneath the Property, which are less than the concentrations detected in the down-gradient production well B25A, and the absence of historical and current use of these chemicals on the Property, the likely source of perchlorate and 1,4-dioxane in groundwater beneath the Property is the regional Baldwin Park OU plume. Based on the absence of groundwater wells on the property, and the depth to groundwater (117.44 to 129.95 feet bgs) beneath the Property, direct exposure to the detected contaminants in groundwater is not anticipated.

## 5.3 Soil Gas and Subslab Sampling

Laboratory analytical results for the soil gas and subslab samples collected from SGP-1 through SGP-5, and SSP-1 through SSP-6 (**Tables 7** and **8**) indicate that:

Soil gas probe (SGP) sample analytical results indicate that several VOCs were detected above their respective laboratory reporting limits. The soil gas sample analytical results were compared to the ESLs, which revealed that concentrations of bromodichloromethane, chloroform, and PCE detected in one or more samples exceed their respective ESLs for residential land use, as detailed below:

- The bromodichloromethane concentration detected in soil gas sample SGP-5-20 at 3.1 micrograms per cubic meter ($\mu g/m^3$), exceeds the residential ESL (*2.5 $\mu g/m^3$*).
- The chloroform concentration detected in soil gas sample SGP-5-20 at 9.8 $\mu g/m^3$, exceeds the residential ESL (*4.1 $\mu g/m^3$*).

- The PCE concentration detected in soil gas sample SGP-3-20 at 17 µg/m$^3$, exceeds the residential ESL (*15 µg/m$^3$*).

- Other detectable VOC concentrations did not exceed their respective residential or commercial ESLs.

Bromodichloromethane and chloroform are typically related to the chlorination and treatment of tap water and are not considered to be directly related to a VOC release.

Subslab probe (SSP) sample analytical results indicate that several VOCs were detected above their respective laboratory reporting limits. The soil gas sample analytical results were compared to the ESLs, which revealed that concentrations of PCE and TCE detected in one sample (SSP-1) exceed their respective ESLs for residential and/or commercial land use, as detailed below:

- The PCE concentration detected in subslab probe sample SSP-1 at 18 µg/m$^3$, exceeds the residential ESL (*15 µg/m$^3$*), but is below the commercial ESL (*67 µg/m$^3$*).

- The TCE concentration detected in subslab probe sample SSP-1 at 130 µg/m$^3$, exceeds the commercial ESL (*100 µg/m$^3$*).

- The remaining detected VOC concentrations did not exceed their respective residential or commercial ESLs.

Laboratory analytical results for the fix gases analysis appear to be in alignment of expected concentrations and evidence of biodegradation of subsurface contaminants, depleted oxygen levels and methanogenesis are not evident.

Based on VOCs concentrations exceeding the residential and/or commercial ESLs, soil gas conditions beneath the Property represent a potential risk for vapor intrusion to indoor air.

## 5.4 Indoor and Outdoor Air Sampling

Laboratory analytical results for the indoor and outdoor air samples collected from IAS-1 through IAS-4, and OAS-1 and OAS-2 (**Table 9**) indicate that:

- The 1,2-dichloroethane concentrations detected in indoor air samples IAS-1 through IAS-4, exceed the residential ESL (*0.11 µg/m$^3$*). However, outdoor air sample OAS-1 also exceeds the residential ESL, and is within the same order of magnitude.

- The benzene concentrations detected in indoor air samples IAS-1 through IAS-4, exceed the commercial ESL (*0.42 µg/m$^3$*). However, outdoor air samples OAS-1 and OAS-2 also exceed the commercial ESL, and are within the same order of magnitude.

- The bromodichloromethane concentration detected in indoor air sample IAS-1 at 0.081 µg/m$^3$, exceeds the residential ESL (*0.076 µg/m$^3$*).

- The carbon tetrachloride concentrations detected in indoor air samples IAS-1 through IAS-4, exceed the residential ESL (*0.47 µg/m$^3$*). However, outdoor air samples OAS-1 and OAS-2 also exceed the residential ESL, and are within the same order of magnitude.

- The chloroform concentrations detected in indoor air samples IAS-1 through IAS-3, exceed the residential ESL of (*0.12 µg/m$^3$*). However, outdoor air samples OAS-1 and OAS-2 are within the same order of magnitude.

- The methylene chloride concentrations detected in indoor air samples IAS-1 through IAS-4, exceed the residential ESL (*1.0 µg/m$^3$*).

- The TCE concentrations detected in indoor air samples IAS-1, IAS-3, and IAS-4, exceed the residential ESL (*0.48 µg/m$^3$*), and the TCE concentration detected in indoor air sample IAS-2 of 4.6 µg/m$^3$ exceeds the commercial ESL (*3.0 µg/m$^3$*).

- Other detectable VOC concentrations did not exceed their respective residential or commercial ESLs.

The four indoor air samples had detectable concentrations of VOCs that exceed residential and commercial ESLs. In general, the detections of VOCs in indoor air where detected in the outdoor air samples at comparable concentrations (within same order of magnitude). The only anomalous data identified are the detection of TCE concentrations in the indoor air samples above residential and commercial ESLs. TCE was not detected above the laboratory reporting limit in the outdoor air samples. As indicated in **Sections 4.4** and **5.3** above, PCE and TCE were also detected above residential and commercial screening levels, respectively, in subslab probe SSP-1. The detections of PCE and TCE in the subslab sample, detection of TCE in indoor air, and absence of TCE detections in outdoor indicates a potential for a complete vapor intrusion exposure pathway for the existing buildings.

The source of the TCE in subslab soil gas and/or indoor air is unconfirmed as TCE was not detected in the limited soil or groundwater data collected for the Property. Based on the isolated detection of elevated TCE concentrations in subslab SSP-1 and similar concentrations of TCE in the four indoor air samples (for both semi-connected buildings), the source for TCE in the indoor

air may be attributed to inventory and products stored in the buildings. Although a chemical/product inventory was not prepared as part of this scope of services, TCE and other solvents are known to be present in adhesives, cleaners, rugs, wood furniture and leather products, which were generally observed in one or both buildings.

Terracon sampled indoor air under normal operating conditions for the business. The heating, ventilation and air conditioning (HVAC) system was operational at the time of indoor air sampling; however, based on the mild temperature on the day of the sampling, the HVAC system likely cycled less than a typical day, which represents the conservative sampling conditions outlined in DTSC's guidance[5].

[5] *Department of Toxic Substances Control (DTSC). 2011. Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance), California Environmental Protection Agency. Original December 2004, Final October 2011.*

# 6.0 RECOMMENDATIONS

It is Terracon's understanding that the Property is intended to either remain occupied as a commercial business, unoccupied or redeveloped in the future.

Based on the above findings and conclusions, Terracon has the following recommendations:

- In response to the potential for a complete vapor intrusion exposure pathway from the documented VOCs concentrations, including TCE, above their respective residential and/or commercial ESLs identified at the Property in subslab soil gas and indoor air, indicating the potential for incremental risk above the acceptable baseline, engineered control measures should be evaluated and implemented based on the future use of the Property, as follows:

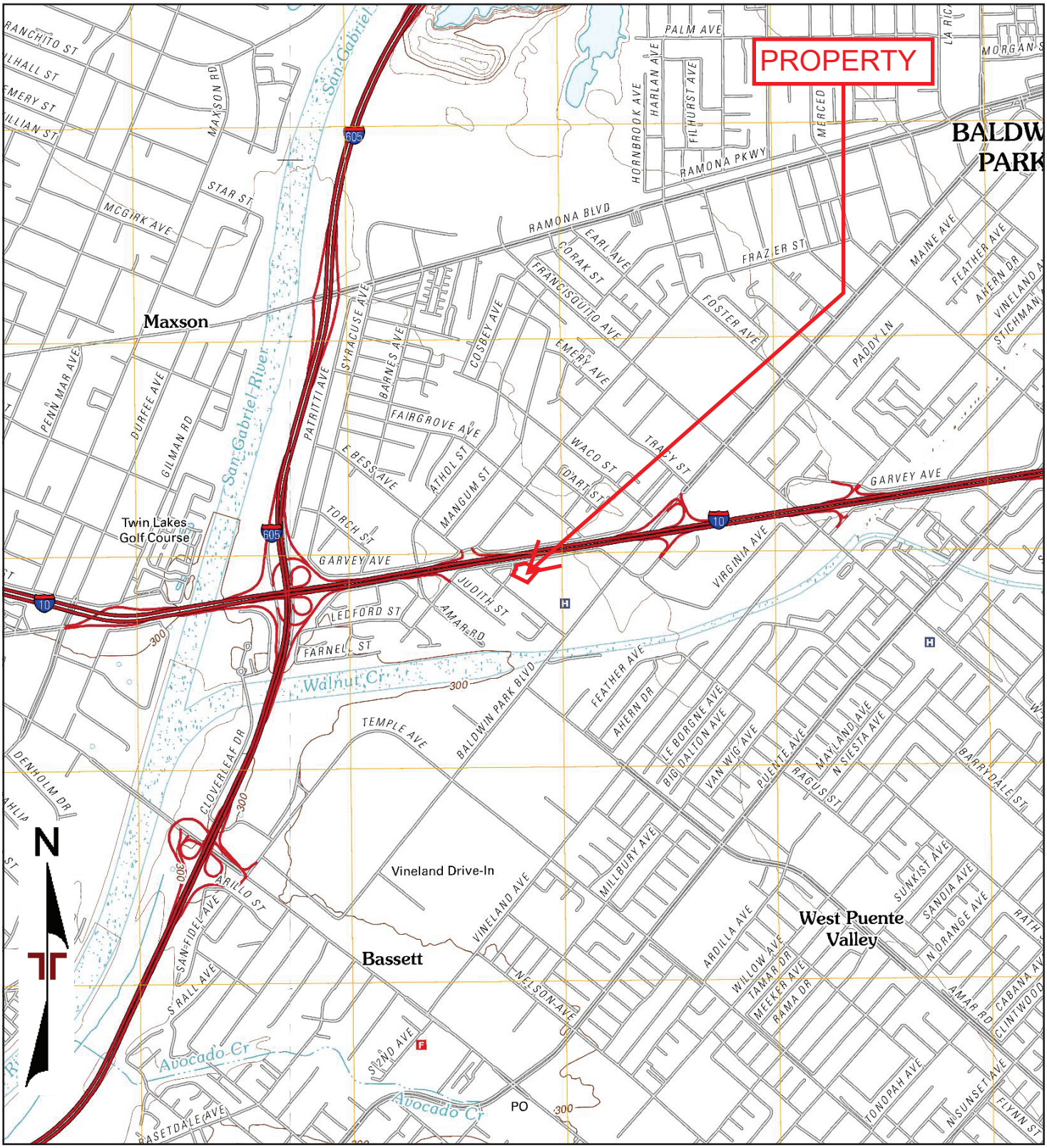
  - If the existing buildings on the Property are to remain occupied for commercial use, and/or otherwise used by KP for occupancy, installation of engineered control measures, such as the application of Retro-Coat to mitigate the potential for vapor intrusion of VOCs into indoor air is warranted.

  - If the existing buildings are to be demolished and the Property will be redeveloped with new building(s) for occupancy, Terracon recommends the installation of a passive vapor intrusion mitigation system (VIMS) that could be converted to an active system for buildings developed on the Property. If installed, the VIMS should consist of an engineered chemically resistant vapor barrier and subslab venting system to mitigate VOCs. If installed, on-going monitoring and evaluation of the VIMS is recommended, including the creation and adherence to a written operation, maintenance, and monitoring plan for the engineering controls. This plan may include recommendations for routine monitoring of indoor air quality.

- Based on the potential for residual impacts to be encountered during demolition and/or redevelopment, a Soil and Groundwater Management Plan is recommended. The Soil and Groundwater Management Plan should be developed prior to any construction or maintenance that includes disturbing soil, for protection of construction workers and proper handling of impacted materials if encountered.

- Additional soil, groundwater, or soil gas assessment at the Property does not appear warranted at this time.

# EXHIBITS




TP, Baldwin Park, 2012, 7.5-minute
W, El Monte, 2012, 7.5-minute

0 Miles 0.25 0.5 1 1.5

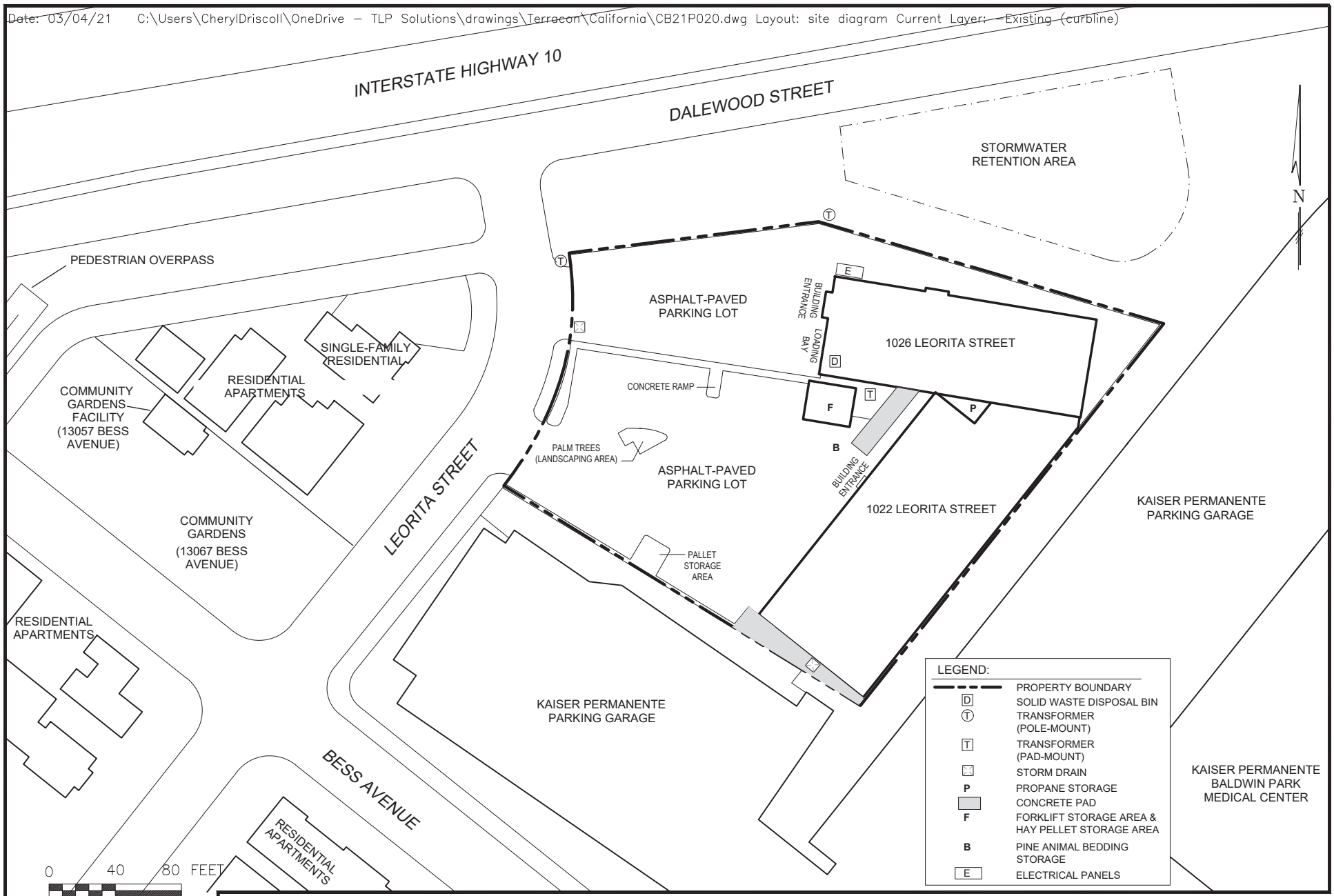
| | |
|---|---|
| Project Manager: TGM | Project No. CB21P020 |
| Drawn by: LSH | Scale: As Shown |
| Checked by: TGM | File Name: N?A |
| Approved by: CAP | Date: 2012 |


Terracon
1355 East Cooley Drive, Suite C
Colton, California 92324


# 2012 TOPOGRAPHIC MAP

SBPK 2021 MLF 1022-1026 Leorita Street
Broken Horn Land
1022-1026 Leorita Street
Baldwin Park, Los Angeles County, California 91706

Exhibit 1




*THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.*

| | |
|---|---|
| Project Mngr: | TGM |
| Drawn By: | CDD |
| Checked By: | TGM |
| Approved By: | CAP |

| | |
|---|---|
| Project No. | CB21P020 |
| Scale: | AS SHOWN |
| Date: | 03/04/21 |

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1355 East Cooley Drive, Suite. C
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# PROPERTY DIAGRAM

SBPK 2021 MLF 1022-1026 LEORITA STREET BROKEN HORN LAND
1022-1026 LEORITA STREET
BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA 91706

EXHIBIT 2

Date: 04/21/21 C:\Users\CherylDriscoll\OneDrive – TLP Solutions\drawings\Terracon\California\CB21P020.dwg Layout: site diagram (2) Current Layer: –Existing (curbline)

LEGEND:

| | |
|---|---|
| | PROPERTY BOUNDARY |
| D | SOLID WASTE DISPOSAL BIN |
| T | TRANSFORMER (POLE-MOUNT) |
| T | TRANSFORMER (PAD-MOUNT) |
| | STORM DRAIN |
| P | PROPANE STORAGE |
| | CONCRETE PAD |
| F | FORKLIFT STORAGE AREA & HAY PELLET STORAGE AREA |
| B | PINE ANIMAL BEDDING STORAGE |
| E | ELECTRICAL PANELS |
| B-1/TSW-1 | BORING/TEMPORARY SAMPLE WELL LOCATION |
| SGP- | SOIL GAS PROBE |
| SSP- | SUB-SLAB PROBE |
| IAS- | INDOOR AIR SAMPLE |
| OAS- | OUTDOOR AIR SAMPLE |

*THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.*

NOTE: BORING/SAMPLE LOCATIONS ARE APPROXIMATE.

| | |
|---|---|
| Project Mngr: | TGM |
| Drawn By: | CDD |
| Checked By: | TGM |
| Approved By: | CAP |
| Project No. | CB21P020 |
| Scale: | AS SHOWN |
| Date: | 04/21/21 |


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# PROPERTY DETAILS

SBPK 2021 MLF 1022-1026 LEORITA STREET BROKEN HORN LAND
1022-1026 LEORITA STREET
BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA 91706

EXHIBIT 3

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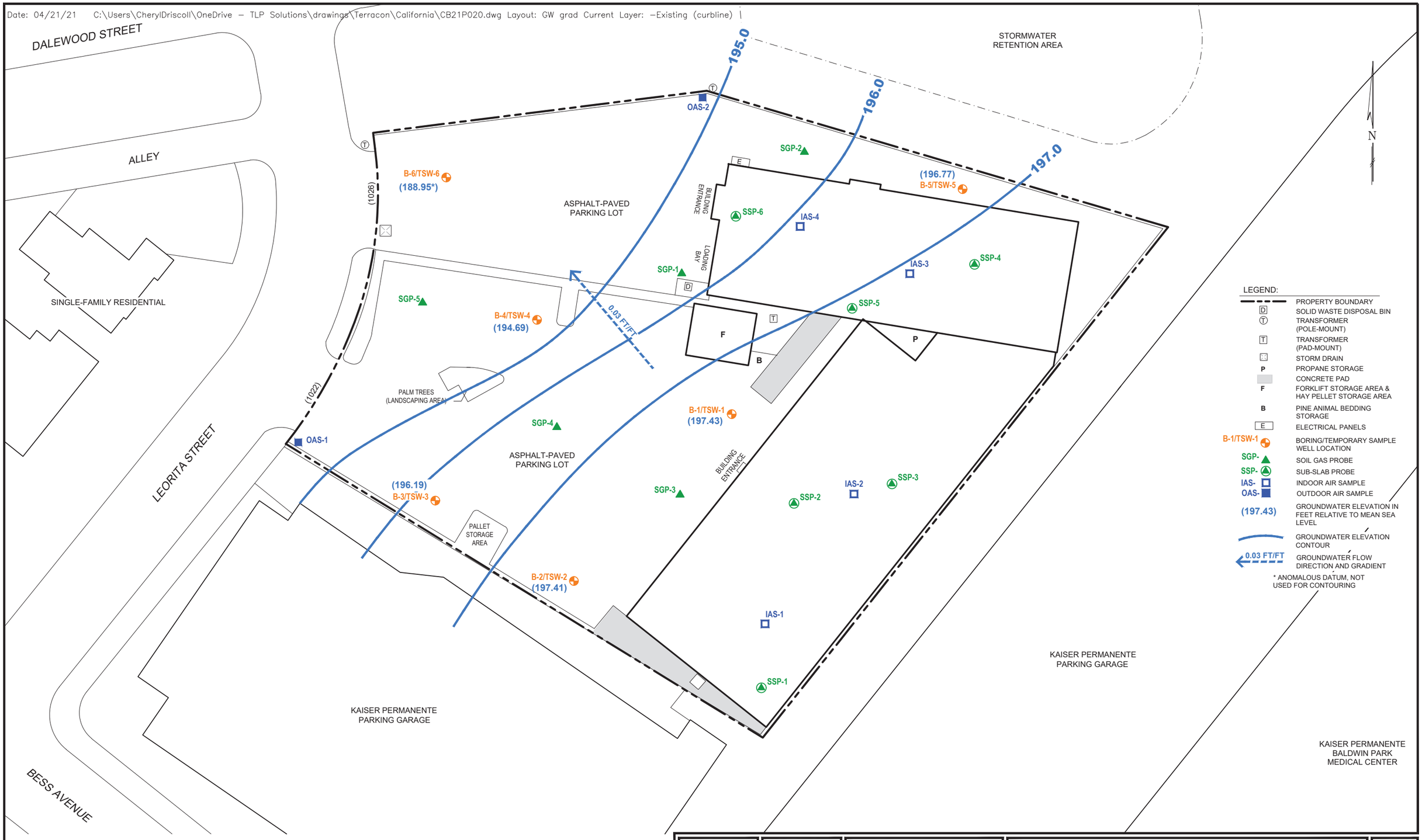


LEGEND:

- PROPERTY BOUNDARY
- D — SOLID WASTE DISPOSAL BIN
- T — TRANSFORMER (POLE-MOUNT)
- T — TRANSFORMER (PAD-MOUNT)
- STORM DRAIN
- P — PROPANE STORAGE
- CONCRETE PAD
- F — FORKLIFT STORAGE AREA & HAY PELLET STORAGE AREA
- B — PINE ANIMAL BEDDING STORAGE
- E — ELECTRICAL PANELS
- B-1/TSW-1 — BORING/TEMPORARY SAMPLE WELL LOCATION
- SGP- — SOIL GAS PROBE
- SSP- — SUB-SLAB PROBE
- IAS- — INDOOR AIR SAMPLE
- OAS- — OUTDOOR AIR SAMPLE
- (197.43) — GROUNDWATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL
- GROUNDWATER ELEVATION CONTOUR
- 0.03 FT/FT — GROUNDWATER FLOW DIRECTION AND GRADIENT

* ANOMALOUS DATUM, NOT USED FOR CONTOURING

0 20 40 FEET
APPROXIMATE SCALE

*THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.*

NOTE: BORING/SAMPLE LOCATIONS ARE APPROXIMATE.

| | |
|---|---|
| Project Mngr: | TGM |
| Drawn By: | CDD |
| Checked By: | TGM |
| Approved By: | CAP |

| | |
|---|---|
| Project No. | CB21P020 |
| Scale: | AS SHOWN |
| Date: | 04/21/21 |


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# GROUNDWATER ELEVATION CONTOURS

SBPK 2021 MLF 1022-1026 LEORITA STREET BROKEN HORN LAND
1022-1026 LEORITA STREET
BALDWIN PARK, LOS ANGELES COUNTY, CALIFORNIA 91706

EXHIBIT 4

# TABLES

Terracon

**Table 1- Depth to Water Measurements and Groundwater Elevation Data**
SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street
Baldwin Park, California
Terracon Project No. CB21P020

| Well ID | Date Measured | Finished Surface Elevation[(1)] (feet amsl) | Temporary Screen Interval (feet bfs) | Depth to Groundwater (feet bfs) | Groundwater Elevation (feet rmsl) |
|---|---|---|---|---|---|
| B-1/TSW-1 | 3/22/2021 | 315.96 | 120-130 | 118.53 | 197.43 |
| B-2/TSW-2 | 3/23/2021 | 314.85 | 117-127 | 117.44 | 197.41 |
| B-3/TSW-3 | 3/25/2021 | 317.53 | 123-133 | 121.34 | 196.19 |
| B-4/TSW-4 | 3/29/2021 | 317.73 | 119-129 | 123.04 | 194.69 |
| B-5/TSW-5 | 3/30/2021 | 318.51 | 120-130 | 121.74 | 196.77 |
| B-6/TSW-6 | 3/31/2021 | 318.90 | 125-135 | 129.95 | 188.95 |

**Notes:**
bfs = below finished surface
amsl = above mean sea level
rmsl = relative to mean sea level

[(1)]Elevations surveyed on March 31, 2021, by Calvada Surveying Inc.

Terracon

**Table 2 - Summary of Soil Sample Analytical Results – TPH**
SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street
Baldwin Park, California
Terracon Project No. CB21P020

| Location ID | Sample ID | Depth (feet bgs) | Sample Date | GRO (C4-C12) | DRO (C13-C22) | MORO (C23-C40) |
|---|---|---|---|---|---|---|
| | | | | EPA Method 8015B (mg/Kg) | | |
| Shallow Soil Direct Exposure Screening Levels (1) | Residential Cancer | | | *NE* | *NE* | *NE* |
| | Residential Non-Cancer | | | *430* | *260* | *12,000* |
| | Commercial / Industrial Cancer | | | *NE* | *NE* | *NE* |
| | Commercial / Industrial Non-Cancer | | | *2,000* | *1,200* | *180,000* |
| | Construction Worker Cancer | | | *NE* | *NE* | *NE* |
| | Construction Worker Non-Cancer | | | *1,800* | *1,100* | *54,000* |
| B-1 | B-1-5 | 5 | 3/22/2021 | <0.054 | <3.7 | **4.9** |
| | B-1-10 | 10 | 3/22/2021 | <0.056 | **5.5** | **5.3** |
| B-2 | B-2-5 | 5 | 3/23/2021 | <0.049 | **14** | **140** |
| | B-2-110 | 110 | 3/23/2021 | <0.048 | <3.7 | **4.0** |
| B-3-5 | B-3-5 | 5 | 3/24/2021 | <0.057 | <4.0 | **5.5** |
| | B-3-110 | 110 | 3/24/2021 | <0.049 | <3.7 | <3.7 |
| B-4-5 | B-4-5 | 5 | 3/25/2021 | <0.056 | <3.8 | **7.5** |
| | B-4-115 | 115 | 3/25/2021 | <0.049 | <3.8 | <3.8 |
| B-5-5 | B-5-5 | 5 | 3/29/2021 | <0.049 | **6.3** | **41** |
| | B-5-115 | 115 | 3/29/2021 | <0.041 | <3.8 | <3.8 |
| B-6-5 | B-6-5 | 5 | 3/30/2021 | <0.062 | <3.8 | <3.8 |
| | B-6-115 | 115 | 3/30/2021 | <0.044 | <3.8 | **8.6** |
| SGP-1-5 | SGP-1-5 | 5 | 3/23/2021 | <0.049 | **4.0** | **7.0** |
| | SGP-1-20 | 20 | 3/23/2021 | <0.048 | <3.8 | <3.8 |
| SGP-2-5 | SGP-2-5 | 5 | 3/23/2021 | <0.043 | **4.6** | **14** |
| | SGP-2-20 | 20 | 3/23/2021 | <0.059 | <3.8 | <3.8 |
| SGP-3-5 | SGP-3-5 | 5 | 3/23/2021 | <0.050 | **6.1** | **4.7** |
| | SGP-3-20 | 20 | 3/23/2021 | <0.054 | **7.6** | **5.1** |
| SGP-4-5 | SGP-4-5 | 5 | 3/23/2021 | <0.043 | <3.8 | <3.8 |
| | SGP-4-20 | 20 | 3/23/2021 | <0.060 | <3.9 | <3.9 |
| SGP-5-5 | SGP-5-5 | 5 | 3/23/2021 | <0.057 | **5.3** | **4.6** |
| | SGP-5-20 | 20 | 3/23/2021 | <0.056 | <3.8 | <3.8 |

Notes:
EPA = United States Environmental Protection Agency
All units are in milligrams per kilogram (mg/Kg)
bgs= below ground surface
"<" = less than the laboratory reporting limit specified
-- = Not analyzed/not available/not established; or omitted based on ND laboratory results
TPH GRO = total petroleum hydrocarbons in gasoline carbon range (C4-C12)
TPH DRO = total petroleum hydrocarbons in diesel carbon range (C13-C22)
TPH MORO = total petroleum hydrocarbons in waste oil carbon range (C23-C40)

Screening Levels

(1) ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (2019, Rev.2), Summary of Soil ESLs, Direct Exposure Human Health Risk Levels, Residential and Commercial/Industrial Shallow Soil Exposure, Table S-1.

**Table 3 - Summary of Soil Sample Analytical Results – VOCs**
SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street
Baldwin Park, California
Terracon Project No. CB21P020

| Location ID | Sample ID | Depth (feet bgs) | Sample Date | Acetone | Benzene | Ethanol | TBA | Other VOCs |
|---|---|---|---|---|---|---|---|---|
| | | | | EPA Method 8260B (mg/Kg) | | | | |
| Shallow Soil Direct Exposure Screening Levels (1) | Residential Cancer | | | *NE* | *0.33* | *NE* | *NE* | -- |
| | Residential Non-Cancer | | | *61000* | *11* | *NE* | *NE* | -- |
| | Commercial / Industrial Cancer | | | *NE* | *1.4* | *NE* | *NE* | -- |
| | Commercial / Industrial Non-Cancer | | | *670000* | *47* | *NE* | *NE* | -- |
| | Construction Worker Cancer | | | *NE* | *33* | *NE* | *NE* | -- |
| | Construction Worker Non-Cancer | | | *270000* | *45* | *NE* | *NE* | -- |
| B-1 | B-1-5 | 5 | 3/22/2021 | **0.018** | <0.00025 | <0.063 | <0.0067 | ND |
| | B-1-10 | 10 | 3/22/2021 | **0.017** | **0.00030** | <0.047 | <0.0050 | ND |
| B-2 | B-2-5 | 5 | 3/23/2021 | **0.022** | **0.00023** | <0.059 | <0.0063 | ND |
| | B-2-110 | 110 | 3/23/2021 | <0.0078 | <0.00021 | <0.053 | <0.0056 | ND |
| B-3-5 | B-3-5 | 5 | 3/24/2021 | **0.014** | **0.00059** | <0.070 | <0.0074 | ND |
| | B-3-110 | 110 | 3/24/2021 | **0.014** | <0.00026 | <0.066 | **0.0079** | ND |
| B-4-5 | B-4-5 | 5 | 3/25/2021 | <0.0096 | **0.00032** | <0.064 | <0.0068 | ND |
| | B-4-115 | 115 | 3/25/2021 | **0.011** | <0.00023 | <0.058 | **0.0065** | ND |
| B-5-5 | B-5-5 | 5 | 3/29/2021 | **0.014** | **0.00024** | <0.058 | <0.0061 | ND |
| | B-5-115 | 115 | 3/29/2021 | <0.0090 | <0.00024 | <0.061 | <0.0064 | ND |
| B-6-5 | B-6-5 | 5 | 3/30/2021 | **0.015** | **0.00044** | <0.074 | <0.0079 | ND |
| | B-6-115 | 115 | 3/30/2021 | <0.0081 | <0.00021 | <0.054 | <0.0058 | ND |
| SGP-1-5 | SGP-1-5 | 5 | 3/23/2021 | **0.022** | <0.00022 | <0.057 | **0.0069** | ND |
| | SGP-1-20 | 20 | 3/23/2021 | **0.011** | <0.00023 | <0.060 | **0.0069** | ND |
| SGP-2-5 | SGP-2-5 | 5 | 3/23/2021 | **0.019** | **0.00029** | **0.083** | **0.010** | ND |
| | SGP-2-20 | 20 | 3/23/2021 | <0.0096 | <0.00025 | <0.065 | <0.0068 | ND |
| SGP-3-5 | SGP-3-5 | 5 | 3/23/2021 | **0.012** | <0.00026 | <0.066 | <0.0069 | ND |
| | SGP-3-20 | 20 | 3/23/2021 | <0.0095 | <0.00025 | <0.064 | <0.0067 | ND |
| SGP-4-5 | SGP-4-5 | 5 | 3/23/2021 | <0.0094 | <0.00025 | <0.063 | <0.0067 | ND |
| | SGP-4-20 | 20 | 3/23/2021 | **0.011** | <0.00026 | <0.066 | **0.0081** | ND |
| SGP-5-5 | SGP-5-5 | 5 | 3/23/2021 | **0.042** | **0.00058** | <0.11 | <0.012 | ND |
| | SGP-5-20 | 20 | 3/23/2021 | **0.013** | <0.00027 | <0.069 | <0.0073 | ND |

Notes:
EPA = United States Environmental Protection Agency
All units are in milligrams per kilogram (mg/Kg)
bgs= below ground surface
"<" = less than the laboratory reporting limit specified
-- = Not analyzed/not available/not established; or omitted based on ND laboratory results
ND = not detected above laboratory reporting limits. Multiple analytes, see laboratory report for specific reporting limits.
TBA = tert-Butyl alcohol

Screening Levels
(1) ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (2019, Rev.2), Summary of Soil ESLs, Direct Exposure Human Health Risk Levels, Residential and Commercial/Industrial Shallow Soil Exposure, Table S-1.
DTSC = Department of Toxic Substances Control, HERO HHRA Note 3, April 2019, Table 1. DTSC-Recommended Screening Levels for Soil, Residential and Commercial/Industrial

Terracon

**Table 4 - Summary of Soil Sample Analytical Results – CAM Metals**
SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street
Baldwin Park, California
Terracon Project No. CB21P020

| Location ID | Sample ID | Depth (feet bgs) | Sample Date | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium | Cobalt | Copper | Lead | Mercury* | Molybdenum | Nickel | Selenium | Silver | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EPA Method 6010B/7471A* (mg/Kg) | | | | | | | | | | | | | | | | |
| Shallow Soil Direct Exposure Screening Levels (1) | Residential Cancer | | | *NE* | *0.067* | *NE* | *1,600* | *910* | *NE* | *420* | *NE* | *82* | *NE* | *NE* | *15,000* | *NE* | *NE* | *NE* | *NE* | *NE* |
| | Residential Non-Cancer | | | *11* | *0.26* | *15,000* | *16* | *78* | *NE* | *23* | *3,100* | *80* | *13* | *390* | *820* | *390* | *390* | *0.78* | *390* | *23,000* |
| | Commercial / Industrial Cancer | | | *NE* | *0.31* | *NE* | *6,900* | *4,000* | *NE* | *1,900* | *NE* | *380* | *NE* | *NE* | *64,000* | *NE* | *NE* | *NE* | *NE* | *NE* |
| | Commercial / Industrial Non-Cancer | | | *160* | *3.6* | *220,000* | *230* | *1,100* | *NE* | *350* | *47,000* | *320* | *190* | *5,800* | *11,000* | *5,800* | *5,800* | *12* | *5,800* | *350,000* |
| | Construction Worker Cancer | | | *NE* | *2* | *NE* | *180* | *110* | *NE* | *49* | *NE* | *2,700* | *NE* | *NE* | *1,700* | *NE* | *NE* | *NE* | *NE* | *NE* |
| | Construction Worker Non-Cancer | | | *50* | *0.98* | *3,000* | *27* | *51* | *NE* | *28* | *14,000* | *160* | *44* | *1,800* | *86* | *1,700* | *1,800* | *3.5* | *470* | *110,000* |
| Background Levels (2) | Background, Mean (EPA, 1995) | | | *NE* | *7.0** | *560* | *NE* | *NE* | *50* | *10.5* | *26* | *26* | *0.17* | *NE* | *18.5* | *0.3* | *NE* | *NE*** | *NE* | *74* |
| | Background, Mean (EPA, 2007) | | | *0.8* | *5.1** | *598* | *1.1* | *0.4* | *120* | *14* | *39* | *26* | *NE* | *NE* | *48* | *0.2* | *0.8* | *NE*** | *118* | *113* |
| B-1 | B-1-5 | 5 | 3/22/2021 | <1.3 | **2.2** | **50** | <0.17 | **0.35** | **6.8** | **5.5** | **12** | **3.0** | **0.038** | <0.44 | **6.0** | <1.8 | <0.22 | <1.4 | **13** | **28** |
| B-2 | B-2-5 | 5 | 3/23/2021 | <1.4 | **2.6** | **59** | <0.17 | **0.50** | **12** | **6.6** | **14** | **22** | **0.032** | **0.55** | **7.8** | <1.9 | <0.23 | <1.5 | **17** | **54** |
| B-3 | B-3-5 | 5 | 3/24/2021 | <1.4 | <2.3 | **93** | **0.41** | **0.32** | **14** | **6.8** | **16** | **2.6** | **0.036** | <0.46 | **11** | <1.9 | <0.23 | <1.5 | **22** | **34** |
| B-4 | B-4-5 | 5 | 3/25/2021 | <1.4 | <2.3 | **16** | <0.17 | <0.20 | **1.7** | **1.3** | **1.2** | <0.98 | **0.027** | <0.46 | **2.0** | <1.9 | <0.23 | <1.5 | **2.1** | **5.7** |
| B-5 | B-5-5 | 5 | 3/29/2021 | <1.4 | <2.3 | **51** | **0.28** | **0.28** | **8.0** | **4.5** | **9.5** | **14** | **0.032** | <0.46 | **8.9** | <1.9 | <0.23 | <1.5 | **17** | **30** |
| B-6 | B-6-5 | 5 | 3/30/2021 | <1.3 | <2.2 | **74** | **0.34** | **0.25** | **13** | **6.7** | **12** | **1.1** | **0.047** | <0.44 | **10** | <1.8 | <0.22 | <1.4 | **22** | **31** |
| SGP-1 | SGP-1-5 | 5 | 3/23/2021 | <1.4 | **2.5** | **60** | <0.17 | **0.52** | **11** | **6.9** | **14** | **15** | **0.038** | <0.46 | **7.3** | <1.9 | <0.23 | <1.5 | **18** | **46** |
| SGP-4 | SGP-4-5 | 5 | 3/23/2021 | <1.3 | <2.2 | **43** | <0.17 | **0.27** | **6.9** | **4.4** | **7.4** | **2.1** | **0.026** | <0.45 | **4.6** | <1.8 | <0.22 | <1.5 | **11** | **20** |
| SGP-5 | SGP-5-5 | 5 | 3/23/2021 | <1.4 | **4.1** | **130** | <0.18 | **0.71** | **21** | **12** | **22** | **4.5** | **0.10** | <0.47 | **14** | <1.9 | <0.24 | <1.6 | **34** | **58** |

Notes:
EPA = United States Environmental Protection Agency
All units are in milligrams per kilogram (mg/Kg)
bgs= below ground surface
"<" = less than the laboratory reporting limit specified
-- = Not analyzed/not available/not established; or omitted based on ND laboratory results

Screening Levels
(1) ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (2019, Rev.2), Summary of Soil ESLs, Direct Exposure Human Health Risk Levels, Residential and Commercial/Industrial Shallow Soil Exposure, Table S-1.
(2) EPA, 1995, Engineering Forum Issue, Determination of Background Concentrations of Inorganics in Soils and Sediments at Hazardous Waste Sites, EPA/540/S-96/500, December 1995.
(2) EPA, 2007, Guidance for Developing Ecological Soil Screening Levels, OSWER Directive 92857-55, Attachment 1-4, November 2003 (Revised July 2007).
* DTSC. Determination of a Southern California Regional Background Arsenic Concentration in Soil. Upper-bound arsenic concentration of 12 mg/Kg for Los Angeles County. Concentrations at or below this level are considered background concentrations.
** DTSC and the Air Force Center for Environmental Excellence, 2005. Inorganic Chemicals in Ground Water and Soil: Background Concentrations at California Air Force Bases., March 10, 2005. Upper-bound (95th Percentile) thallium concentration of 25 mg/Kg for California. Concentrations at or below this level are considered background concentrations.

**Analyte concentration exceeds the standard for:**
Concentration Reported Above Commercial/Industrial ESL. Non-Cancer Hazard
Concentration Reported Above Construction Worker ESL. Cancer Hazard

**Table 5 - Summary of Soil Sample Analytical Results – Pesticides and Herbicides**
SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street
Baldwin Park, California
Terracon Project No. CB21P020

| Location ID | Sample ID | Depth (feet bgs) | Sample Date | 4,4'-DDE | 4,4'-DDT | Dieldrin | gamma-Chlordane | Other Pesticides | Herbicides |
|---|---|---|---|---|---|---|---|---|---|
| | | | | EPA Method 8081A (mg/Kg) | | | | | EPA Method 8151A (mg/Kg) |
| Shallow Soil Direct Exposure Screening Levels (1) | Residential Cancer | | | *1.8* | *1.9* | *0.037* | *NE* | -- | -- |
| | Residential Non-Cancer | | | *NE* | *37* | *3.5* | *NE* | -- | -- |
| | Commercial / Industrial Cancer | | | *8.3* | *8.5* | *0.16* | *NE* | -- | -- |
| | Commercial / Industrial Non-Cancer | | | *NE* | *520* | *48* | *NE* | -- | -- |
| | Construction Worker Cancer | | | *57* | *57* | *1.1* | *NE* | -- | -- |
| | Construction Worker Non-Cancer | | | *NE* | *140* | *12* | *NE* | -- | -- |
| B-1 | B-1-5 | 5 | 3/22/2021 | **0.00078** | **0.00051** | <0.00025 | <0.00026 | ND | ND |
| | B-1-10 | 10 | 3/22/2021 | -- | -- | -- | -- | -- | -- |
| B-2 | B-2-5 | 5 | 3/23/2021 | <0.00054 | **0.00086** | **0.00032** | **0.00030** | ND | ND |
| | B-2-110 | 110 | 3/23/2021 | -- | -- | -- | -- | -- | -- |
| B-3-5 | B-3-5 | 5 | 3/24/2021 | <0.00053 | <0.00036 | <0.00025 | <0.00026 | ND | ND |
| | B-3-110 | 110 | 3/24/2021 | -- | -- | -- | -- | -- | -- |
| B-4-5 | B-4-5 | 5 | 3/25/2021 | <0.00054 | <0.00036 | <0.00025 | <0.00026 | ND | ND |
| | B-4-115 | 115 | 3/25/2021 | -- | -- | -- | -- | -- | -- |
| B-5-5 | B-5-5 | 5 | 3/29/2021 | <0.00054 | **0.00060** | <0.00025 | <0.00026 | ND | ND |
| | B-5-115 | 115 | 3/29/2021 | -- | -- | -- | -- | -- | -- |
| B-6-5 | B-6-5 | 5 | 3/30/2021 | <0.00053 | <0.00035 | <0.00025 | <0.00025 | ND | ND |
| | B-6-115 | 115 | 3/30/2021 | <0.00054 | <0.00036 | <0.00025 | <0.00026 | ND | ND |
| SGP-1-5 | SGP-1-5 | 5 | 3/23/2021 | <0.00053 | <0.00035 | <0.00025 | <0.00025 | ND | ND |
| | SGP-1-20 | 20 | 3/23/2021 | -- | -- | -- | -- | -- | -- |
| SGP-2-5 | SGP-2-5 | 5 | 3/23/2021 | -- | -- | -- | -- | -- | -- |
| | SGP-2-20 | 20 | 3/23/2021 | -- | -- | -- | -- | -- | -- |
| SGP-3-5 | SGP-3-5 | 5 | 3/23/2021 | -- | -- | -- | -- | -- | -- |
| | SGP-3-20 | 20 | 3/23/2021 | -- | -- | -- | -- | -- | -- |
| SGP-4-5 | SGP-4-5 | 5 | 3/23/2021 | <0.00054 | <0.00036 | <0.00025 | <0.00026 | ND | ND |
| | SGP-4-20 | 20 | 3/23/2021 | -- | -- | -- | -- | -- | -- |
| SGP-5-5 | SGP-5-5 | 5 | 3/23/2021 | <0.00053 | <0.00035 | <0.00025 | <0.00025 | ND | ND |
| | SGP-5-20 | 20 | 3/23/2021 | -- | -- | -- | -- | -- | -- |

Notes:
EPA = United States Environmental Protection Agency
All units are in milligrams per kilogram (mg/Kg)
bgs= below ground surface
"<" = less than the laboratory reporting limit specified
ND = not detected above laboratory reporting limits. Multiple analytes, see laboratory report for specific reporting limits.
-- = Not analyzed/not available/not established; or omitted based on ND laboratory results

Screening Levels
(1) ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (2019, Rev.2), Summary of Soil ESLs, Direct Exposure Human Health Risk Levels, Residential and Commercial/Industrial Shallow Soil Exposure, Table S-1.

**Table 6 - Summary of Groundwater Sample Analytical Results – TPH, VOCs, Perchlorate, and 1,4-Dioxane**
SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street
Baldwin Park, California
Terracon Project No. CB21P020

| Location ID | Sample ID | Sample Date | GRO (C4-C12) | DRO (C13-C22) | MORO (C23-C40) | VOCs | Perchlorate | 1,4-Dioxane |
|---|---|---|---|---|---|---|---|---|
| | | | EPA Method 8015B (µg/L) | | | EPA Method 8260B (µg/L) | EPA Method 314.0 (µg/L) | EPA Method 8270C SIM (µg/L) |
| Groundwater Vapor Intrusion Environmental Screening Levels[1] | Residential Cancer | | *NE* | *NE* | *NE* | -- | *NE* | *1800* |
| | Residential Noncancer | | *NE* | *NE* | *NE* | -- | *NE* | *160000* |
| | Commercial / Industrial Cancer | | *NE* | *NE* | *NE* | -- | *NE* | *8000* |
| | Commercial / Industrial Noncancer | | *NE* | *NE* | *NE* | -- | *NE* | *660000* |
| Direct Exposure Human Health Risk Levels [2] | PHG | | *NE* | *NE* | *NE* | -- | *1.0* | *NE* |
| | MCL Priority | | *760* | *200* | *NE* | -- | *6.0* | *0.38* |
| TSW-1 | TSW-1 | 3/22/2021 | <30 | **160** | **63** | ND | **1.1** | <0.34 |
| TSW-2 | TSW-2 | 3/24/2021 | <30 | **31** | <23 | ND | <0.91 | <0.34 |
| TSW-3 | TSW-3 | 3/25/2021 | <30 | <23 | <23 | ND | <0.91 | <0.34 |
| TSW-4 | TSW-4 | 3/29/2021 | <30 | **82** | **99** | ND | **0.91** | <0.34 |
| TSW-5 | TSW-5 | 3/30/2021 | <30 | <22 | <22 | ND | <0.91 | **0.95** |
| TSW-5 | TSW-5 DUP | 3/30/2021 | <30 | <22 | <22 | ND | <0.91 | **0.60** |
| TSW-6 | TSW-6 | 3/31/2021 | <30 | **48** | **47** | ND | <0.91 | <0.34 |
| -- | Trip Blank | 3/22/2021 | -- | -- | -- | ND | -- | -- |
| -- | Trip Blank | 3/25/2021 | -- | -- | -- | ND | -- | -- |
| -- | Trip Blank | 3/30/2021 | -- | -- | -- | ND | -- | -- |
| -- | Trip Blank | 3/31/2021 | -- | -- | -- | ND | -- | -- |

Notes:
EPA = United States Environmental Protection Agency
All units are in micrograms per liter (µg/L)
"<" = less than the laboratory reporting limit specified
ND = not detected above laboratory reporting limits. Multiple analytes, see laboratory report for specific reporting limits.
-- = Not analyzed/not available/not established; or omitted based on ND laboratory results
TPH GRO = total petroleum hydrocarbons in gasoline carbon range (C4-C12)
TPH DRO = total petroleum hydrocarbons in diesel carbon range (C13-C22)
TPH MORO = total petroleum hydrocarbons in waste oil carbon range (C23-C40)
MCL = Maximum contaminant level (State)
PHG = Public health goal (State)

Screening Levels
(1) Environmental Screening Levels (ESLs), established by the San Francisco Bay Regional Water Quality Control Board, January (Rev. 2)
Groundwater Vapor Intrusion Human Health Risk Level (HHRL) ESLs for Residential and Commercial/Industrial land use exposure scenarios,
(2) "MCL Priority" list all available MCL values. If no MCL values are available, the lower of the cancer and non-cancer tapwater direct exposure levels is listed.

**Analyte concentration exceeds the standard for:**
Concentration Reported Above Maximum Contaminant Level (MCL) for Drinking Water Screening Levels
Concentration Reported Above Preliminary Health Goal (PHG)

Terracon

**Table 7 - Summary of Soil Gas Sample Analytical Results**

SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street Baldwing Park, Los Angeles County, California
Terracon Project No. CB21P020

| Project Sample ID | Units | Environmental Screening Levels[1] | | | | SGP-1-5 | SGP-1-20 | SGP-2-5 | SGP-2-20 | SGP-2-20 DUP | SGP-3-5 | SGP-3-20 | SGP-4-5 | SGP-4-20 | SGP-5-5 | SGP-5-20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date Collected | | Vapor Intrusion Residential Cancer | Vapor Intrusion Residential Non-Cancer | Vapor Intrusion Commercial / Industrial Cancer | Vapor Intrusion Commercial / Industrial Non-Cancer | 3/24/2021 | | 3/25/2021 | | | 3/24/2021 | | 3/25/2021 | | | |
| Matrix | | | | | | Soil Gas | | | | | | | | | | |
| **Fixed Gases - ASTM 1946D** | | | | | | | | | | | | | | | | |
| Oxygen* | % | -- | -- | -- | -- | 22 | 21 | 22 | 23 | 22 | 22 | 20 | 21 | 22 | 22 | 22 |
| Carbon Monoxide | % | -- | -- | -- | -- | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 |
| Carbon Dioxide | % | -- | -- | -- | -- | 0.28 | 1.3 | 0.53 | 0.56 | 0.51 | 0.59 | 2.5 | 1.1 | 0.71 | 0.64 | 0.92 |
| Methane | % | -- | -- | -- | -- | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 |
| Nitrogen | % | -- | -- | -- | -- | 79 | 79 | 79 | 81 | 79 | 80 | 79 | 79 | 81 | 79 | 80 |
| **Volatile Organic Compounds (VOCs) - EPA Method TO-15** | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | ug/m3 | -- | 35,000 | -- | 146,000 | <0.79 | <0.79 | <0.79 | **0.86** | <0.79 | <0.79 | <0.79 | <0.79 | <0.79 | <0.79 | <0.79 |
| 1,2,4-Trimethylbenzene | ug/m3 | -- | -- | -- | -- | **1.9** | **4.9** | **1.9** | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | **3.4** | <1.6 |
| 1,3,5-Trimethylbenzene | ug/m3 | -- | -- | -- | -- | <1.0 | **1.4** | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | **1.3** | <1.0 |
| 2-Butanone (MEK) | ug/m3 | -- | 170,000 | -- | 730,000 | **9.4** | **5.5** | **9.0** | **11** | **11** | **15** | **90** | **6.2** | **18** | **4.3** | **3.9** |
| 4-Methyl-2-pentanone (MIBK) | ug/m3 | -- | 100,000 | -- | 440,000 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | **16** | <2.3 | <2.3 | <2.3 | <2.3 |
| Acetone | ug/m3 | -- | 1,100,000 | -- | 4,500,000 | **37** | **35** | **25** | **32** | **31** | **23** | **180** | **29** | **30** | **31** | **25** |
| Benzene | ug/m3 | 3.2 | 100 | 14 | 440 | **1.5** | **0.89** | **0.62** | **0.68** | **0.64** | **0.75** | **2.0** | **1.8** | **0.87** | <0.50 | **0.64** |
| Bromodichloromethane | ug/m3 | 2.5 | -- | 11 | -- | <0.74 | <0.74 | <0.74 | <0.74 | <0.74 | <0.74 | <0.74 | <0.74 | <0.74 | <0.74 | **3.1** |
| Carbon disulfide | ug/m3 | -- | -- | -- | -- | **0.61** | <0.58 | <0.58 | <0.58 | <0.58 | <0.58 | **0.60** | **0.85** | <0.58 | <0.58 | <0.58 |
| Chloroform | ug/m3 | 4.1 | 3,400 | 18 | 14,000 | <0.78 | <0.78 | <0.78 | <0.78 | <0.78 | <0.78 | <0.78 | <0.78 | <0.78 | <0.78 | **9.8** |
| Chloromethane | ug/m3 | -- | 3,100 | -- | 13,000 | **0.57** | <0.33 | **0.54** | **0.41** | **0.51** | <0.33 | <0.33 | **0.69** | **0.56** | **0.76** | **0.59** |
| Dichlorodifluoromethane | ug/m3 | -- | -- | -- | -- | **2.9** | **3.0** | **3.1** | **3.1** | **3.0** | **2.7** | **3.1** | **3.1** | **2.7** | **3.1** | **3.1** |
| Ethylbenzene | ug/m3 | 37 | 35,000 | 160 | 150,000 | **2.2** | **1.4** | **1.8** | <1.1 | <1.1 | <1.1 | <1.1 | **1.3** | <1.1 | <1.1 | <1.1 |
| Isopropanol | ug/m3 | -- | -- | -- | -- | **14** | **5.7** | **12** | **8.3** | **9.0** | **11** | **5.2** | **5.3** | **19** | **5.6** | **18** |
| m&p-Xylene | ug/m3 | -- | 3,500 | -- | 15,000 | **8.1** | **5.7** | **8.9** | <2.7 | <2.7 | <2.7 | **4.2** | <2.7 | <2.7 | <2.7 | <2.7 |
| Methylene Chloride | ug/m3 | 34 | 14,000 | 410 | 58,000 | **2.0** | <1.9 | **2.5** | <1.9 | <1.9 | <1.9 | <1.9 | <1.9 | <1.9 | <1.9 | <1.9 |
| Methyl-t-Butyl Ether (MTBE) | ug/m3 | 360 | 100,000 | 1,600 | 440,000 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | **14** | <1.2 | <1.2 | <1.2 | <1.2 |
| o-Xylene | ug/m3 | -- | 3,500 | -- | 15,000 | **3.3** | **2.6** | **4.3** | <0.86 | <0.86 | <0.86 | **15** | <0.86 | <0.86 | **1.1** | <0.86 |
| Tetrachloroethene | ug/m3 | 15 | 1,400 | 67 | 5,800 | **4.1** | **14** | **4.6** | **6.3** | **5.7** | **9.1** | **17** | **13** | **14** | **1.7** | **6.4** |
| Toluene | ug/m3 | -- | 10,000 | -- | 44,000 | **10** | **3.7** | **5.5** | **1.5** | **1.1** | **0.80** | **2.5** | **0.97** | **1.5** | **1.6** | **1.8** |
| Trichloroethene | ug/m3 | 16 | 70 | 100 | 290 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| Trichlorofluoromethane | ug/m3 | -- | -- | -- | -- | **2.0** | **2.6** | **2.3** | **2.5** | **2.4** | **2.9** | **2.9** | **2.6** | **3.1** | **2.3** | **3.3** |
| Vinyl acetate | ug/m3 | -- | -- | -- | -- | **5.5** | <1.2 | **2.8** | **1.6** | **1.4** | **3.2** | <1.2 | **1.9** | <1.2 | **3.5** | <1.2 |
| *1,1-Difluoroethane (Leak Check)* | ug/m3 | -- | -- | -- | -- | **21** | <0.99 | **5.2** | **2.1** | **1.3** | <0.99 | **2.0** | **12** | <0.99 | **4.0** | <0.99 |
| *ADDITIONAL ANALYTES* | ug/m3 | -- | -- | -- | -- | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

NOTES:

[1] Environmental Screening Levels (ESLs), established by the San Francisco Bay Regional Water Quality Control Board, dated January 2019, Subslab/Soil Gas, Vapor Intrusion; Human Health Risk Levels, Table SG-1

*value includes argon

µg/m3 = micrograms per cubic meter

1,1-Difluoroethane = Leak check compound

-- = Not established

NA = Not applicable

ND = not detected above laboratory reporting limits. Multiple analytes, see laboratory report for specific reporting limits.

-- = Not analyzed/not applicable/not established; or omitted based on ND laboratory results

<## = Not detected above the laboratory reporting limit specified

**Bold** values indicate a detection.

**Analyte concentration exceeds the standard for:**

Concentration reported above Residential ESL for Soil Gas Vapor Intrusion, Cancer Risk

Terracon

**Table 8 - Summary of Subslab Soil Gas Sample Analytical Results**

SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street Baldwing Park, Los Angeles County, California
Terracon Project No. CB21P020

| Project Sample ID | Units | Environmental Screening Levels[1] | | | | SSP-1 | SSP-2 | SSP-3 | SSP-4 | SSP-5 | SSP-6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date Collected | | Vapor Intrusion Residential Cancer | Vapor Intrusion Residential Non-Cancer | Vapor Intrusion Commercial / Industrial Cancer | Vapor Intrusion Commercial / Industrial Non-Cancer | 3/24/2021 | | | | | |
| Matrix | | | | | | Subslab Soil Gas | | | | | |
| **Fixed Gases - ASTM 1946D** | | | | | | | | | | | |
| Oxygen | % | -- | -- | -- | -- | 22 | 21 | 18 | 22 | 22 | 22 |
| Carbon Monoxide | | -- | -- | -- | -- | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 |
| Carbon Dioxide | | -- | -- | -- | -- | 0.25 | 1.1 | 2.8 | 0.18 | 0.032 | 0.37 |
| Methane | | -- | -- | -- | -- | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 | <0.0069 |
| Nitrogen | | -- | -- | -- | -- | 79 | 79 | 80 | 79 | 79 | 79 |
| **Volatile Organic Compounds (VOCs) - EPA Method TO-15** | | | | | | | | | | | |
| 1,1,1-Trichloroethane | µg/m3 | -- | 35,000 | -- | 146,000 | <0.79 | <0.79 | <0.79 | **1.7** | <0.79 | <0.79 |
| 2-Butanone (MEK) | | -- | 170,000 | -- | 730,000 | **7.5** | **6.8** | **16** | **4.5** | **4.2** | **9.2** |
| 4-Methyl-2-pentanone (MIBK) | | -- | 100,000 | -- | 440,000 | <2.3 | <2.3 | **2.9** | <2.3 | <2.3 | **2.3** |
| Acetone | | -- | 1,100,000 | -- | 4,500,000 | **150** | **140** | **170** | **270** | **150** | **220** |
| Benzene | | 3.2 | 100 | 14 | 440 | **0.90** | **1.3** | **0.86** | <0.50 | <0.50 | **0.64** |
| Carbon disulfide | | -- | -- | -- | -- | <0.58 | <0.58 | <0.58 | <0.58 | <0.58 | **2.0** |
| Chloromethane | | -- | 3,100 | -- | 13,000 | **0.34** | **0.55** | **1.2** | **0.34** | **0.33** | **1.0** |
| Dichlorodifluoromethane | | -- | -- | -- | -- | **2.5** | **3.0** | **2.8** | **3.1** | **3.2** | **3.1** |
| Ethylbenzene | | 37 | 35,000 | 160 | 150,000 | <1.1 | <1.1 | **2.8** | <1.1 | <1.1 | <1.1 |
| Isopropanol | | -- | -- | -- | -- | **30** | **22** | **35** | **29** | **87** | **18** |
| m&p-Xylene | | -- | 3,500 | -- | 15,000 | <2.7 | <2.7 | **3.7** | <2.7 | <2.7 | <2.7 |
| o-Xylene | | -- | 3,500 | -- | 15,000 | **1.4** | <0.86 | **2.3** | <0.86 | **1.1** | **2.3** |
| Tetrachloroethene | | 15 | 1,400 | 67 | 5,800 | **18** | **13** | **13** | **5.1** | **5.4** | **15** |
| Toluene | | -- | 10,000 | -- | 44,000 | **5.1** | **4.6** | **5.8** | **5.0** | **3.7** | **5.2** |
| Trichloroethene | | 16 | 70 | 100 | 290 | **130** | **1.0** | **4.7** | **4.3** | <0.96 | <0.96 |
| Trichlorofluoromethane | | -- | -- | -- | -- | **1.7** | **1.5** | **1.8** | **2.0** | **1.9** | **2.1** |
| Vinyl acetate | | -- | -- | -- | -- | <1.2 | **1.7** | <1.2 | <1.2 | <1.2 | **4.1** |
| *1,1-Difluoroethane (Leak Check)* | | -- | -- | -- | -- | **2.7** | **1.2** | **5.5** | **4.0** | **35** | **1,600** |
| *ADDITIONAL ANALYTES* | | -- | -- | -- | -- | ND | ND | ND | ND | ND | ND |

NOTES:

[1] Environmental Screening Levels (ESLs), established by the San Francisco Bay Regional Water Quality Control Board, dated January 2019, Subslab/Soil Gas, Vapor Intrusion; Human Health Risk Levels, Table SG-1

µg/m3 = micrograms per cubic meter

1,1-Difluoroethane = Leak check compound

-- = Not established

ND = not detected above laboratory reporting limits. Multiple analytes, see laboratory report for specific reporting limits.

-- = Not analyzed/not applicable/not established; or omitted based on ND laboratory results

<## = Not detected above the laboratory reporting limit specified

**Bold** values indicate a detection.

**Analyte concentration exceeds the standard for:**

| | |
|---|---|
| | Concentration reported above Residential ESL for Soil Gas Vapor Intrusion, Cancer Risk |
| | Concentration Reported Above Commercial/Industrial ESL for Soil Gas Vapor Intrusion, Cancer Risk |

**Table 9 - Summary of Indoor and Outdoor Air Sample Analytical Results**

SBPK 2021 MLF 1022-1026 Leorita Street Broken Horn Land
1022 and 1026 Leorita Street Baldwing Park, Los Angeles County, California
Terracon Project No. CB21P020

| Project Sample ID | Units | Environmental Screening Levels[1] | | | | IAS-1 | IAS-2 | IAS-3 | IAS-4 | OAS-1 | OAS-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date Collected | | Direct Exposure Residential Cancer | Direct Exposure Residential Non-Cancer | Direct Exposure Commercial / Industrial Cancer | Direct Exposure Commercial / Industrial Non-Cancer | 3/24/2021 | | | | | |
| Matrix | | | | | | Indoor and Outdoor Air | | | | | |
| **Volatile Organic Compounds (VOCs) - EPA Method TO-15 SIM** | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ug/m3 | -- | -- | -- | -- | **0.57** | **0.52** | **0.52** | **0.54** | **0.57** | **0.53** |
| 1,1-Difluoroethane | | -- | -- | -- | -- | **1.3** | **31** | **210** | **39** | **<0.30** | **<0.30** |
| 1,2,4-Trimethylbenzene | | -- | -- | -- | -- | **0.90** | **1.6** | **0.97** | **0.62** | **0.21** | **0.21** |
| 1,2-Dichloroethane | | 0.11 | 7.3 | 0.47 | 31 | **0.14** | **0.19** | **0.15** | **0.11** | **0.12** | **0.095** |
| 1,3,5-Trimethylbenzene | | -- | -- | -- | -- | **0.25** | **0.47** | **0.29** | **0.18** | **0.069** | **0.061** |
| 4-Ethyltoluene | | -- | -- | -- | -- | **0.25** | **0.41** | **0.26** | **0.18** | **0.076** | **0.069** |
| Benzene | | 0.097 | 3.1 | 0.42 | 13 | **0.95** | **0.72** | **0.66** | **0.64** | **0.48** | **0.45** |
| Bromodichloromethane | | 0.076 | -- | 0.33 | -- | **0.081** | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 |
| Carbon Tetrachloride | | 0.47 | 42 | 2 | 180 | **0.61** | **0.57** | **0.56** | **0.58** | **0.53** | **0.57** |
| Chlorobenzene | | -- | 52 | -- | 220 | **0.91** | **4.0** | **2.0** | **0.62** | <0.080 | <0.080 |
| Chloroform | | 0.12 | 100 | 0.53 | 430 | **0.19** | **0.19** | **0.14** | **0.12** | **0.11** | **0.10** |
| Chloromethane | | -- | 94 | -- | 390 | **0.78** | **0.89** | **0.84** | **0.86** | **0.69** | **0.75** |
| Dichlorodifluoromethane | | -- | -- | -- | -- | **2.7** | **2.6** | **2.7** | **2.7** | **2.8** | **2.7** |
| Ethylbenzene | | 1.1 | 1,000 | 4.9 | 4,400 | **0.53** | **0.62** | **0.45** | **0.33** | **0.17** | **0.16** |
| m&p-Xylene | | -- | -- | -- | -- | **1.8** | **2.2** | **1.6** | **1.1** | **0.50** | **0.46** |
| Methylene Chloride | | 1.0 | 420 | 12 | 1,800 | **2.1** | **4.5** | **2.3** | **1.3** | **0.49** | **0.62** |
| o-Xylene | | -- | -- | -- | -- | **0.72** | **0.95** | **0.67** | **0.47** | **0.21** | **0.20** |
| Tetrachloroethene | | 0.46 | 42 | 2.0 | 180 | **0.24** | **0.33** | **0.22** | **0.16** | **0.13** | **0.12** |
| Toluene | | -- | 310 | -- | 1,300 | **21** | **88** | **33** | **14** | **1.0** | **0.87** |
| Trichloroethene | | 0.48 | 2.1 | 3.0 | 8.8 | **1.2** | **4.6** | **2.4** | **0.82** | <0.095 | <0.095 |
| Trichlorofluoromethane | | -- | -- | -- | -- | **1.6** | **1.6** | **1.5** | **1.6** | **1.6** | **1.5** |
| *ADDITIONAL ANALYTES* | | -- | -- | -- | -- | ND | ND | ND | ND | ND | ND |

NOTES:

[1] Environmental Screening Levels (ESLs), established by the San Francisco Bay Regional Water Quality Control Board, dated January 2019, Indoor Air, Direct Exposure; Human Health Risk Levels, Table IA-1.

µg/m3 = micrograms per cubic meter

1,1-DFA = 1,1-Difluoroethane

-- = Not established

ND = not detected above laboratory reporting limits. Multiple analytes, see laboratory report for specific reporting limits.

-- = Not analyzed/not applicable/not established; or omitted based on ND laboratory results

<## = Not detected above the laboratory reporting limit specified

**Bold** values indicate a detection.

**Analyte concentration exceeds the standard for:**

| | |
|---|---|
| | Concentration reported above Residential ESL for Direct Exposure, Cancer Risk |
| | Concentration Reported Above Commercial/Industrial ESL for Direct Exposure, Cancer Risk |

# APPENDIX A

## Photographic Log

Photo 1 - Utility markings at street.

Photo 2 - Utility markings on the Property.

Photo 3 - Site overview, eastern portion of parking lot.

Photo 4 - Site overview, western portion of parking lot.

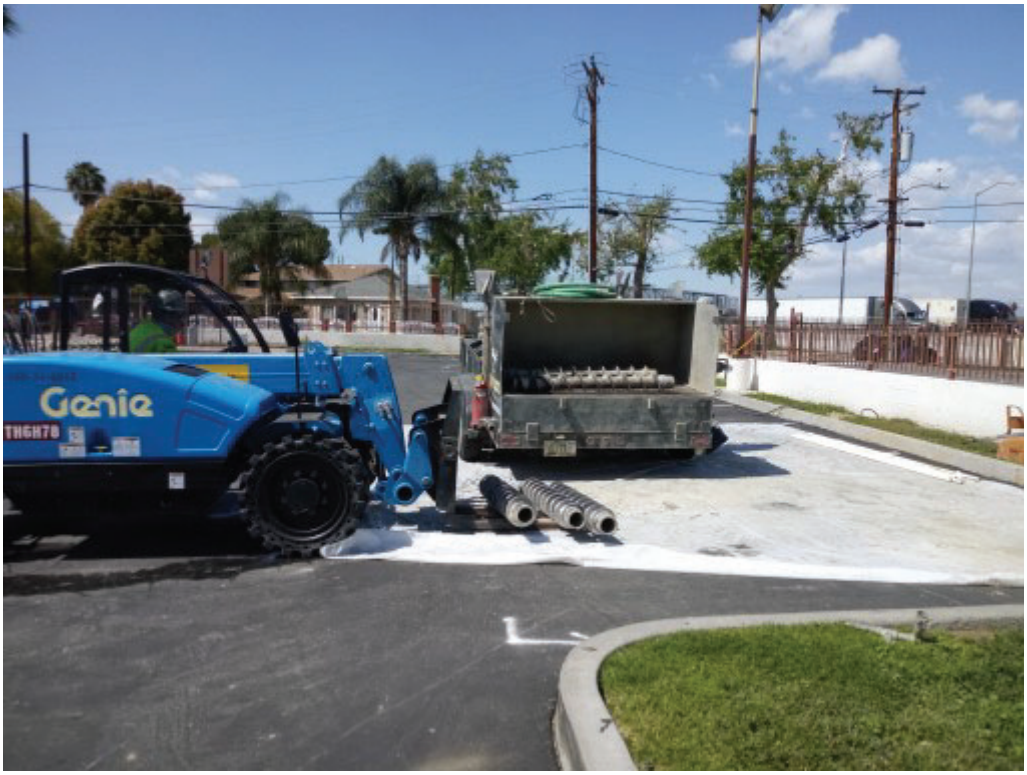



Photo 5 - Decontamination trailer, staging augers.

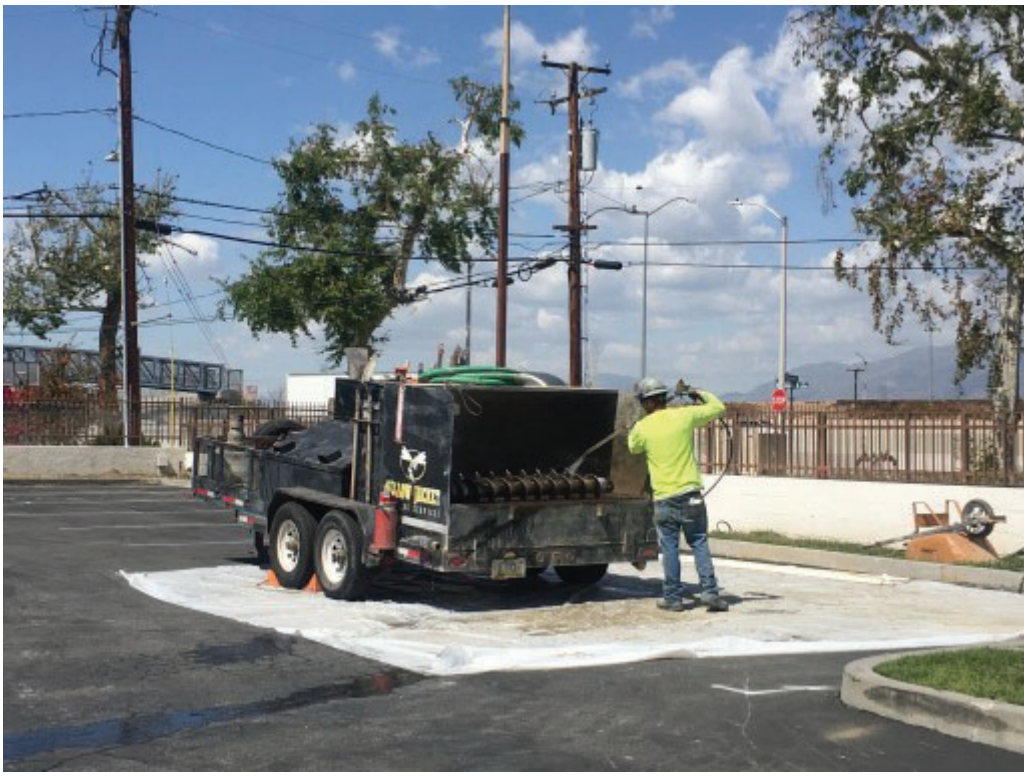


Photo 6 - Decontamination trailer, cleaning augers.

Photo 7 - Soil bin.

Photo 8 - Soil bin, partially full.

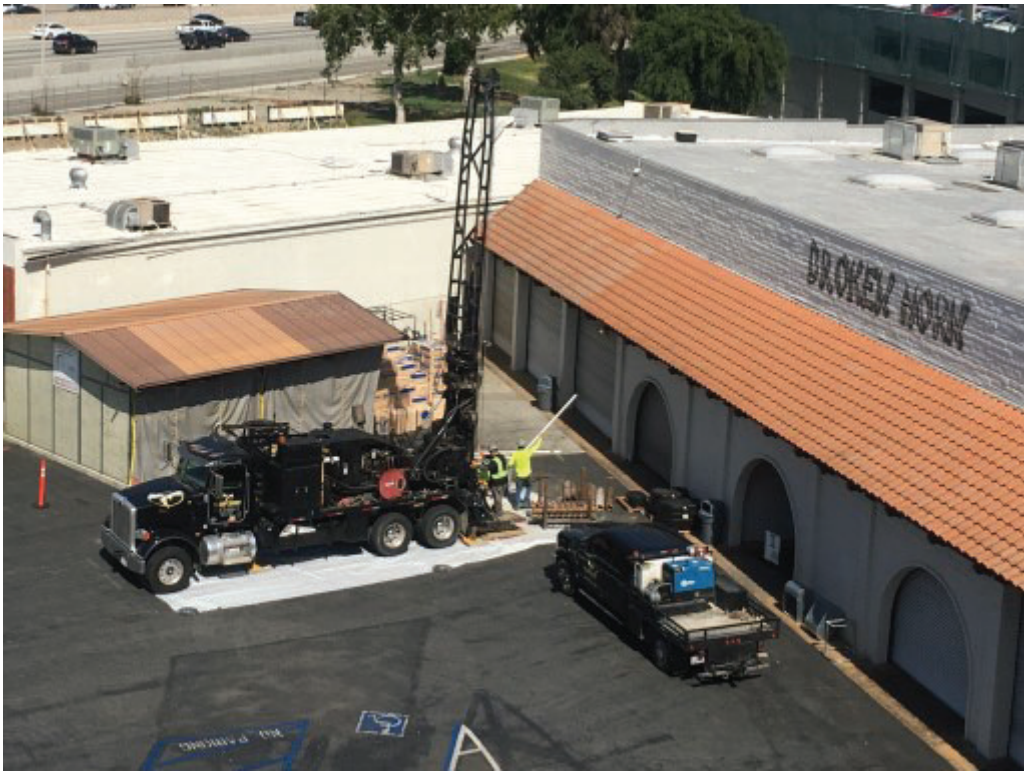



Photo 9 - Drill rig setup on soil boring B-1/TSW-1.

Photo 10 - Drill rig setup on soil boring B-1/TSW-1.

Photo 11 - Drill rig setup on soil boring B-1/TSW-1.

Photo 12 - Drill rig setup on soil boring B-1/TSW-1.

Photo 13 - Drill rig setup on soil boring B-1/TSW-1.

Photo 14 - Drill rig setup on soil boring B-2/TSW-2.

Photo 15 - Drill rig setup on soil boring B-2/TSW-2.

Photo 16 - Drill rig setup on soil boring B-3/TSW-3.

Photo 17 - Drill rig setup on soil boring B-4/TSW-4.

Photo 18 - Drill rig setup on soil boring B-4/TSW-4.

Photo 19 - Drill rig setup on soil boring B-5/TSW-5.

Photo 20 - Drill rig setup on soil boring B-6/TSW-6.

Photo 21 - Soil lithology and PID screening.

Photo 22 - Direct push drilling, SGP-1.

Photo 23 - Direct push drilling, SGP-2.

Photo 24 - Direct push drilling, SGP-4.

Photo 25 - Soil gas probe, sampling tip.

Photo 26 - Soil gas probe, temporary surface completion and valves.

Photo 27 - Soil gas probe, temporary surface completion and valves.

Photo 28 - Soil gas probe, three volume purge and sample preparation.

Photo 29 - Soil gas probe, shut-in test.

Photo 30 - Soil gas probe, sampling.

Photo 31 - Soil gas probe, shroud and leak check.

Photo 32 - Soil gas probe, shroud details.

Photo 33 - Subslab probe, SSP-1, installed.

Photo 34 - Subslab probe, SSP-1, patched.

Photo 35 - Subslab probe, SSP-1, post flooring repairs.

Photo 36 - Subslab probe, SSP-2, installed.

Photo 37 - Subslab probe, SSP-2, patched.

Photo 38 - Subslab probe, SSP-2, post flooring repairs.

Photo 39 - Subslab probe, SSP-3, installed.

Photo 40 - Subslab probe, SSP-3, patched.

Photo 41 - Subslab probe, SSP-3, post flooring repairs.

Photo 42 - Subslab probe, SSP-4, installed.

Photo 43 - Subslab probe, SSP-4, patched.

Photo 44 - Subslab probe, SSP-4, post flooring repairs.

Photo 45 - Subslab probe, SSP-5, installed.

Photo 46 - Subslab probe, SSP-5, patched.

Photo 47 - Subslab probe, SSP-6, installed.

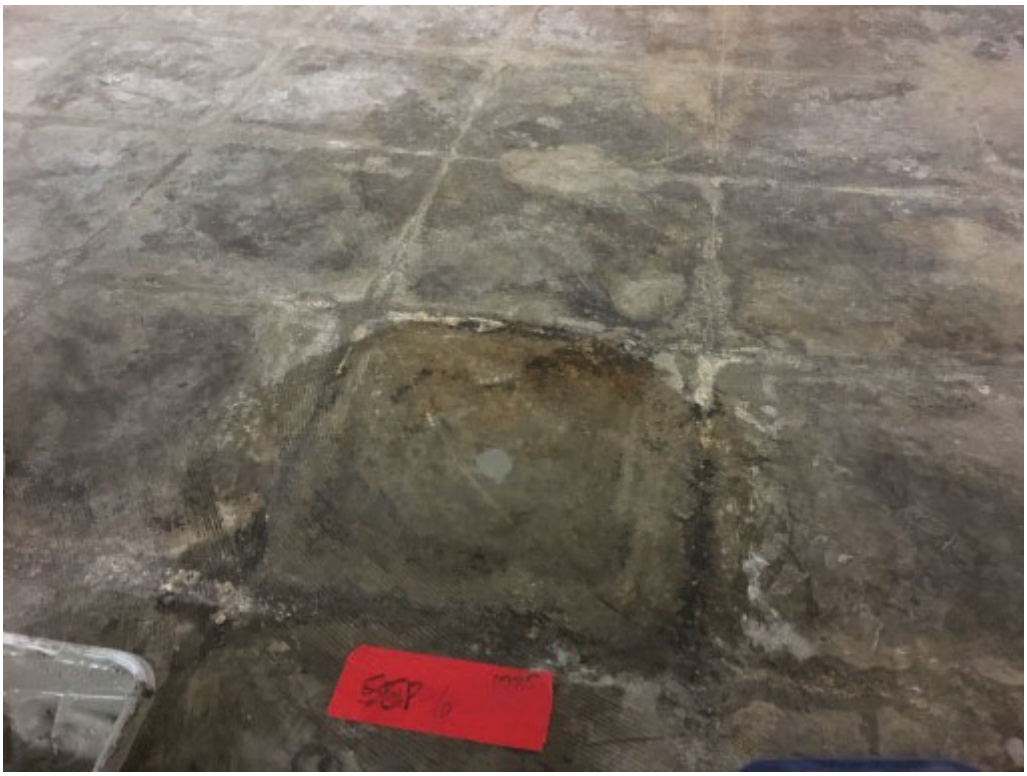


Photo 48 - Subslab probe, SSP-5, patched.

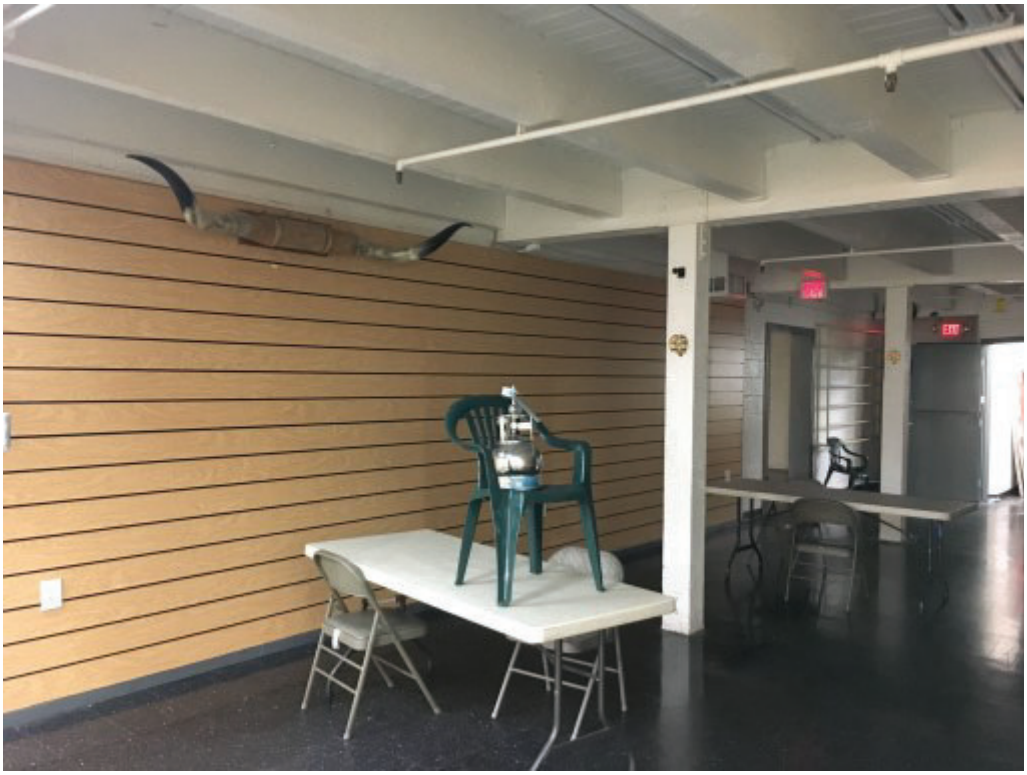


Photo 49 - Indoor air sampling, IAS-3.

Photo 50 - Indoor air sampling, IAS-4.

Photo 51 - Soil bin, secured with delineator.

Photo 52 - Soil gas probe concrete patch.

Photo 53 - Soil boring concrete patch.

Photo 54 - Soil boring concrete patch.

Photo 55 - Completion of field activities and removal of equipment and soil bin.

Photo 56 - Completion of field activities and removal of equipment and soil bin.

# APPENDIX B

## Boring Permit

# ENVIRONMENTAL HEALTH

## Drinking Water Program

5050 Commerce Drive, Baldwin Park, CA 91706
Telephone: (626) 430-5420 • http://publichealth.lacounty.gov/eh/ep/dw/dw_main.htm

# Work Plan Approval

| WORK SITE ADDRESS | CITY | ZIP | EMAIL ADDRESS |
|---|---|---|---|
| Broken Horn / CB21P020<br>1022 & 1026 Leorita Street / APN 8559-008-005, 011 | Baldwin Park | 91706 | todd.mcfarland@terracon.com |

**NOTICE:**

- WORK PLAN APPROVALS ARE VALID FOR 180 DAYS. 30 DAY EXTENSIONS OF WORK PLAN APPROVALS ARE CONSIDERED ON AN INDIVIDUAL (CASE-BY-CASE) BASIS AND MAY BE SUBJECT TO ADDITIONAL PLAN REVIEW FEES (HOURLY RATE AS APPLICABLE).
- WORK PLAN MODIFICATIONS MAY BE REQUIRED IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED AT THE SITE INSPECTION ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.
- WORK PLAN APPROVALS ARE LIMITED TO COMPLIANCE WITH THE CALIFORNIA WELL STANDARDS AND THE LOS ANGELES COUNTY CODE AND DOES NOT GRANT ANY RIGHTS TO CONSTRUCT, RENOVATE, OR DECOMMISSION ANY WELL. THE APPLICANT IS RESPONSIBLE FOR SECURING ALL OTHER NECESSARY PERMITS SUCH AS WATER RIGHTS, PROPERTY RIGHTS, COASTAL COMMISSION APPROVALS, USE COVENANTS, ENCROACHMENT PERMISSIONS, UTILITY LINE SETBACKS, CITY/COUNTY PUBLIC WORKS RIGHTS OF WAY, ETC.
- THIS PERMIT IS NOT COMPLETE UNTIL ALL OF THE FOLLOWING REQUIREMENTS ARE SIGNED BY THE DEPUTY HEALTH OFFICER. WORK SHALL NOT BE INITIATED WITHOUT A WORK PLAN APPROVAL STAMPED BY THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.

**TO BE COMPLETED BY DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM:**

| | | | | | |
|---|---|---|---|---|---|
| X | **WORK PLAN APPROVED** FOR:<br>6 soil borings up to ~160 ft bgs. | **PERMIT NUMBER:** | SR0248160 | **DATE:** | March 19, 2021 |

## ADDITIONAL APPROVAL CONDITIONS:

1) Work plan approval is issued for scope of work submitted to the Drinking Water Program. Any modifications to the scope of work will require additional work plan review.
2) Soil borings shall be sealed to terminal depth pursuant to Section 9 and Appendix B of *California Well Standards - Bulletins 74-90 & Bulletins 74-81* respectively upon completion.
    - For Portland cement, it shall be mixed at a ratio of one 94-pound sack of Portland cement 5 to 6 gallons of 'clean' water.
    - ***Up to 6%*** of bentonite may be added to the cement mixture at a ratio of two (2) pounds of bentonite one (1) gallon of 'clean' water, or in accordance with the manufacturer's specification.
    - The use of hydrated bentonite is not permitted.
3) Sealing materials shall be applied under pressure - from *the bottom of the well or boring proceeding upward in one continuous operation via a tremie pipe or equivalent* - to prevent freefall, jamming or "bridging", voids, dilution of sealing materials, and/or prevent separation of aggregate from sealants.
4) Drill cuttings and wastewater shall be disposed of in accordance with all applicable federal, State, and local requirements.
5) Sealing materials shall meet *National Sanitation Foundation (NSF 61)* standard.
6) Provide temporary cover to the borehole opening whenever work is interrupted.
7) Soil boring or exploration holes must comply with all applicable requirements published in the *California Well Standards (Bulletins 74-81 and 74-90 combined)* and the *Los Angeles County Code, Title 11.*

REHS NO: 5841

Quang Ly, REHS

# ENVIRONMENTAL HEALTH
## Drinking Water Program

5050 Commerce Drive, Baldwin Park, CA 91706
◆ Telephone: (626) 430-5420 ◆
http://publichealth.lacounty.gov/eh/docs/ep_dw_well_app.pdf

COUNTY OF LOS ANGELES Public Health

# APPLICATION FOR WELL/EXPLORATION HOLE PERMIT

| PROJECT INFORMATION | | | |
|---|---|---|---|
| PROJECT NAME / NUMBER: | Broken Horn/CB21P020 | | |
| ASSESSOR'S PARCEL NUMBER (APN): http://egisgcx.isd.lacounty.gov/slv/?Viewer=GISViewer# | MONITORING WELLS - Submit separate application(s) for each parcel. 8559008005 and 8559008011 | | |
| WORK SITE ADDRESS: | ADDRESS 1022 and 1026 Leorita Street | CITY Baldwin Park | ZIP CODE 91706 |
| CROSS STREET(S): | Dalewood Street | | |
| E-MAIL PERMIT TO: | ☐ Driller ☐ Owner ■ Consultant | | |

| SERVICE | FEE | QTY | TOTAL |
|---|---|---|---|
| **PRODUCTION WELLS** | | | |
| ☐ Residential ☐ Public / Municipal ☐ Irrigation | | | |
| ☐ Construction | $ 970.00 | x | = $ |
| ☐ Decommission ☐ Renovation | $ 1,268.00 | x | = $ |
| **NON-PRODUCTION WELLS** | | | |
| ☐ Monitoring ☐ Piezometer ☐ Water Extraction ☐ Injection ☐ Air Sparge ☐ Test Hole | | | |
| ☐ Soil Vapor Extraction *(into saturated zone / groundwater)* ☐ Geothermal Heat Exchange | | | |
| ☐ Construction ☐ Decommission | | | |
| ☐ *1-10 Wells* | $ 735.00 | | |
| ☐ *11-24 Wells* | $ 825.00 | | |
| ☐ *25+ Wells* | $ 1,666.00 | | |
| **EXPLORATION HOLES** - CPT / HYDROPUNCH / SOIL BORING **(Soil borings deeper than 10 feet or that extend into groundwater regardless of depth require a permit)** | | | |
| ☐ Up to four (4) borings | $ 126.00 | | |
| ■ 5+ Borings | $ 406.00 | | 406.00 |
| Depth of boring (Min. to Max.): 160 feet | | | |
| Estimated groundwater depth: 150 feet | | | |
| **CATHODIC WELLS** | | | |
| ☐ Construction | $ 970.00 | x | = $ |
| ☐ Decommission | $ 1,268.00 | x | = $ |
| **WATER SUPPLY YIELD** | | | |
| ☐ Water Supply Yield Test - Commercial | $ 1,038.00 | x | = $ |
| ☐ Water Supply Yield Test - Residential | $ 971.00 | x | = $ |
| WELL SITE PLAN REVIEW (for Small Water Systems) | $ 584.00 | x | = $ |
| WATER TREATMENT SYSTEM EVALUATION | $ 519.00 | x | = $ |
| WATER SAMPLING (Commercial food service facility for USDA certification) | $ 821.00 | x | = $ |
| **TOTAL COST** | | | **$ 406.00** |

Applications are nontransferable. Please allow **ten (10) business days** for work plan review and response.

| FOR OFFICE USE ONLY |
|---|
| ASSIGNED INSPECTOR: |
| DATE: |
| SUPERVISOR'S INITIAL: |
| SITE / PERMIT NO.: **SR** |
| INVOICE NO.: **IN** |

# ENVIRONMENTAL HEALTH
## Drinking Water Program

5050 Commerce Drive, Baldwin Park, CA 91706
◆ Telephone: (626) 430-5420 ◆
http://publichealth.lacounty.gov/eh/docs/ep_dw_well_app.pdf

## APPLICATION FOR WELL/EXPLORATION HOLE PERMIT

| WORK SITE ADDRESS | CITY | ZIP CODE | QUANTITY (QTY) |
|---|---|---|---|
| 1022 and 1026 Leorita Street | Baldwin Park | 91706 | 6 |

| CALIFORNIA STATE REGISTERED DRILLER I | C-57 LICENSE HOLDER NAME | C-57 LICENSE NUMBER | C-57 EXPIRATION DATE |
|---|---|---|---|
| Yellow Jacket Drilling Services LLC | Richard LeBlanc | 1034407 | 12/31/2021 |

| TELEPHONE NO. | MOBILE | E-MAIL ADDRESS |
|---|---|---|
| (909) 989-8563 | (626) 716-6470 | dkinloch@yjdrilling.com |

| CALIFORNIA STATE REGISTERED DRILLER II | C-57 LICENSE HOLDER NAME | C-57 LICENSE NUMBER | C-57 EXPIRATION DATE |
|---|---|---|---|
| | | | |

| TELEPHONE NO. | MOBILE | E-MAIL ADDRESS |
|---|---|---|
| | | |

| OWNER NAME | TELEPHONE / MOBILE | E-MAIL |
|---|---|---|
| Nuzzo Family Limited Partnership | (714) 931-2123 | jerrynuzzo@yahoo.com |

| CONSULTANT | OFFICE NUMBER | | |
|---|---|---|---|
| Terracon Consultants, Inc. | (909) 824-7311 | | |
| PROJECT CONTACT | TELEPHONE NO. Ext. | MOBILE | E-MAIL ADDRESS |
| Todd McFarland | (909) 301-6068 | (805) 294-8147 | todd.mcfarland@terracon.com |
| PROJECT MANAGER | TELEPHONE NO. Ext. | MOBILE | E-MAIL ADDRESS |
| Todd McFarland | (909) 301-6068 | (805) 294-8147 | todd.mcfarland@terracon.com |

### REQUIRED SUPPORTING DOCUMENTS

**Well Construction**

- ☐ Written narrative describing work plan details
- ☐ Well diagram detailing depth, size, thickness, and materials of:
  - (1) the casing
  - (2) the annular (sanitary) seal
  - (3) the screen / slotting
  - (4) any pertinent geological features
- ☐ Scaled drawing of roads, property lines, private sewage disposal systems, surface water features, blue line streams, and other possible sources of contamination within 200 feet of the well site

**Well Decommission**

- ☐ Written narrative describing work plan details
- ☐ Well construction logs
- ☐ Type and amount of sealant
- ☐ Method of assessment
- ☐ Method of upper seal pressure application (including PSI and time applied)
- ☐ Scaled drawing of roads, property lines, private sewage disposal systems, surface water features, blue line streams, and other possible sources of contamination within 200 feet of the well site

**Borings**

- ■ Written narrative describing work plan details
- ■ Scaled drawing of roads, property lines, private sewage disposal systems, surface water features, blue line streams, and other possible sources of contamination within 200 feet of the well site

**1022 and 1026 Leorita Street, Baldwin Park, CA 91706**

**Proposed soil borings**

The proposed soil boring locations (approximate) are shown on Exhibit 2. The proposed scope includes the following elements:

| Type | Quantity | Depth* (feet bgs) | Sample Media | Drilling Method | Abandonment Method |
|---|---|---|---|---|---|
| Soil Borings | 6 | 160 | Soil, Groundwater | Hollow Stem Auger | Neat cement |
| | | **960 Feet (total)** | | | |

bgs = below ground surface
* approximately depth, or first encountered groundwater, and/or refusal

Drilling services for the proposed soil borings will be performed by a State-of-California C-57 licensed driller using a hollow stem auger drill rig. Field work will be conducted under the supervision of a Terracon environmental professional and the oversight of a California licensed Professional Geologist (P.G.).

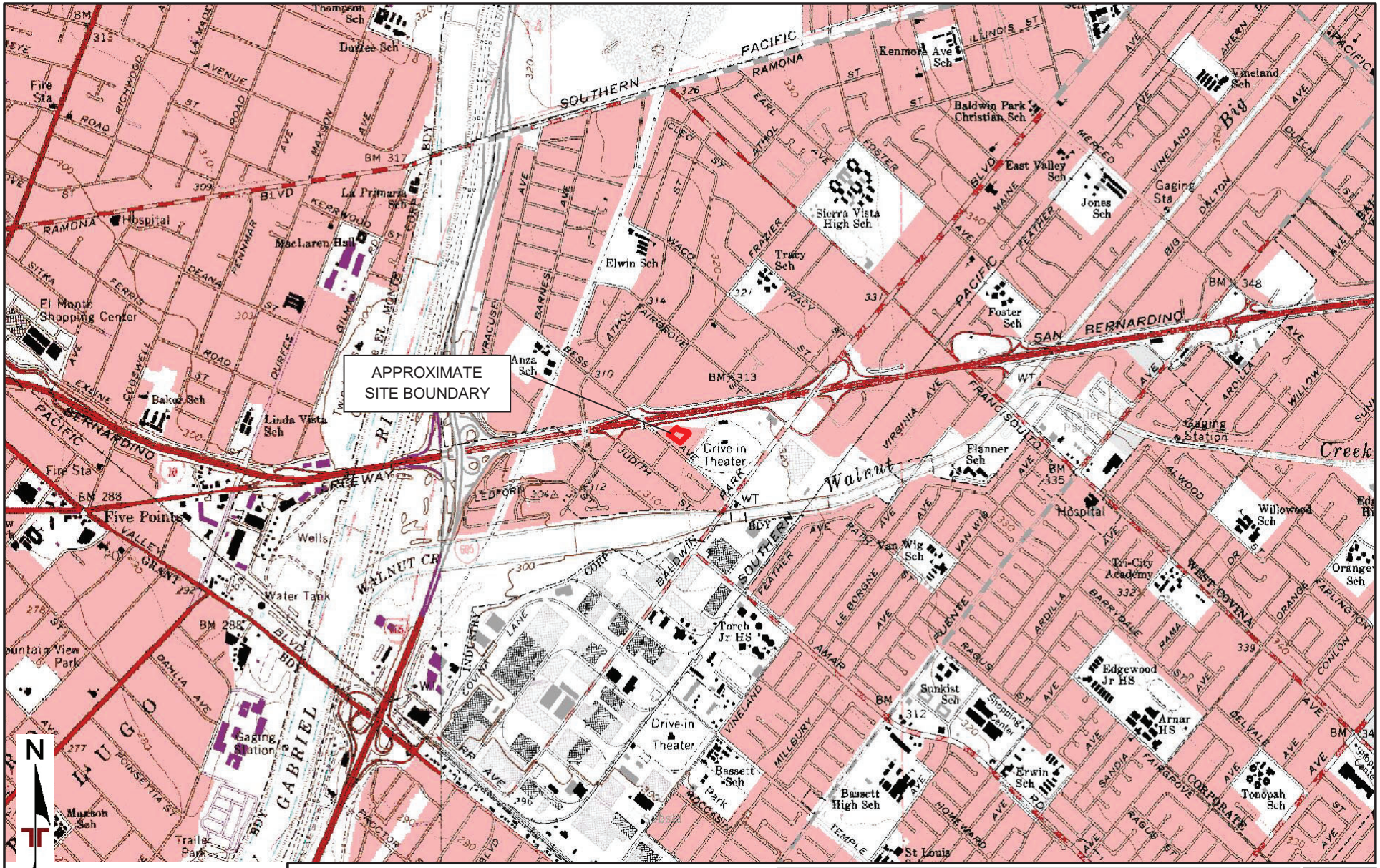
**Soil Borings and Sampling**

From each 160-foot boring, soil samples will be collected approximately every 5-feet, beginning at 5 feet bgs to the terminal depth. Once lithology and depth to groundwater are established, sampling intervals may be adjusted. Soil samples will be collected to document lithology, color, and relative moisture content, and logged on a boring log.

**Temporary Sampling Wells and Sampling**

Terracon proposes to install temporary sampling wells to assess groundwater conditions beneath the Property within each of the deeper (160-foot) soil borings. The wells will be constructed with new 2-inch PVC well casing into the shallow water bearing formation and constructed with 5-feet of 0.020-inch slotted well screen from the bottom of the boring, flush threaded to 2-inch casing to the existing grade.

Terracon will measure depth to static groundwater and surface elevations (and/or casing elevations) will be measured to establish groundwater flow and gradient. At the completion of groundwater sampling activities, the temporary casing will be removed and the boreholes will be plugged with neat cement, or similarly agency approved sealing material, and patched at the surface to match the existing surface.




TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: EL MONTE, CA (1/1/1994) and BALDWIN PARK, CA (1/1/1981).

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

| | |
|---|---|
| Project Manager: | TGM |
| Drawn by: | TGM |
| Checked by: | CAP |
| Approved by: | TGM |

| | |
|---|---|
| Project No. | CB21P020 |
| Scale: | 1"=2,000' |
| File Name: | -- |
| Date: | 3/15/2021 |

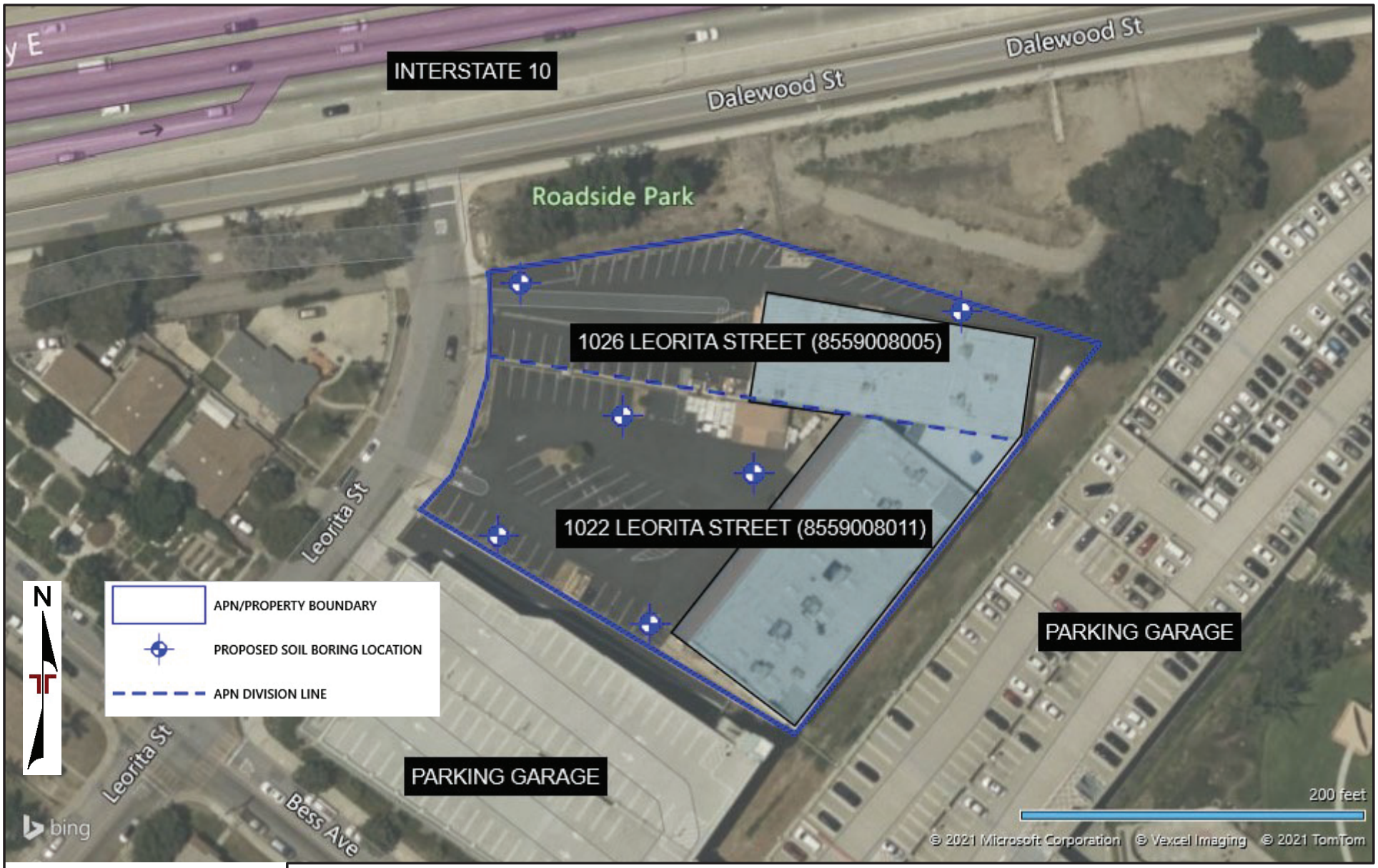
Terracon
1355 E Cooley Dr, Ste C
Colton, CA 92324-3954

TOPOGRAPHIC MAP

Broken Horn
**1022 and 1026 Leorita Street**
**Baldwin Park, CA**

Exhibit

1




AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

| | |
|---|---|
| Project Manager: | TGM |
| Drawn by: | TGM |
| Checked by: | CAP |
| Approved by: | TGM |

| | |
|---|---|
| Project No. | CB21P020 |
| Scale: | AS SHOWN |
| File Name: | -- |
| Date: | 3/15/2021 |

Terracon
1355 E Cooley Dr, Ste C
Colton, CA 92324-3954

SITE DIAGRAM

Broken Horn
**1022 and 1026 Leorita Street**
**Baldwin Park, CA**

Exhibit

2

About | Legend | Layers

# Legend

## SMD Sewer Manholes

- Other

## SMD Sewer Lines

- Clay
- Lined Clay
- Cement
- Lined Cement
- ABS Plastic
- Other

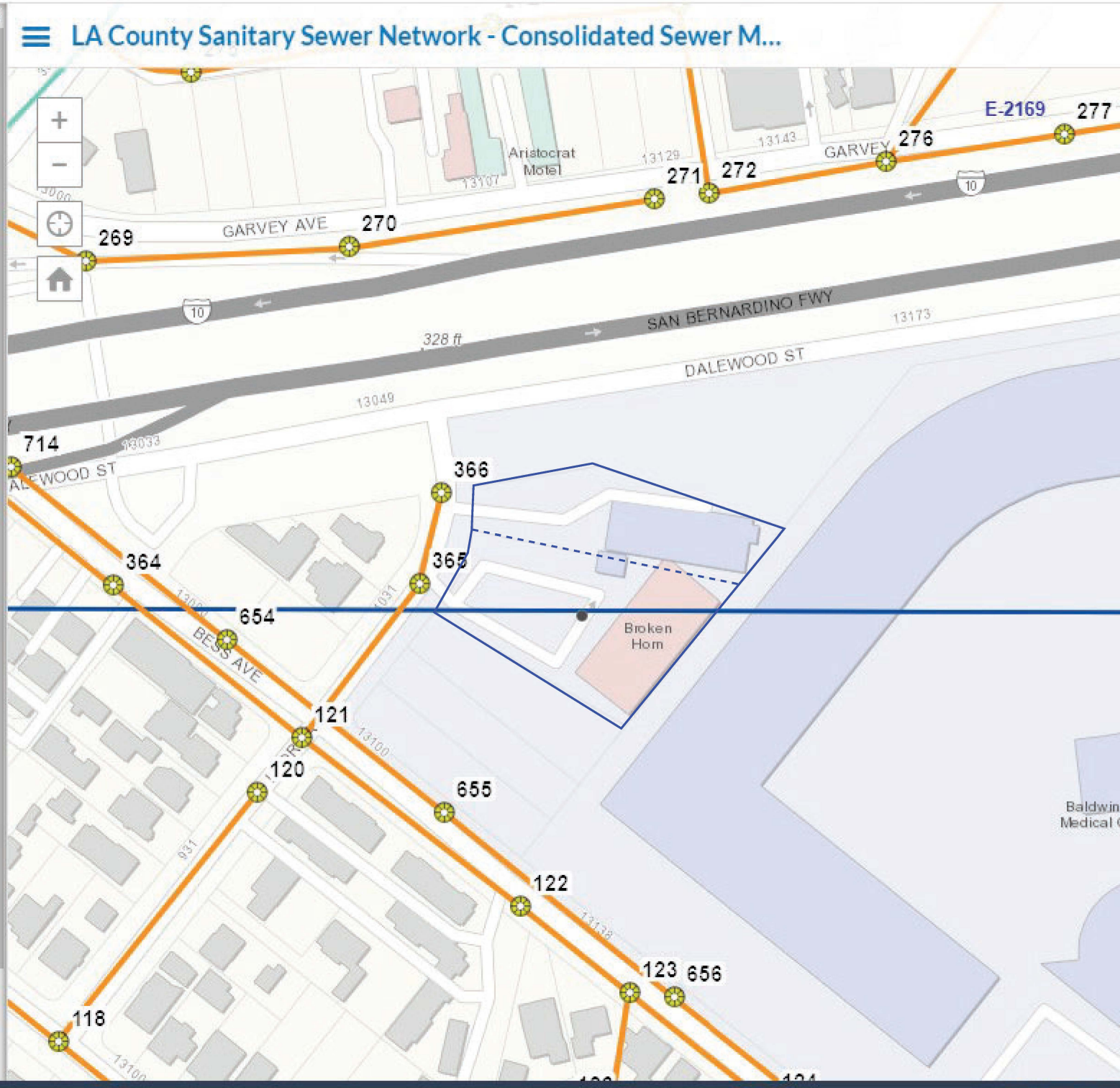
## Non SMD Manholes

## Non SMD Sewers

## Trunk Manholes

## Trunk Main Lines

## SMD Operations Map



SEE SHT. NO. E-2169

U-45
U-46
U-47
U-48
U-77
U-78

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

SEE SHT. NO. E-2123

SEE SHT. NO. E-2216

SEE SHT. NO. E-2171

N 4,287,000

N 4,129,000

AUTOMATED GRAPHICS

METERS
0 50 100 200 250
0 200 400 600 800
FEET

## LEGEND

- CLAY SEWERS MAINTAINED BY SMD, 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.O. CLEANOUT
- L.H. LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 513

MAP REV.
10-11-11

E-2170

MAP REV
11-30-10

DATA BASE REV
03-14-89

CONSOLIDATED S.M.D.

E-2170

T:637:J3

1127.1227.2170

SEE SHT. NO. E-2169

U-68
U-77
U-78

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

SEE SHT. NO. E-2122

SEE SHT. NO. E-2215

E 4,287,000

N 4,136,500

SEE SHT. NO. E-2170

AUTOMATED GRAPHICS

METERS
0 50 100 200 250
0 200 400 600 800
FEET

LEGEND

- CLAY SEWERS MAINTAINED BY SMD, 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- CLEANOUT
- LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 719

L.A. COUNTY

MAP REV.
08-24-09

E-2169

MAP REV
08-26-98

DATA BASE REV
02-21-89

CONSOLIDATED S.M.D.

E-2169

T:597:J7

1127.1227.2169

# APPENDIX C

## Geophysical Survey

# Job Summary

**Job Date : 3/18/2021**

| | | | |
|---|---|---|---|
| **Customer** | Terracon | **Phone Number** | (805) 294-8147 |

| Billing Address | City | State | Zip |
|---|---|---|---|
| 1355 E. Cooley Dr Ste C | Colton | CA | 92324 |

**Job Details**

| | |
|---|---|
| **Jobsite Location** | 1022 AND 1026 LEORITA ST |
| **City** | BALDWIN PARK |
| **State** | CA |

| | |
|---|---|
| **WA Number** | 253711 |
| **Job Num** | |
| **PO Num** | CB21P020 |

| | | | | | |
|---|---|---|---|---|---|
| **Lead Technician** | KNERR, CHRIS | **Phone** | | **Email** | chris.knerr@gprsinc.com |

Thank you for using GPRS on your project. We appreciate the opportunity to work with you. If you have questions regarding the results of this scanning, please contact the lead GPRS technician on this project.

**EQUIPMENT USED**

The following equipment was used on this project:

- Underground Scanning GPR antenna. Typically capable of detecting objects up to 8' deep or more in ideal conditions but maximum effective depth can vary widely and depends on site and soil conditions. Depth penetration is most commonly limited by moisture and clay/conductive soils. Depths provided should always be treated as estimates as their accuracy can be affected by multiple factors.
- Electromagnetic Pipe and Cable Locator. Detects electromagnetic fields. Used to actively trace conductive pipes and tracer wires, or passively detect power and radio signals traveling along conductive pipes and utilities. Depths provided should always be treated as estimates as their accuracy can be affected by multiple factors.

**Work Performed**

Ground Penetrating Radar Systems performed the following work on this project:

**Underground Utility**

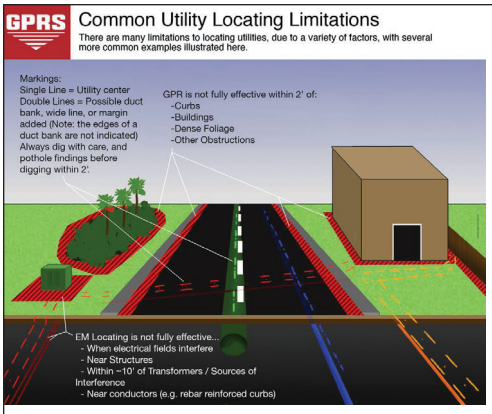
The scope of work included scanning the specified area to locate underground utilities. A tracer signal was sent along any accessible metallic utility or tracer wire, and the area was scanned with GPR to locate any additional targets. The locations of any detected utilities and anomalies were marked directly at the site with paint, flags, stakes, or other appropriate means, and results were reviewed with onsite personnel unless otherwise noted.

- Clear and mark utilities for 11 outdoor borring locations and 6 indoor sub slab locations.
- The effective depth of GPR will vary throughout a site depending on surface and soil conditions. In this area, the maximum effective GPR depth was approximately 0-4 feet.
- Marked all found utilities with color coded marking paint. Water lines were non conductive unable to confirm.

**Pictures**

# Job Summary

**Job Date : 3/18/2021**




Utility Limitations

**TERMS & CONDITIONS**

http://www.gprsinc.com/termsandconditions.html

**SIGNATURE**

**Contact Name**

**Todd McFarland (805) 294-8147 Todd.McFarland@terracon.com**

# Job Summary

**Job Date : 3/18/2021**

GPRS

1.866.914.4718 · GPRSINC.COM

## UTILITY LOCATING

To ensure the overall timely success of your project, utility detection is critical to any construction project where subsurface excavation is planned. If this critical first step is ignored, the risk for injury increases, budget overruns can multiply and your schedule can be delayed.

## VIDEO PIPE INSPECTION

Video Pipe Inspection (CCTV) is a service used to inspect underground water, sewer and lateral pipelines. VPI is a great tool for investigating cross-bores, structural faults and damages, and lateral line inspection.

## CONCRETE SCANNING

With new build construction and renovation projects, the likelihood of needing to cut or core concrete is high. There is an inherent risk of striking rebar, conduits, and post tension cables during the cutting or coring process. Our industry-leading concrete scanning services can mitigate the risks associated with saw cutting and core drilling concrete slabs.

## REPORTS & DRAWINGS

The goal of the GPRS Deliverables Department is to deliver clear and understandable findings with each of our outputs from field markings to field sketches, KMZ files, or CAD drawings that provide 2D site plans or even 3D CAD models. In addition, upon the completion of every project, our customers receive a job summary that includes job scope information, site photos, description of site conditions, equipment used, and notes from the project.

### NATIONWIDE SERVICE

With team members located in every major metropolitan area in the U.S., we're just a short drive away from any project. Our footprint allows us to service all of your projects, nationwide.

### RAPID RESPONSE

Time is always critical in any construction project. We understand this and have, accordingly, developed and perfected our operations to quickly and efficiently respond to our customers within 24-48 hours, or less.

### CONSULTATIVE APPROACH

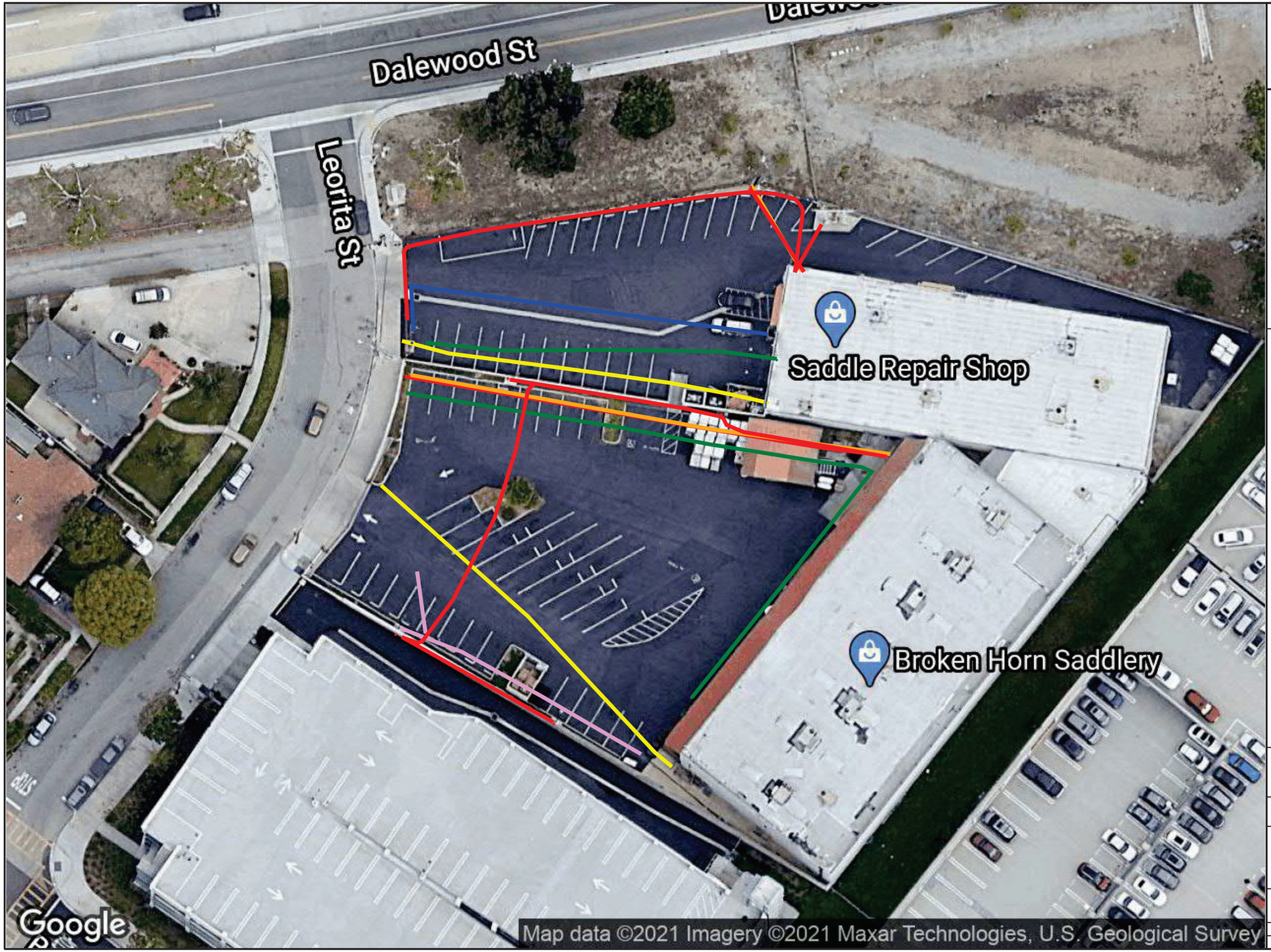
Our Project Managers are trained to ask questions and provide you with answers. This project-specific consultative approach - a GPRS trademark – helps us hone in on your subsurface issues and ensure we provide valuable problem-solving solutions to keep your job moving.

### PROVEN RESULTS

GPRS deploys the best equipment, operated by skilled Project Managers, who know how to solve your subsurface locating issues. Since our inception, GPRS has completed hundreds of thousands of projects in North America. Our accuracy rate on these projects? Over 99%

The SIM Specification standard is the industry-leading, metrics-based guideline for the underground locating and concrete scanning industries. SIM includes these three main elements:

SIMSPEC.ORG




GPRS

## DISCLAIMERS

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3. GPRS CANNOT GUARANTEE THAT ALL UTILITIES OR OTHER SUBSURFACE FEATURES ON SITE WERE ABLE TO BE LOCATED. ALL FINDINGS ARE SUBJECT TO THE TERMS AND CONDITIONS THAT CAN BE VIEWED AT THIS LINK: https://gp-radar.com/terms-conditions
4. GPRS DOES NOT PROVIDE GEOPHYSICAL, GEOLOGICAL, LAND SURVEYING, OR ENGINEERING SERVICES. GPRS IS NOT A LICENSED LAND SURVEYOR. THIS PDF IS NOT A LAND SURVEY AND MAY NOT BE RELIED ON OR USED FOR ANY PURPOSES EXCEPT AS EXPRESSLY STATED HEREIN.
5. FOR ADDITIONAL INFORMATION REGARDING FINDINGS AND EQUIPMENT USED, SEE THE "JOB SUMMARY REPORT" AS WELL AS OTHER SUBMITTALS INCLUDED IN THE SUBMITTAL LETTER SENT VIA EMAIL FOLLOWING COMPLETION OF FIELD WORK.
6. PRIVATE UTILITY LOCATING IS NEVER A REPLACEMENT FOR ONE CALL/811 SERVICES. STATE LAW REQUIRES 811 TO BE CALLED PRIOR TO ANY AND ALL EXCAVATION ACTIVITIES.

## LEGEND

- ELECTRICAL
- GAS
- SANITARY
- TELECOMM
- UNKNOWN
- WATER

0' 10' 20' 30' 40' 50'

811 Know what's below. Call before you dig.

GPRS IS NOT AFFILIATED WITH 811 BUT DOES RECOMMEND THAT THE SERVICE IS USED ON EVERY PROJECT IN ADDITION TO OUR OWN. SEE NOTE #6 ABOVE.

**FOR INFORMATION ONLY**

# GPRS FINDINGS MAP

**PREPARED FOR:**
TERRACON

**LOCATION:**
BROKEN HORN SADDLERY
1022 AND 1026 LEORITA ST
BALDWIN PARK , CA

**PROJECT MANAGER:**
CHRIS KNERR
CHRIS.KNERR@GPRSINC.COM

| DATE | 2021 MAR 18 | | |
|---|---|---|---|
| DRAWING NO. | 1 | REV. | 0 |

253711

# APPENDIX D

## Soil Boring Logs

# BORING LOG NO. SGP-1



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit A-2

| DEPTH | GRAPHIC LOG | | INSTALLATION DETAILS |
|---|---|---|---|
| 0.3 | | **ASPHALT**, 3.5" thick | |
| | | **SILTY SAND WITH GRAVEL (SM)**, fine grained, Medium Brown, moist, gravel upto 1" | 1/4" Nylaflow Tubing; Granular bentonite chips; #3 Sand |
| 7.0 | | **SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel upto 2" | Granular bentonite chips; #3 Sand |
| 20.5 | | ***Boring Terminated at 20.5 Feet*** | |

DEPTH (Ft.): 5, 10, 15, 20

WATER LEVEL OBSERVATIONS

SAMPLE TYPE

PID: 0 (at 5 ft), 0 (at 20 ft)

Stratification lines are approximate. In-situ, the transition may be gradual.

Completed as dual nested soil gas probe

Advancement Method:
Direct Push Technology

Abandonment Method:
Boring backfilled with bentonite
Surface capped with concrete

Notes:

**WATER LEVEL OBSERVATIONS**

*Groundwater not encountered*

Terracon

Boring Started: 03-23-2021 | Boring Completed: 03-23-2021

Drill Rig: 7822 DT Geoprobe | Driller: BC2

Project No.: CB21P020 | Exhibit: B-1

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_DIRECT PUSH LOGS_SOIL GAS PROBES.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. SGP-2



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit A-2

| DEPTH | GRAPHIC LOG | | INSTALLATION DETAILS |
|---|---|---|---|
| 0.3 | | **ASPHALT**, 3.5" thick | 1/4" Nylaflow Tubing |
| | | **SILTY SAND WITH GRAVEL (SM)**, fine grained, Medium Brown, moist, gravel upto 1" | Granular bentonite chips |
| 4.0 | | **SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel upto 2" | #3 Sand |
| | | | Granular bentonite chips |
| 20.5 | | | #3 Sand |
| | | ***Boring Terminated at 20.5 Feet*** | |

| DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|
| 5 | | | 0 |
| 10 | | | |
| 15 | | | |
| 20 | | | 0.1 |

Stratification lines are approximate. In-situ, the transition may be gradual.

Completed as dual nested soil gas probe

Advancement Method:
Direct Push Technology

Abandonment Method:
Boring backfilled with bentonite
Surface capped with concrete

Notes:

**WATER LEVEL OBSERVATIONS**

*Groundwater not encountered*

Terracon

| | |
|---|---|
| Boring Started: 03-23-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: 7822 DT Geoprobe | Driller: BC2 |
| Project No.: CB21P020 | Exhibit: B-2 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_DIRECT PUSH LOGS_SOIL GAS PROBES.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. SGP-3



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit A-2

| DEPTH | GRAPHIC LOG | | INSTALLATION DETAILS |
|---|---|---|---|
| 0.3 | | **ASPHALT**, 3.5" thick | 1/4" Nylaflow Tubing |
| | | **SILTY SAND WITH GRAVEL (SM)**, fine grained, Medium Brown, moist, gravel upto 1.5" | Granular bentonite chips |
| 4.0 | | **SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel upto 2" | #3 Sand |
| | | | Granular bentonite chips |
| 20.5 | | | #3 Sand |
| | | ***Boring Terminated at 20.5 Feet*** | |

DEPTH (Ft.): 5, 10, 15, 20

WATER LEVEL OBSERVATIONS

SAMPLE TYPE

PID: 0 (at 5 ft), 0.3 (at 20 ft)

Stratification lines are approximate. In-situ, the transition may be gradual.

Completed as dual nested soil gas probe

Advancement Method:
Direct Push Technology

Abandonment Method:
Boring backfilled with bentonite
Surface capped with concrete

Notes:

**WATER LEVEL OBSERVATIONS**

*Groundwater not encountered*

Terracon

Boring Started: 03-23-2021 | Boring Completed: 03-23-2021

Drill Rig: 7822 DT Geoprobe | Driller: BC2

Project No.: CB21P020 | Exhibit: B-3

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_DIRECT PUSH LOGS_SOIL GAS PROBES.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. SGP-4



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit A-2

| DEPTH | GRAPHIC LOG | | INSTALLATION DETAILS |
|---|---|---|---|
| 0.3 | | **ASPHALT**, 3.5" thick | 1/4" Nylaflow Tubing |
| | | **SILTY SAND WITH GRAVEL (SM)**, fine grained, Medium Brown, moist, gravel upto 1.5" | Granular bentonite chips |
| 3.0 | | **SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel upto 2" | #3 Sand |
| | | | Granular bentonite chips |
| 20.5 | | | #3 Sand |
| | | ***Boring Terminated at 20.5 Feet*** | |

DEPTH (Ft.): 5, 10, 15, 20

WATER LEVEL OBSERVATIONS

SAMPLE TYPE

PID: 0.2, 0.6

Stratification lines are approximate. In-situ, the transition may be gradual.

Completed as dual nested soil gas probe

Advancement Method:
Direct Push Technology

Abandonment Method:
Boring backfilled with bentonite
Surface capped with concrete

Notes:

**WATER LEVEL OBSERVATIONS**

*Groundwater not encountered*

Terracon

Boring Started: 03-23-2021 | Boring Completed: 03-23-2021

Drill Rig: 7822 DT Geoprobe | Driller: BC2

Project No.: CB21P020 | Exhibit: B-4

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_DIRECT PUSH LOGS_SOIL GAS PROBES.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. SGP-5



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit A-2

| DEPTH | GRAPHIC LOG | | INSTALLATION DETAILS | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| 0.3 | | **ASPHALT**, 3.5" thick | 1/4" Nylaflow Tubing | | | | |
| | | **SILTY SAND WITH GRAVEL (SM)**, fine grained, Medium Brown, moist, gravel upto 1" | Granular bentonite chips | | | | |
| 3.0 | | **SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel upto 2" | #3 Sand | 5 | | | 0.1 |
| | | | Granular bentonite chips | 10 | | | |
| | | | | 15 | | | |
| 20.5 | | | #3 Sand | 20 | | | 0 |
| | | ***Boring Terminated at 20.5 Feet*** | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Completed as dual nested soil gas probe

Advancement Method:
Direct Push Technology

Abandonment Method:
Boring backfilled with bentonite
Surface capped with concrete

Notes:

**WATER LEVEL OBSERVATIONS**

*Groundwater not encountered*

Terracon

| | |
|---|---|
| Boring Started: 03-23-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: 7822 DT Geoprobe | Driller: BC2 |
| Project No.: CB21P020 | Exhibit: B-5 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_DIRECT PUSH LOGS_SOIL GAS PROBES.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-1/TSW-1



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065795° Longitude: -117.988042°

Surface Elev.: 315.96 (Ft.)

| DEPTH | ELEVATION (Ft.) | Description |
|---|---|---|
| 0.3 | 315.5 | **ASPHALT**, 4" thick |
| | | **SILTY SAND WITH GRAVEL (SM)**, fine grained, medium brown, moist, gravel up to 1" |
| 5.0 | 311 | |
| | | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 1" |
| 15.0 | 301 | |
| 16.0 | 300 | **SILT (ML)**, medium brown, moist |
| | | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 1" |

INSTALLATION DETAILS: 2" PVC casing

| DEPTH (Ft.) | SAMPLE TYPE | PID |
|---|---|---|
| 5 | | 0.2 |
| 10 | | 0.1 |
| 15 | | 0.0 |
| 20 | | 0.2 |
| 25 | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 118.53 feet bgs*

Terracon

Boring Started: 03-22-2021 | Boring Completed: 03-23-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-1

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-1/TSW-1



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065795° Longitude: -117.988042°

Surface Elev.: 315.96 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing | 30 | | | 0.0 |
| | | | | 35 | | | |
| | | | | 40 | | | 0.2 |
| | | | | 45 | | | |
| | 50.0 | 266 | | 50 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 118.53 feet bgs*

Terracon

Boring Started: 03-22-2021 | Boring Completed: 03-23-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-2

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-1/TSW-1



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065795° Longitude: -117.988042°

Surface Elev.: 315.96 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2" | | 2" PVC casing | | | | 0.1 |
| | 70.0 | 246 | | 55 | | | |
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, light brown, moist, gravel up to 1" | | | 60 | | | |
| | | | | 65 | | | |
| | | | | 70 | | | 0.3 |
| | | | | 75 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
No recovery at 60'

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 118.53 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-22-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-3 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-1/TSW-1



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065795° Longitude: -117.988042°

Surface Elev.: 315.96 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing | 80 | | | 0.2 |
| | | | | 85 | | | |
| | | | | 90 | | | 0.3 |
| | | | | 95 | | | |
| | | | | 100 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 118.53 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-22-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-4 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-1/TSW-1



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065795° Longitude: -117.988042°

Surface Elev.: 315.96 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing | | | | 0.3 |
| | 110.0 | 206 | | 105 | | | |
| | **SILTY SAND WITH GRAVEL (SM)**, fine grained, medium brown, moist, gravel up to 1" | | | 110 | | | 2.3 |
| | 120.0 | 196 | | 115 | | | |
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine to coarse grained, light brown, wet, gravel up to 1" | | 2" PVC well screen<br>#3 Sand | 120 | | | 0.1 |
| | | | | 125 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
102'-105' Cobbles upto 5"
Groundwater encountered at 119.2'

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 118.53 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-22-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-5 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-1/TSW-1



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065795° Longitude: -117.988042°

Surface Elev.: 315.96 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | | | 2" PVC well screen | | | | |
| | | | #3 Sand | | | | |
| | 130.0 | 186 | | 130 | | | 0.2 |

**POORLY GRADED SAND WITH GRAVEL (SP)**, fine to coarse grained, light brown, wet, gravel up to 1" *(continued)*

***Boring Terminated at 130 Feet***

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 118.53 feet bgs*

Terracon

Boring Started: 03-22-2021 | Boring Completed: 03-23-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-6

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-2/TSW-2



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065592° Longitude: -117.988274°

Surface Elev.: 314.85 (Ft.)

| DEPTH | ELEVATION (Ft.) | Description |
|---|---|---|
| 0.3 | 314.5 | **ASPHALT**, 4" thick |
| | | **SILTY SAND WITH GRAVEL (SM)**, fine grained, medium brown, moist, gravel up to 1" |
| 5.0 | 310 | |
| | | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 1" |
| 15.0 | 300 | |
| | | **SILT (ML)**, medium brown, moist |
| 16.0 | 299 | |
| | | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 1" |

INSTALLATION DETAILS: 2" PVC casing

| DEPTH (Ft.) | PID |
|---|---|
| 5 | 0.4 |
| 10 | 0.3 |
| 15 | 0.9 |
| 20 | 0.6 |
| 25 | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 117.44 feet bgs*

Terracon

Boring Started: 03-23-2021 | Boring Completed: 03-23-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-7

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-2/TSW-2



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065592° Longitude: -117.988274°

Surface Elev.: 314.85 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing | 30 | | | 0.2 |
| | | | | 35 | | | |
| | | | | 40 | | | 0.2 |
| | | | | 45 | | | |
| | 50.0 | 265 | | 50 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 117.44 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-23-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-8 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-2/TSW-2



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065592° Longitude: -117.988274°

Surface Elev.: 314.85 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2" | | 2" PVC casing | 55 | | | |
| | | | | 60 | | | 0.3 |
| | | | | 65 | | | |
| | 70.0 | 245 | | 70 | | | 0.5 |
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, light brown, moist, gravel up to 1" | | | 75 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
Cobbles upto 5" in cuttings.

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 117.44 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-23-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-9 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-2/TSW-2



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065592° Longitude: -117.988274°

Surface Elev.: 314.85 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing | 80 | | | 0.7 |
| | | | | 85 | | | |
| | | | | 90 | | | 0.4 |
| | | | | 95 | | | |
| | | | | 100 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 117.44 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-23-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-10 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-2/TSW-2



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065592° Longitude: -117.988274°

Surface Elev.: 314.85 (Ft.)

| DEPTH | ELEVATION (Ft.) | GRAPHIC LOG | DESCRIPTION | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|---|
| | | | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, light brown, moist, gravel up to 1" *(continued)* | 2" PVC casing | | | | 0.9 |
| 110.0 | 205 | | **SILTY SAND (SM)**, fine grained, medium brown, moist | | 110 | | | 0.3 |
| 120.0 | 195 | | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, mottled, wet, gravel up to 1" | 2" PVC well screen<br>#3 Sand | 120 | | | 0.2 |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
Groundwater encountered at 118'

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 117.44 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-23-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-11 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-2/TSW-2



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065592° Longitude: -117.988274°

Surface Elev.: 314.85 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, mottled, wet, gravel up to 1" *(continued)* | | 2" PVC well screen<br>#3 Sand | | | | |
| | 130.0 | 185 | | 130 | | | 0.6 |
| | ***Boring Terminated at 130 Feet*** | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 117.44 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-23-2021 | Boring Completed: 03-23-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-12 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-3/TSW-3



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065688° Longitude: -117.988481°

Surface Elev.: 317.53 (Ft.)

| DEPTH | ELEVATION (Ft.) | GRAPHIC LOG | INSTALLATION DETAILS | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| 0.3 | 317 | | 2" PVC casing | | | | |
| **ASPHALT**, 4" thick | | | | | | | |
| **SILTY SAND WITH GRAVEL (SM)**, fine grained, medium brown, moist, gravel up to 1" | | | | 5 | | | 0.0 |
| 10.0 | 307.5 | | | 10 | | | 1.1 |
| **POORLY GRADED SAND (SP)**, fine grained, light brown, moist, gravel up to 1" | | | | 15 | | | 1.0 |
| | | | | 20 | | | 0.5 |
| | | | | 25 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.34 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-24-2021 | Boring Completed: 03-25-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-13 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-3/TSW-3



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065688° Longitude: -117.988481°

Surface Elev.: 317.53 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND (SP)**, fine grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing | 30 | | | 0.1 |
| | | | | 35 | | | |
| | | | | 40 | | | 0.3 |
| | | | | 45 | | | |
| | 50.0 | 267.5 | | 50 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.34 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-24-2021 | Boring Completed: 03-25-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-14 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-3/TSW-3



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065688° Longitude: -117.988481°

Surface Elev.: 317.53 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2" | | 2" PVC casing | | | | 1.0 |
| | | | | 55 | | | |
| | | | | 60 | | | 0.5 |
| | | | | 65 | | | |
| | 70.0 | 247.5 | | 70 | | | |
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine to coarse grained, light brown, moist, gravel up to 1" | | | | | | |
| | | | | 75 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
No recovery at 70'

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.34 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-24-2021 | Boring Completed: 03-25-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-15 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-3/TSW-3



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065688° Longitude: -117.988481°

Surface Elev.: 317.53 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine to coarse grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing | 80 | | | 1.2 |
| | | | | 85 | | | |
| | | | | 90 | | | 0.3 |
| | | | | 95 | | | |
| | | | | 100 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.34 feet bgs*

Terracon

Boring Started: 03-24-2021 | Boring Completed: 03-25-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-16

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-3/TSW-3



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065688° Longitude: -117.988481°

Surface Elev.: 317.53 (Ft.)

| DEPTH | ELEVATION (Ft.) | GRAPHIC LOG | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine to coarse grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing → | | | | |
| 110.0 | 207.5 | | | 105 | | | |
| | **SILTY SAND WITH GRAVEL (SM)**, fine grained, medium brown, moist, gravel up to 1" | | | 110 | | | |
| 120.0 | 197.5 | | | 115 | | | |
| | **SILTY SAND (SM)**, fine grained, medium brown, moist, gravel up to 1" | | 2" PVC well screen → | 120 | | | 0.3 |
| | | | | 125 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
Groundwater encountered at 122'

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.34 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-24-2021 | Boring Completed: 03-25-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-17 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-3/TSW-3



**PROJECT: Broken Horn Saddlery**

**CLIENT: Kaiser Permanente Pasadena, CA**

**SITE: 1022 and 1026 Leorita Street Baldwin Park, CA**

LOCATION See Exhibit 3

Latitude: 34.065688° Longitude: -117.988481°

Surface Elev.: 317.53 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **SILTY SAND (SM)**, fine grained, medium brown, moist, gravel up to 1" *(continued)* | | 2" PVC well screen; #3 Sand | | | | |
| | 130.0 | 187.5 | | 130 | | | 0.2 |
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, mottled, wet | | | | | | |
| | 135.0 | 182.5 | | 135 | | | |
| | ***Boring Terminated at 135 Feet*** | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.34 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-24-2021 | Boring Completed: 03-25-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-18 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-4/TSW-4



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065913° Longitude: -117.988331°

Surface Elev.: 317.73 (Ft.)

| DEPTH | ELEVATION (Ft.) | Description |
|---|---|---|
| 0.3 | 317.5 | **ASPHALT**, 4" thick |
| | | **SILTY SAND WITH GRAVEL (SM)**, fine grained, medium brown, moist, gravel up to 1" |
| 10.0 | 307.5 | **POORLY GRADED SAND (SP)**, fine grained, light brown, moist, gravel up to 1" |

INSTALLATION DETAILS: 2" PVC casing

| DEPTH (Ft.) | SAMPLE TYPE | PID |
|---|---|---|
| 5 | | 0.1 |
| 10 | | 0.3 |
| 15 | | 0.1 |
| 20 | | 0.2 |
| 25 | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 123.04 feet bgs*

Terracon

Boring Started: 03-25-2021 | Boring Completed: 03-29-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-19

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-4/TSW-4



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065913° Longitude: -117.988331°

Surface Elev.: 317.73 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND (SP)**, fine grained, light brown, moist, gravel up to 1" *(continued)* | | 2" PVC casing | 30 | | | 0.5 |
| | | | | 35 | | | |
| | | | | 40 | | | 0.1 |
| | | | | 45 | | | |
| | 50.0 | 267.5 | | 50 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 123.04 feet bgs*

Terracon

Boring Started: 03-25-2021 | Boring Completed: 03-29-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-20

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-4/TSW-4



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065913° Longitude: -117.988331°

Surface Elev.: 317.73 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2" | | 2" PVC casing | 55 | | | 0.0 |
| | | | | 60 | | | 0.2 |
| | | | | 65 | | | |
| | | | | 70 | | | 0.0 |
| | | | | 75 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 123.04 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-25-2021 | Boring Completed: 03-29-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-21 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-4/TSW-4



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065913° Longitude: -117.988331°

Surface Elev.: 317.73 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2" *(continued)* | | 2" PVC casing | 80 | | | 0.5 |
| | | | | 85 | | | |
| | | | | 90 | | | 0.4 |
| | | | | 95 | | | |
| | | | | 100 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 123.04 feet bgs*

Terracon

Boring Started: 03-25-2021 | Boring Completed: 03-29-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-22

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-4/TSW-4



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065913° Longitude: -117.988331°

Surface Elev.: 317.73 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2" *(continued)* | | 2" PVC casing | | | | 0.0 |
| | 115.0 | 202.5 | | 105 | | | |
| | **SILTY SAND (SM)**, fine grained, medium brown, moist, gravel up to 1" | | | 110 | | | |
| | | | | 115 | | | 0.0 |
| | | | 2" PVC well screen | 120 | | | 0.8 |
| | | | #3 Sand | 125 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
No soil recovered, only gravel and cobble at 110'
Groundwater encountered at 125'

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 123.04 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-25-2021 | Boring Completed: 03-29-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-23 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-4/TSW-4



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.065913° Longitude: -117.988331°

Surface Elev.: 317.73 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **SILTY SAND (SM)**, fine grained, medium brown, moist, gravel up to 1" *(continued)* | | 2" PVC well screen; #3 Sand | | | | |
| | 130.0 | 187.5 | | 130 | | | 0.3 |
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, medium to coarse grained, mottled, wet | | | | | | |
| | 135.0 | 182.5 | | 135 | | | |
| | ***Boring Terminated at 135 Feet*** | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 123.04 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-25-2021 | Boring Completed: 03-29-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-24 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-5/TSW-5



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066073° Longitude: -117.987698°

Surface Elev.: 318.51 (Ft.)

| DEPTH | ELEVATION (Ft.) | GRAPHIC LOG | INSTALLATION DETAILS | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| 0.3 | 318 | | 2" PVC casing | | | | |
| **ASPHALT**, 4" thick | | | | | | | |
| **SILTY SAND WITH GRAVEL (SM)**, fine grained, medium brown, moist, gravel up to 1" | | | | | | | |
| 5.0 | 313.5 | | | 5 | | | 1.2 |
| **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 1" | | | | 10 | | | 0.7 |
| | | | | 15 | | | 0.5 |
| | | | | 20 | | | 0.2 |
| | | | | 25 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.74 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-29-2021 | Boring Completed: 03-30-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-25 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-5/TSW-5



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066073° Longitude: -117.987698°

Surface Elev.: 318.51 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 1" *(continued)* | 2" PVC casing | | | | |
| | 30.0 | 288.5 | | | | | |
| | | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2.5" | | 30 | | | 0.3 |
| | | | | 35 | | | |
| | | | | 40 | | | 0.3 |
| | | | | 45 | | | |
| | | | | 50 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.74 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-29-2021 | Boring Completed: 03-30-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-26 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-5/TSW-5



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066073° Longitude: -117.987698°

Surface Elev.: 318.51 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2.5" *(continued)* | | 2" PVC casing | 55 | | | 0.4 |
| | | | | 60 | | | 0.3 |
| | | | | 65 | | | |
| | | | | 70 | | | |
| | | | | 75 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
Chatter
No recovery
at 70 feet

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.74 feet bgs*

Terracon

Boring Started: 03-29-2021 | Boring Completed: 03-30-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-27

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-5/TSW-5



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066073° Longitude: -117.987698°

Surface Elev.: 318.51 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2.5" *(continued)* | | 2" PVC casing | 80 | | | 0.4 |
| | | | | 85 | | | |
| | | | | 90 | | | 0.5 |
| | | | | 95 | | | |
| | | | | 100 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.74 feet bgs*

Terracon

Boring Started: 03-29-2021 | Boring Completed: 03-30-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-28

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-5/TSW-5



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066073° Longitude: -117.987698°

Surface Elev.: 318.51 (Ft.)

| DEPTH | ELEVATION (Ft.) | |
|---|---|---|
| | | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2.5" *(continued)* |
| 115.0 | 203.5 | **SILT (ML)**, medium brown, moist, gravel up to 1" |
| 120.0 | 198.5 | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, medium brown, moist, gravel up to 1.5" |

2" PVC casing

2" PVC well screen

#3 Sand

| DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|
| | | | 0.0 |
| 105 | | | |
| 110 | | | |
| 115 | | | 0.3 |
| 120 | | | 0.0 |
| 125 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
No recovery at 110 feet

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.74 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-29-2021 | Boring Completed: 03-30-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-29 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-5/TSW-5



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066073° Longitude: -117.987698°

Surface Elev.: 318.51 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, medium brown, moist, gravel up to 1.5" *(continued)* | | 2" PVC well screen; #3 Sand | | | | |
| | 130.0 | 188.5 | | 130 | | | 0.0 |
| | **POORLY GRADED SAND (SP)**, medium to coarse grained, mottled, wet | | | | | | |
| | 135.0 | 183.5 | | 135 | | | |
| | ***Boring Terminated at 135 Feet*** | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 121.74 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-29-2021 | Boring Completed: 03-30-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-30 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-6/TSW-6



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066086° Longitude: -117.988467°

Surface Elev.: 318.90 (Ft.)

| DEPTH | ELEVATION (Ft.) | |
|---|---|---|
| 0.3 | 318.5 | **ASPHALT**, 4" thick |
| | | **SILTY SAND (SM)**, fine grained, medium brown, moist |
| 5.0 | 314 | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2" |

INSTALLATION DETAILS: 2" PVC casing

| DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|
| 5 | | | 0.0 |
| 10 | | | 0.3 |
| 15 | | | 0.4 |
| 20 | | | 0.0 |
| 25 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 129.95 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-30-2021 | Boring Completed: 03-31-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-31 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-6/TSW-6



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066086° Longitude: -117.988467°

Surface Elev.: 318.90 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | | | 2" PVC casing | | | | |
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2" *(continued)* | | | | | | |
| | 30.0 | 289 | | 30 | | | 0.0 |
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2.5" | | | 35 | | | |
| | | | | 40 | | | 0.1 |
| | | | | 45 | | | |
| | | | | 50 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 129.95 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-30-2021 | Boring Completed: 03-31-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-32 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-6/TSW-6



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066086° Longitude: -117.988467°

Surface Elev.: 318.90 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2.5" *(continued)* | | 2" PVC casing | 55 | | | 0.0 |
| | | | | 60 | | | 0.2 |
| | | | | 65 | | | |
| | | | | 70 | | | |
| | | | | 75 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:
No recovery at 70'

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 129.95 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-30-2021 | Boring Completed: 03-31-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-33 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-6/TSW-6



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066086° Longitude: -117.988467°

Surface Elev.: 318.90 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2.5" *(continued)* | | 2" PVC casing | 80 | | | 0.7 |
| | | | | 85 | | | |
| | | | | 90 | | | 0.4 |
| | | | | 95 | | | |
| | | | | 100 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 129.95 feet bgs*

Terracon

Boring Started: 03-30-2021 | Boring Completed: 03-31-2021

Drill Rig: CME95 | Driller: Yellow Jacket

Project No.: CB21P020 | Exhibit: B-34

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-6/TSW-6



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066086° Longitude: -117.988467°

Surface Elev.: 318.90 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **POORLY GRADED SAND WITH GRAVEL (SP)**, fine grained, light brown, moist, gravel up to 2.5" *(continued)* | | 2" PVC casing | | | | 0.3 |
| | | | | 105 | | | |
| | | | | 110 | | | 0.0 |
| | | | | 115 | | | 0.3 |
| | 120.0 | 199 | | | | | |
| | **SILTY SAND (SM)**, fine grained, medium brown, moist | | | 120 | | | 0.0 |
| | | | | 125 | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 129.95 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-30-2021 | Boring Completed: 03-31-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-35 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# BORING LOG NO. B-6/TSW-6



**PROJECT:** Broken Horn Saddlery

**CLIENT:** Kaiser Permanente
Pasadena, CA

**SITE:** 1022 and 1026 Leorita Street
Baldwin Park, CA

LOCATION See Exhibit 3

Latitude: 34.066086° Longitude: -117.988467°

Surface Elev.: 318.90 (Ft.)

| GRAPHIC LOG | DEPTH | ELEVATION (Ft.) | | DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE | PID |
|---|---|---|---|---|---|---|---|
| | **SILTY SAND (SM)**, fine grained, medium brown, moist *(continued)* | | 2" PVC well screen; #3 Sand | | | | |
| | 130.0 | 189 | | 130 | | | |
| | **SILTY SAND WITH GRAVEL (SM)**, fine grained, medium brown, wet, gravel up to 1" | | | | | | |
| | 135.0 | 184 | | 135 | | | |
| | ***Boring Terminated at 135 Feet*** | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion and capped with concrete.

Notes:

**WATER LEVEL OBSERVATIONS**

*Static groundwater level observed at 129.95 feet bgs*

Terracon

| | |
|---|---|
| Boring Started: 03-30-2021 | Boring Completed: 03-31-2021 |
| Drill Rig: CME95 | Driller: Yellow Jacket |
| Project No.: CB21P020 | Exhibit: B-36 |

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL CB21P020_BROKEN HORN_HSA DEEP LOGS-TSW.GPJ TERRACON_DATATEMPLATE.GDT 4/22/21

# APPENDIX E

## Field Data Sheets

CB21P020

Project Number: ~~PCB21-4022~~

Client: Kaiser Permanente

Site Address: 1622 Loomis

Sampler: JH

Soil Gas Sampling Log

| Sample ID | Purge Data | | | Sample Set Up | | | | | | Sample Collection | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Date | Purge Method | Purge Volume | Canister Serial Number (Lab's Can #) | Flow Controller Serial Number | Gauge Serial Number | Sample Analysis | Initial Field Vacuum (in Hg) | Time Canister Opened | Final Canister Vacuum (in. Hg) | Time Canister Closed | Time of Sample Collection (closed valve) | ~~Comments~~ Pressure Init SC |
| SGP-1-5 | 3-24-21 | Peri Pump | 1000 mL | LC 781 | ~~LC~~ A 381 | ~~29~~ | TO-15 Fixed Gases | -29 | 1103 | -5 | 1107 | 1107 | 0.00 |
| SGP-1-20 | 3-24-21 | Peri Pump | 1200mL | LC 511 | A 328 | → | | -33 | 1146 | -5 -10 | 1159 | 1159 | 0.00 |
| SGP-2-5 | 3-25-21 | Peri Pump | 1000mL | LC 319 | A 180 | → | | -31 | 1140 | -3 | 1145 | 1145 | 0.00 ~~0~~ |
| SGP-2-20 | 3-25-21 | Peri Pump | 1200mL | LC 622 | A 471 | → | | -30 | 1207 | -5 | 1212 | 1212 | 0.00 ~~0.05~~ |
| SGP-3-5 | 3-24-21 | Peri Pump | 1000mL | LC 997 | A 19 | → | | -31 | 1323 | -5 | 1330 | 1330 | 0.10 |
| SGP-3-20 | 3-24-21 | Peri Pump | 1200mL | LC 486 | A 477 | → | | -31 | 1351 | -2 | 1359 | 1359 | 0.05 |
| SGP-4-5 | 3-25-21 | Peri Pump | 1000mL | LC 1091 | A 219 | → | | -32 | 1425 | -5 | 1431 | 1431 | 0.06 |
| SGP-4-20 | 3-25-21 | Peri Pump | 1200mL | LC 657 | A 257 | → | | -29 | 1350 | -5 | 1404 | 1404 | 0.00 |
| SGP-5-5 | 3-25-21 | Peri Pump | 1000mL | LC 864 | A 327 | → | | -30 | 1248 | -3 | 1253 | 1253 | 0.00 |
| SGP-5-20 | 3-25-21 | Peri Pump | 1200mL | LC 099 | A 511 | → | | -31 | 1317 | -5 | 1322 | 1322 | 0.00 |
| SGP-2-20 DUP | 3-25-21 | Peri Pump | — | LC 1226 | A 107 | → | | -30 | 1221 | -6 | 1226 | 1226 | 0.00 |

Notes:

~~Initial Summa canister vacuum should be -28 to -30 inches of Hg. Do not use canister if initial vacuum is -27 inches of Hg or less.~~

in Hg = inches of mercury

Terracon

Project Number: CB21P020

Client: KP

Site Address: 1022 AND 1026 LEORITA ST, BALDWIN PARK, CA

Sampler: JM

Terracon

Soil Gas Sampling Log

| Sample ID | Purge Data | | | Sample Set Up | | | | | | | Sample Collection | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Date | Purge Method | Purge Volume | Canister Serial Number (Lab's Can #) | Flow Controller Serial Number | Differential Pressure inWC | Shut-in Pass inWC | Leak Check Compound | Initial Field Vacuum (in. Hg) | Time Canister Opened | Final Canister Vacuum (in. Hg) | Time Canister Closed | Time of Sample Collection (closed valve) | Comments |
| SSP-1 | 3-24-21 | Syringe | 60mL | LC 609 | A 128 | 0.00 | ✓ | ✓ | -30 | 1426 | -5 | 1437 | 1431 | ✓ |
| SSP-2 | 3-24-21 | Syringe | 60mL | LL 1280 | A 127 | 0.00 | ✓ | ✓ | -30 | 1443 | -5 | 1449 | 1449 | — |
| SSP-3 | 3-24-21 | Syringe | 60mL | LC 0690 | A 494 | 0.00 | ✓ | ✓ | -30 | 1516 | -5 | 1516 | 1516 | — |
| SSP-4 | 3-24-21 | Syringe | 60mL | LC 1137 | A 016 | 0.00 | ✓ | ✓ | -31 | 1534 | -3 | 1541 | 1541 | — |
| SSP-5 | 3-24-21 | Syringe | 60mL | LC 812 | A 193 | 0.00 | ✓ | ✓ | ~~-34~~ -33 | 1608 | ~~-9~~ -5 | 1622 | 1628 | — |
| SSP-6 | 3-24-21 | Syringe | 60mL | LC 1210 | A 46 | 0.00 | ✓ | ✓ | -31 | 1633 | -5 | 1658 | 1658 | ✓ |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

Notes:
initial summa canister vacuum should be -28 to -30 inches of Hg Do not use canister if initial vacuum is -27 inches of Hg or less.
in Hg = inches of mercury

Project Number: ~~X6827022~~CB21P020
Client: Kaiser
Date: 3-24-21

Site Address: 1022 Loomis Street
Sampler: JM

Terracon

Background Data:
Wind Direction: NORTHWEST
Wind Speed: —
Barometric Pressure: ____
HVAC Status: OFF. NORMAL
Temp: 62°-69°F
Weather: FAIR.

Ambient Air Sampling Log

| Sample ID | Sample Set Up | | | | | Sample Collection | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Canister Serial Number (Lab's Can #) | Flow Controller Serial Number | Gauge Serial Number | Canister Location/ Description | Canister Sampling Height | Initial Field Vacuum (in. Hg) | Initial Time | 1st Check Vacuum (in. Hg) | 1st Check Time | 2nd Check Vacuum (in. Hg) | 2nd Check Time | Final Canister Vacuum (in. Hg) | Final Time | Comments |
| IAS-1 | D565 | FC 3796 | FC 3788 | See site Diagram | ~4 | -29 | 0927 | -18 | 14:14 | - | - | -12 | 1625 | |
| IAS-2 | D464 | FC 303 → | | | ~5 | -29 | 0930 | -18 | 14:15 | - | - | -11 | 1627 | |
| IAS-3 | D489 | FC 321 → | | | ~5 | -29 | 0933 | -14 ~~-12~~ | 14:15 | - | - | -7 | 1628 | |
| IAS-4 | SIM 093 | FC 160 → | | | ~4 | -32 | 0935 | -16 | 14:17 | - | - | -9 | 1629 | |
| OAS-1 | D593 | FC 487 → | | | ~5 | -31 | 0939 | -15 | 14:20 | - | - | -10 | 1637 | |
| OAS-2 | D477 | FC 346 → | | ↓ | ~5 | -31 | 0943 | -17 | 14:22 | - | - | -6 | 1639 | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

Notes:
Initial summa canister vacuum should be -28 to -30 inches of Hg. Do not use canister if initial vacuum is -27 inches of Hg or less.
in Hg = inches of mercury

# APPENDIX F

## Well Survey Report

Terracon Project: CB21P020
Location: 1022 and 1026 Leorita Street, Baldwin Park, CA

## TEMPORARY PVC LOCATIONS

| LOCATION | NORTHING (FEET) | EASTING (FEET) | LATITUDE (DD) | LONGITUDE (DD) | FS/NG (ELEVATION) |
|---|---|---|---|---|---|
| B-1/TSW-1 | 1846326.59 | 6565288.20 | 34.0657953 | -117.9880423 | 315.96 |
| B-2/TSW-2 | 1846252.64 | 6565218.20 | 34.0655922 | -117.9882735 | 314.85 |
| B-3/TSW-3 | 1846287.62 | 6565155.51 | 34.0656883 | -117.9884805 | 317.53 |
| B-4/TSW-4 | 1846369.39 | 6565200.92 | 34.0659130 | -117.9883305 | 317.73 |
| B-5/TSW-5 | 1846427.69 | 6565392.58 | 34.0660731 | -117.9876977 | 318.51 |
| B-6/TSW-6 | 1846432.35 | 6565159.59 | 34.0660860 | -117.9884670 | 318.90 |
| SGP-3 | 1846282.57 | 6565262.25 | 34.0656744 | -117.9881280 | 315.91 |
| SGP-4 | 1846323.00 | 6565209.43 | 34.0657855 | -117.9883024 | 316.50 |
| SGP-5 | 1846376.64 | 6565149.77 | 34.0659329 | -117.9884994 | 318.38 |

Professional's Name:
Armando D. Dupont

Professional's License Type:
Professional Land Surveyor

Professional's License Number:
7780

NOTE:
**DD:** DECIMAL DEGREES
**FS**: FINISHED SURFACE

SURVEY DATE: MARCH 31, 2021

BENCHMARK:
THE ELEVATIONS SHOWN HEREON ARE BASED UPON STATIC GPS OBSERVATION, HOLDING THE CSRC DATA POINT "CASF"; ELEVATION = 157.90 FEET (NAVD 88)

COORDINATES:
THE COORDINATES SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM (CCS 83), ZONE 5, 1983 DATUM, DEFINED BY SECTIONS 8801 TO 8819 OF THE CALIFORNIA PUBLIC RESOURCES CODE, BASED UPON STATIC GPS OBSERVATION, HOLDING THE CSRC DATA POINT "CASF"

# APPENDIX G

## Waste Documentation

March 24, 2021

Jerry and Erin Nuzzo Trust and Nuzzo Family Limited Partnership
1022-1026 Leorita Street
Baldwin Park, California 91706
Phone #: 714-931-2123

Re: Waste Representative Authorization
Broken Horn Saddlery
1022-1026 Leorita Street, Baldwin Park, CA

Dear Jerry Nuzzo:

Terracon Consultants, Inc. (Terracon) understands that, as part of our Services, Terracon will be requested to sign waste management documents, in your name and on your behalf, as required to transport estimated 40 tons of [Class II non-hazardous] soil and 300 gallons of [Class II non-hazardous] water from the above referenced site.

In accordance with your request, it is agreed that Terracon is authorized to sign on behalf of Jerry and Erin Nuzzo Trust and Nuzzo Family Limited Partnership any required documentation for the removal of waste and other materials from the above-referenced site. The documents shall be completed in the name of Jerry and Erin Nuzzo Trust and Nuzzo Family Limited Partnership and shall be signed on behalf of Jerry and Erin Nuzzo Trust and Nuzzo Family Limited Partnership . It is understood and agreed that by its actions that Terracon will not be deemed a generator, arranger, transporter or disposer of hazardous materials or hazardous wastes.

In consideration of Terracon's agreement to sign the required documents on its behalf, Jerry and Erin Nuzzo Trust and Nuzzo Family Limited Partnership shall indemnify and hold harmless Terracon from and against any and all claims, damages, losses and expenses, including but not limited to attorneys' fees, court costs, and administrative expenses arising out of or in any way associated with the action of Terracon in signing the required documents on behalf of Jerry and Erin Nuzzo Trust and Nuzzo Family Limited Partnership , unless such claims, damages, losses and expenses are caused by the sole negligence of Terracon.

By signing the attached copy of this letter Jerry and Erin Nuzzo Trust and Nuzzo Family Limited Partnership agrees to be bound by the terms of this letter.

Sincerely,
**Terracon Consultants, Inc.**

Michael P. Harris
Senior National Account Manager

Accepted:
**Jerry and Erin Nuzzo Trust and Nuzzo Family Limited Partnership**

By: Jerry Nuzzo
Name: JERRY NUZZO
Title:
Date: 3/25/21

| Adelanto, CA<br>Soil Recycling Facility | Soil Safe<br>(Formerly TPST)<br>SOIL DATA AND CERTIFCATION SHEET | DATE:<br>4/2/2021 |
|---|---|---|

**Generator (propery owner):**

Jerry & Erin Nuzzo Trust & Nuzzo Family Limite
1022 Leorita Street
Baldwin Park, CA 91706

**Consultant/Engineering Firm:**

Belshire Environmental Services, Inc.
25971 Towne Centre Dr
Foothill Ranch CA 92610
Tel: (949) 460-5200
Fax: (949) 460-5210

X Invoice BESI
Invoice Generator
Invoice Consultant

**Testing Laboratory:**
Calscience

**Sampling Procedures:**
Soil Cuttings

Site History: Please list SITE NAME ADDRESS (including zip code), describe contamination type, contamination source, how contamination was stored, and past activities at site.-Attach additional documents)

**Site Name & Address:**
1022 Leorita Street
1022 LEORITA STREET
BALDWIN PARK, CA 91706

**BESI:** 328621
**Site No:** 1022LEOR
**Site Contact:**
**Consultant:**
**Contact:**

X NON-HAZ HAZ

**ESTIMATED QUANTITY**
40 Tons
Drums

**Source of contamination (ust, ast, etc...):** No known contamination
(please list gas, diesel, combo, waste oil, etc...) Exploratory soil borings

Please check appropate box below and attach all required analytical reports. Unless otherwise noted, composite samples should be collected with the following frequency: 1sample for 100 cubic yards or less ; 3 samples for 500 cu yds or less ; 5 samples for 1000 cu yds 1 additional sample for each additional 500cu yds greater than 1000 cu yds

☐ I/we certify that the soil referenced herein is contaminated soley by Virgin petroleum products from leaking underground storage tank(s).

Attached is analytical data from state certified lab for the following

1) Total Petroleum Hydrocarbons (TPH, EPA 8015 Modified)

2) Benzene/Toluene/Ethylbenzene/xylene (BTEX, EPA 8020)

X I/We certified that some or all of the contaminants in the soil referenced herein is waste oil, or some other non-virgin petroleum product, or virgin petroleum product from something other than a leaking underground storage tank.
Attached is analytical data from a state certified lab for the following:

**1) Total metals concentration for a thru q below (TTLC test)**

| | | |
|---|---|---|
| a) Antimony | g)Cobalt | m) Selenium |
| b) Arsenic | h)Copper | n) Silver |
| c) Barium | I) Lead | o) Thalium |
| d) Berylium | j) Mercury | p) Vanadium |
| e) Cadmium | k) Molybdenum | q) Zinc |
| f) Chromium | l) Nickel | |

Note: If any item a thru q is greater than 10 times its Soluble Threshold Limit concentration (STLC) the soluble metal concentration must be determined by the Waste Extraction Test procedure.

**2) TPH by:**
EPA 418.1 or
EPA 8015 modified

**3) BTEX/VOC by:**
EPA 8020 EPA 8010
or EPA 8260(combines above)

**4) PCB'S(waste oil only)**
**5) Additional analytical data as required.**

No soils referenced herein may be delivered until the forgoing certificate is received and approved by the facility, and they issues manifests and assigns an approval number. If any soils delivered to the facility are found to be "Hazardous Waste" pursuant to federal or state regulations, the client shall be solely responsible for their removal. If the client fails to remove such soils, the facility, acting as client's agent, may arrange for such removal at client's expense. This is a complete and accurate description of the soil referenced herein; no deliberate or willful omissions have been made and all known or suspected hazards have been disclosed herein. I/We certify that the soil is not "hazardous" as defined by U.S. Department of Transportation (DOT), U.S. Environmental Protection Agency (EPA), State or local regulations. I/We further certify that the soils referenced herein contain no free liquids. All analysis reports attached.

**Generator's Authorized Signatory:** AS AUTHORIZED AGENT FOR GENERATOR **Date:** 4/2/2021
**Print Name:** TODD MCFARLAND FOR JERRY AND ERIN NUZZO TRUST **Title:** ENV. DEPT. MGR

**Environmental Firm Signatory:** **Date:** 4/2/2021
**Print Name:** Brian Cass **Title:** Sr. Account Manager

# Manifest

## SOIL SAFE OF CA – TPST
Non-Hazardous Soils

↓ Manifest # ↓

| Date of Shipment: | Responsible for Payment: | Transport Truck #: | Facility #: | Approval Number: | Load # |
|---|---|---|---|---|---|
| 4 18 21 | | 576/8200 | A07 | A5-2882 | 0011 |

**Generator and/or Consultant**

Generator's Name and Billing Address:

JERRY & ERIN NUZZO TRUST & NUZZO FAMILY
LIMITED PARTNERSHIP
1022 LEORITA STREET
BALDWIN PARK, CA 91706

Generator's Phone #: 714-931-2123
Person to Contact:
FAX#:
Customer Account Number

Consultant's Name and Billing Address:

Consultant's Phone #:
Person to Contact:
FAX#:
Customer Account Number

Generation Site (Transport from): *(name & address)*

1022 LEORITA STREET
1022 LEORITA STREET
BALDWIN PARK, CA 91706

Site Phone #:
Person to Contact:
FAX#:

Designated Facility (Transport to): *(name & address)*

SOIL SAFE
12328 HIBISCUS AVENUE
ADELANTO, CA 92301

Facility Phone #: (800) 862-8001
Person to Contact: JOE PROVANSAL
FAX#: (760) 246-8004

Transporter Name and Mailing Address:

BELSHIRE
25971 TOWNE CENTRE DRIVE
FOOTHILL RANCH, CA 92610
BESI: 328621

Transporter's Phone #: 949-460-5200 — CAR000183913
Person to Contact: LARRY MOOTHART — 1629169
FAX#: 949-460-5210 — Customer Account Number

| Description of Soil | Moisture Content | Contaminated by: | Approx. Qty: | Description of Delivery | Gross Weight | Tare Weight | Net Weight |
|---|---|---|---|---|---|---|---|
| Sand ☐ Organic ☐ Clay ☐ Other ☐ | 0 - 10% ☐ 10 - 20% ☐ 20% - over ☐ | Gas ☐ Diesel ☐ Other ☐ | 3 yards | | 45620 | 38140 | 7480 |
| Sand ☐ Organic ☐ Clay ☐ Other ☐ | 0 - 10% ☐ 10 - 20% ☐ 20% - over ☐ | Gas ☐ Diesel ☐ Other ☐ | | | | | 3.74 |

List any exception to items listed above: Bin # 6044 — Scale Ticket # 164016

*Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils descried in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.*

Print or Type Name: Generator ☐ Consultant ☑ — x Thomas S. Johnson
Signature and date: as Authorized agent for [illegible] Trust — Month 4 Day 9 Year 21

**Transporter**

*Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.*

Print or Type Name: Frank Salazar
Signature and date: — Month 04 Day 09 Year 21

**Recycling Facility**

Discrepancies:

*Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:*

Print or Type Name: Joe Provansal / Barry Meek / Bill Bishop
Signature and date: 4-9-21

Please print or type.

1022LEOR/2520417

TRANSPORTER COPY

# Soil Safe of California, Inc.

12328 Hibiscus Ave. Adelanto, CA 92301

**ADE** 164016

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professional Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

**Manifest Number:** A5-2882 Load #: 1 4/9/2021

**Generator Site Information:**

1022 Leorita Street

1022 Leorita Street

Baldwin Park, Ca 91706

**Weighmaster Weighed at:**

SOIL SAFE OF CALIFORNIA, INC..

12328 HIBISCUS AVE

ADELANTO, CA 92301

| | | | Lbs | Tons | |
|---|---|---|---|---|---|
| Joe Provansal | **Time In:** 9:14:33 AM | **Gross Weight:** | 45620 | 22.81 | Manual Wt |
| Joe Provansal | **Time out:** 9:15:16 AM | **Tare Weight:** | 38140 | 19.07 | Manual Wt |
| | | **Net Weight:** | 7480 | 3.74 | |

**Truck Number:** 876

**Trailer Number:** 8200

**Commodity:** Non Haz - Solids

**Driver on Gross and Tare Transporter:** Besi - Frank

# Manifest

## SOIL SAFE OF CA – TPST
Non-Hazardous Soils

Manifest #

| Date of Shipment: | Responsible for Payment: | Transport Truck #: | Facility #: | Approval Number: | Load # |
|---|---|---|---|---|---|
| 4/9/2021 | | 3875 / 10732 | A07 | A5-2882 | 0012 |

**Generator and/or Consultant**

Generator's Name and Billing Address:
JERRY & ERIN NUZZO TRUST & NUZZO FAMILY LIMITED PARTNERSHIP
1022 LEORITA STREET
BALDWIN PARK, CA 91706

Generator's Phone #: 714-931-2123
Person to Contact:
FAX#:
Customer Account Number

Consultant's Name and Billing Address:

Consultant's Phone #:
Person to Contact:
FAX#:
Customer Account Number

Generation Site (Transport from): *(name & address)*
1022 LEORITA STREET
1022 LEORITA STREET
BALDWIN PARK, CA 91706

Site Phone #:
Person to Contact:
FAX#:

Designated Facility (Transport to): *(name & address)*
SOIL SAFE
12328 HIBISCUS AVENUE
ADELANTO, CA 92301

Facility Phone #: (800) 862-8001
Person to Contact: JOE PROVANSAL
FAX#: (760) 246-8004

Transporter Name and Mailing Address:
BELSHIRE
25971 TOWNE CENTRE DRIVE
FOOTHILL RANCH, CA 92610
BESI: 328621

Transporter's Phone #: 949-480-5200
CAR000183913
Person to Contact: LARRY MOOTHART
1629169
FAX#: 949-480-5210
Customer Account Number

| Description of Soil | Moisture Content | Contaminated by: | Approx. Qty: | Description of Delivery | Gross Weight | Tare Weight | Net Weight |
|---|---|---|---|---|---|---|---|
| Sand ☐ Organic ☐ Clay ☐ Other ☐ | 0 - 10% ☐ 10 - 20% ☐ 20% - over ☐ | Gas ☐ Diesel ☐ Other ☐ | 18 Yds | Soil B.U. #66d | 70420 | 37240 | 33180 |
| Sand ☐ Organic ☐ Clay ☐ Other ☐ | 0 - 10% ☐ 10 - 20% ☐ 20% - over ☐ | Gas ☐ Diesel ☐ Other ☐ | | | | | 16.59 |

List any exception to items listed above:
Scale Ticket # 164017

*Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils descried in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.*

Print or Type Name: Generator ☐ Consultant ☑ Thomas S. Johnson
Signature and date: As further agent for Jerry and Erin Nuzzo Trust — Month 4 Day 9 Year 2021

**Transporter**

*Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.*

Print or Type Name: Edward Ruiz
Signature and date: Month 4 Day 9 Year 21

**Recycling Facility**

Discrepancies:

*Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above.*

Print or Type Name: Joe Provansal / Barry Meek / Bill Bishop
Signature and date: 4-9-21

Please print or type.

1022LEOR/2520413

TRANSPORTER COPY

# Soil Safe of California, Inc.

**ADE** 164017

12328 Hibiscus Ave. Adelanto, CA 92301

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professional Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

**Manifest Number:** A5-2882 Load #: 2 4/9/2021

**Generator Site Information:**

1022 Leorita Street

1022 Leorita Street

Baldwin Park, Ca 91706

**Weighmaster Weighed at:**

SOIL SAFE OF CALIFORNIA, INC..

12328 HIBISCUS AVE

ADELANTO, CA 92301

Joe Provansal **Time In:** 9:36:09 AM

Joe Provansal **Time out:** 9:36:14 AM

| | Lbs | Tons | |
|---|---|---|---|
| **Gross Weight:** | 70420 | 35.21 | Manual Wt |
| **Tare Weight:** | 37240 | 18.62 | Manual Wt |
| **Net Weight:** | 33180 | 16.59 | |

**Truck Number:** 3785

**Trailer Number:** 0732

**Commodity:** Non Haz - Solids

**Driver on Gross and Tare Transporter:** Besi - Ed

# APPENDIX H

## Analytical Reports and Chain of Custody Forms – Soil

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-280935-1
Client Project/Site: Baldwin Park

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/1/2021 12:12:08 PM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Solid | 03/23/21 08:15 | 03/23/21 18:30 | |
| 440-280935-2 | SGP-1-20 | Solid | 03/23/21 08:30 | 03/23/21 18:30 | |
| 440-280935-3 | SGP-2-5 | Solid | 03/23/21 09:15 | 03/23/21 18:30 | |
| 440-280935-4 | SGP-2-20 | Solid | 03/23/21 09:40 | 03/23/21 18:30 | |
| 440-280935-5 | SGP-3-5 | Solid | 03/23/21 10:30 | 03/23/21 18:30 | |
| 440-280935-6 | SGP-3-20 | Solid | 03/23/21 10:50 | 03/23/21 18:30 | |
| 440-280935-7 | SGP-4-5 | Solid | 03/23/21 12:40 | 03/23/21 18:30 | |
| 440-280935-8 | SGP-4-20 | Solid | 03/23/21 12:50 | 03/23/21 18:30 | |
| 440-280935-9 | SGP-5-5 | Solid | 03/23/21 13:15 | 03/23/21 18:30 | |
| 440-280935-10 | SGP-5-20 | Solid | 03/23/21 13:25 | 03/23/21 18:30 | |

## Job ID: 440-280935-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-280935-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/23/2021 6:30 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5º C.

**GC/MS VOA**
Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-138697.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-138692.

Method 8260B: The initial calibration curve analyzed in batch 570-138697 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC VOA**
Method 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 138805.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC Semi VOA**
Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-138530 and analytical batch 570-138769 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8151A: The continuing calibration verification (CCV) associated with batch 570-138775 recovered above the upper control limit for 2,4,5-TP (Silvex) and 2,4-DB. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 570-138775/34).

Method 8151A: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 570-138415 and analytical batch 570-138775 recovered outside control limits for the following analyte(s): Dinoseb. Dinoseb has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8151A: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-138415 and analytical batch 570-138775 recovered outside control limits for the following analytes: 2,4-DB and Dalapon.

Method 8151A: The matrix spike/matrix spike duplicate (MS/MSD) for preparation batch 570-138415 and analytical batch 570-138775 exceeded control limits for the following analyte(s): Dinoseb, Note that this analyte is a known poor performer when analyzed using this method.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-138796 and analytical batch 570-139319 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated

## Job ID: 440-280935-1 (Continued)

### Laboratory: Eurofins Calscience Irvine (Continued)

laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: The absolute response for Beryllium was greater than the method reporting limit (RL) in the following sample: SGP-5-5 (440-280935-9).
The instrument raw data has been manually reviewed and the result can be reported as ND.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

## Client Sample ID: SGP-1-5 — Lab Sample ID: 440-280935-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.022 | | 0.017 | 0.0084 | mg/Kg | 1 | | 8260B | Total/NA |
| tert-Butyl alcohol (TBA) | 0.0069 | J | 0.017 | 0.0060 | mg/Kg | 1 | | 8260B | Total/NA |
| C13-C22 | 4.0 | J | 5.0 | 3.8 | mg/Kg | 1 | | 8015B | Total/NA |
| C23-C40 | 7.0 | | 5.0 | 3.8 | mg/Kg | 1 | | 8015B | Total/NA |
| Arsenic | 2.5 | J | 2.6 | 2.3 | mg/Kg | 1 | | 6010B | Total/NA |
| Barium | 60 | | 0.51 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Cadmium | 0.52 | | 0.51 | 0.21 | mg/Kg | 1 | | 6010B | Total/NA |
| Chromium | 11 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 6.9 | | 1.0 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 14 | | 1.0 | 0.52 | mg/Kg | 1 | | 6010B | Total/NA |
| Lead | 15 | | 5.1 | 0.99 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 7.3 | | 0.51 | 0.44 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 18 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 46 | | 10 | 5.2 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.038 | J | 0.079 | 0.013 | mg/Kg | 1 | | 7471A | Total/NA |

## Client Sample ID: SGP-1-20 — Lab Sample ID: 440-280935-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.011 | J | 0.018 | 0.0089 | mg/Kg | 1 | | 8260B | Total/NA |
| tert-Butyl alcohol (TBA) | 0.0069 | J | 0.018 | 0.0063 | mg/Kg | 1 | | 8260B | Total/NA |

## Client Sample ID: SGP-2-5 — Lab Sample ID: 440-280935-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.019 | J | 0.020 | 0.010 | mg/Kg | 1 | | 8260B | Total/NA |
| Benzene | 0.00029 | J | 0.0010 | 0.00026 | mg/Kg | 1 | | 8260B | Total/NA |
| Ethanol | 0.083 | J | 0.26 | 0.067 | mg/Kg | 1 | | 8260B | Total/NA |
| tert-Butyl alcohol (TBA) | 0.010 | J | 0.020 | 0.0071 | mg/Kg | 1 | | 8260B | Total/NA |
| C13-C22 | 4.6 | J | 4.8 | 3.7 | mg/Kg | 1 | | 8015B | Total/NA |
| C23-C40 | 14 | | 4.8 | 3.7 | mg/Kg | 1 | | 8015B | Total/NA |

## Client Sample ID: SGP-2-20 — Lab Sample ID: 440-280935-4

No Detections.

## Client Sample ID: SGP-3-5 — Lab Sample ID: 440-280935-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.012 | J | 0.020 | 0.0098 | mg/Kg | 1 | | 8260B | Total/NA |
| C13-C22 | 6.1 | | 4.7 | 3.7 | mg/Kg | 1 | | 8015B | Total/NA |
| C23-C40 | 4.7 | | 4.7 | 3.7 | mg/Kg | 1 | | 8015B | Total/NA |

## Client Sample ID: SGP-3-20 — Lab Sample ID: 440-280935-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | 7.6 | | 5.1 | 3.9 | mg/Kg | 1 | | 8015B | Total/NA |
| C23-C40 | 5.1 | | 5.1 | 3.9 | mg/Kg | 1 | | 8015B | Total/NA |

## Client Sample ID: SGP-4-5 — Lab Sample ID: 440-280935-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Barium | 43 | | 0.50 | 0.22 | mg/Kg | 1 | | 6010B | Total/NA |
| Cadmium | 0.27 | J | 0.50 | 0.20 | mg/Kg | 1 | | 6010B | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: SGP-4-5 (Continued) — Lab Sample ID: 440-280935-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Chromium | 6.9 | | 0.99 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 4.4 | | 0.99 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 7.4 | | 0.99 | 0.50 | mg/Kg | 1 | | 6010B | Total/NA |
| Lead | 2.1 | J | 5.0 | 0.96 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 4.6 | | 0.50 | 0.43 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 11 | | 0.99 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 20 | | 9.9 | 5.1 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.026 | J | 0.082 | 0.013 | mg/Kg | 1 | | 7471A | Total/NA |

## Client Sample ID: SGP-4-20 — Lab Sample ID: 440-280935-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.011 | J | 0.020 | 0.0099 | mg/Kg | 1 | | 8260B | Total/NA |
| tert-Butyl alcohol (TBA) | 0.0081 | J | 0.020 | 0.0070 | mg/Kg | 1 | | 8260B | Total/NA |

## Client Sample ID: SGP-5-5 — Lab Sample ID: 440-280935-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.042 | | 0.033 | 0.016 | mg/Kg | 1 | | 8260B | Total/NA |
| Benzene | 0.00058 | J | 0.0017 | 0.00043 | mg/Kg | 1 | | 8260B | Total/NA |
| C13-C22 | 5.3 | | 5.1 | 3.9 | mg/Kg | 1 | | 8015B | Total/NA |
| C23-C40 | 4.6 | J | 5.1 | 3.9 | mg/Kg | 1 | | 8015B | Total/NA |
| Arsenic | 4.1 | | 2.6 | 2.4 | mg/Kg | 1 | | 6010B | Total/NA |
| Barium | 130 | | 0.52 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Cadmium | 0.71 | | 0.52 | 0.21 | mg/Kg | 1 | | 6010B | Total/NA |
| Chromium | 21 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 12 | | 1.0 | 0.24 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 22 | | 1.0 | 0.53 | mg/Kg | 1 | | 6010B | Total/NA |
| Lead | 4.5 | J | 5.2 | 1.0 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 14 | | 0.52 | 0.45 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 34 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 58 | | 10 | 5.4 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.10 | | 0.088 | 0.014 | mg/Kg | 1 | | 7471A | Total/NA |

## Client Sample ID: SGP-5-20 — Lab Sample ID: 440-280935-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.013 | J | 0.021 | 0.010 | mg/Kg | 1 | | 8260B | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Client Sample ID: SGP-1-5**
**Date Collected: 03/23/21 08:15**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-1**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00086 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00086 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0017 | 0.00047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0086 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00086 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,1-Dichloroethane | ND | | 0.00086 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,1-Dichloroethene | ND | | 0.00086 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,1-Dichloropropene | ND | | 0.0017 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0017 | 0.00086 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0017 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0017 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0017 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0086 | 0.0058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2-Dibromoethane | ND | | 0.00086 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00086 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2-Dichloroethane | ND | | 0.00086 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,2-Dichloropropane | ND | | 0.00086 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0017 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00086 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,3-Dichloropropane | ND | | 0.00086 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00086 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 2,2-Dichloropropane | ND | | 0.0043 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 2-Butanone | ND | | 0.017 | 0.0039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 2-Chlorotoluene | ND | | 0.00086 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 2-Hexanone | ND | | 0.017 | 0.0026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 4-Chlorotoluene | ND | | 0.00086 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.017 | 0.0025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| **Acetone** | **0.022** | | 0.017 | 0.0084 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Benzene | ND | | 0.00086 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Bromobenzene | ND | | 0.00086 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Bromochloromethane | ND | | 0.0017 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Bromodichloromethane | ND | | 0.00086 | 0.00014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Bromoform | ND | | 0.0043 | 0.0011 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Bromomethane | ND | | 0.017 | 0.0056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Carbon disulfide | ND | | 0.0086 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Carbon tetrachloride | ND | | 0.00086 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Chlorobenzene | ND | | 0.00086 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Chloroethane | ND | | 0.0017 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Chloroform | ND | | 0.00086 | 0.00051 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Chloromethane | ND | | 0.017 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00086 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00086 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Dibromochloromethane | ND | | 0.0017 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Dibromomethane | ND | | 0.00086 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Dichlorodifluoromethane | ND | | 0.0017 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00086 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Ethanol | ND | | 0.21 | 0.057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Ethylbenzene | ND | | 0.00086 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00086 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |

**Client Sample ID: SGP-1-5**
**Date Collected: 03/23/21 08:15**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-1**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ND | | 0.0043 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Isopropylbenzene | ND | | 0.00086 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| m,p-Xylene | ND | | 0.0017 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Methylene Chloride | ND | | 0.0086 | 0.0027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0017 | 0.00016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Naphthalene | ND | | 0.0086 | 0.0045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| n-Butylbenzene | ND | | 0.00086 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| N-Propylbenzene | ND | | 0.0017 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| o-Xylene | ND | | 0.00086 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| p-Isopropyltoluene | ND | | 0.00086 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| sec-Butylbenzene | ND | | 0.00086 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Styrene | ND | | 0.00086 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00086 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| **tert-Butyl alcohol (TBA)** | **0.0069** | **J** | 0.017 | 0.0060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| tert-Butylbenzene | ND | | 0.00086 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Tetrachloroethene | ND | | 0.00086 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Toluene | ND | | 0.00086 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00086 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0017 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Trichloroethene | ND | | 0.0017 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Trichlorofluoromethane | ND | | 0.0086 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Vinyl acetate | ND | | 0.0086 | 0.0034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Vinyl chloride | ND | | 0.00086 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |
| Xylenes, Total | ND | | 0.0017 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *71 - 155* | *03/24/21 19:28* | *03/26/21 04:01* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 04:01* | *1* |
| *Dibromofluoromethane (Surr)* | *101* | | *79 - 133* | *03/24/21 19:28* | *03/26/21 04:01* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 04:01* | *1* |

## Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.089 | 0.049 | mg/Kg | | 03/24/21 19:28 | 03/26/21 08:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 08:52* | *1* |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C13-C22** | **4.0** | **J** | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 16:01 | 1 |
| **C23-C40** | **7.0** | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 16:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *100* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 16:01* | *1* |

## Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0049 | 0.00097 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| 4,4'-DDE | ND | | 0.0049 | 0.00053 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| 4,4'-DDT | ND | | 0.0049 | 0.00035 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |

**Client Sample ID: SGP-1-5**
**Date Collected: 03/23/21 08:15**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-1**
**Matrix: Solid**

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 0.0049 | 0.00029 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| alpha-BHC | ND | | 0.0049 | 0.0030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| alpha-Chlordane | ND | | 0.0049 | 0.0013 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| beta-BHC | ND | | 0.0049 | 0.0036 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Chlordane | ND | | 0.025 | 0.0023 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| delta-BHC | ND | | 0.0049 | 0.0033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Dieldrin | ND | | 0.0049 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Endosulfan I | ND | | 0.0049 | 0.00043 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Endosulfan II | ND | | 0.0049 | 0.00030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Endosulfan sulfate | ND | | 0.0049 | 0.00040 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Endrin | ND | | 0.0049 | 0.00033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Endrin aldehyde | ND | | 0.0049 | 0.00072 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Endrin ketone | ND | | 0.0049 | 0.00047 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| gamma-BHC | ND | | 0.0049 | 0.00061 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| gamma-Chlordane | ND | | 0.0049 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Heptachlor | ND | | 0.0049 | 0.00087 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Heptachlor epoxide | ND | | 0.0049 | 0.00066 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Methoxychlor | ND | | 0.0049 | 0.00080 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |
| Toxaphene | ND | | 0.025 | 0.019 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *97* | | *37 - 151* | *03/25/21 08:00* | *03/26/21 04:10* | *1* |
| *Tetrachloro-m-xylene* | *91* | | *38 - 148* | *03/25/21 08:00* | *03/26/21 04:10* | *1* |

## Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| 2,4-DB | ND | *1 | 0.10 | 0.047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| Dalapon | ND | *1 | 0.25 | 0.073 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| Dichlorprop | ND | | 0.10 | 0.050 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| Dinoseb | ND | *- *1 | 0.10 | 0.019 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 03/24/21 16:36 | 03/26/21 19:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *126* | | *21 - 161* | *03/24/21 16:36* | *03/26/21 19:58* | *1* |

## Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.1 | 1.4 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Arsenic** | **2.5** | **J** | 2.6 | 2.3 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Barium** | **60** | | 0.51 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| Beryllium | ND | | 0.26 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Cadmium** | **0.52** | | 0.51 | 0.21 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Chromium** | **11** | | 1.0 | 0.18 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Cobalt** | **6.9** | | 1.0 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Copper** | **14** | | 1.0 | 0.52 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |

## Client Sample ID: SGP-1-5

**Date Collected: 03/23/21 08:15**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-1

**Matrix: Solid**

### Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **15** | | 5.1 | 0.99 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| Molybdenum | ND | | 0.51 | 0.46 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Nickel** | **7.3** | | 0.51 | 0.44 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| Selenium | ND | | 5.1 | 1.9 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| Silver | ND | | 1.0 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| Thallium | ND | | 5.1 | 1.5 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Vanadium** | **18** | | 1.0 | 0.18 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |
| **Zinc** | **46** | | 10 | 5.2 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:13 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.038** | **J** | 0.079 | 0.013 | mg/Kg | | 03/25/21 20:00 | 03/26/21 15:20 | 1 |

## Client Sample ID: SGP-1-20

**Date Collected: 03/23/21 08:30**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-2

**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00091 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00091 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0018 | 0.00049 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0091 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00091 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,1-Dichloroethane | ND | | 0.00091 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,1-Dichloroethene | ND | | 0.00091 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,1-Dichloropropene | ND | | 0.0018 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0018 | 0.00091 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0018 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0018 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0018 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0091 | 0.0061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2-Dibromoethane | ND | | 0.00091 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00091 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2-Dichloroethane | ND | | 0.00091 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,2-Dichloropropane | ND | | 0.00091 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0018 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00091 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,3-Dichloropropane | ND | | 0.00091 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00091 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 2,2-Dichloropropane | ND | | 0.0045 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 2-Butanone | ND | | 0.018 | 0.0041 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 2-Chlorotoluene | ND | | 0.00091 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 2-Hexanone | ND | | 0.018 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 4-Chlorotoluene | ND | | 0.00091 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.018 | 0.0026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| **Acetone** | **0.011** | **J** | 0.018 | 0.0089 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Benzene | ND | | 0.00091 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Bromobenzene | ND | | 0.00091 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Bromochloromethane | ND | | 0.0018 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |

**Client Sample ID: SGP-1-20**
**Date Collected: 03/23/21 08:30**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-2**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | 0.00091 | 0.00014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Bromoform | ND | | 0.0045 | 0.0012 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Bromomethane | ND | | 0.018 | 0.0060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Carbon disulfide | ND | | 0.0091 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Carbon tetrachloride | ND | | 0.00091 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Chlorobenzene | ND | | 0.00091 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Chloroethane | ND | | 0.0018 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Chloroform | ND | | 0.00091 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Chloromethane | ND | | 0.018 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00091 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00091 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Dibromochloromethane | ND | | 0.0018 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Dibromomethane | ND | | 0.00091 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Dichlorodifluoromethane | ND | | 0.0018 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00091 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Ethanol | ND | | 0.23 | 0.060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Ethylbenzene | ND | | 0.00091 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00091 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0045 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Isopropylbenzene | ND | | 0.00091 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| m,p-Xylene | ND | | 0.0018 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Methylene Chloride | ND | | 0.0091 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0018 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Naphthalene | ND | | 0.0091 | 0.0047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| n-Butylbenzene | ND | | 0.00091 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| N-Propylbenzene | ND | | 0.0018 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| o-Xylene | ND | | 0.00091 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| p-Isopropyltoluene | ND | | 0.00091 | 0.00064 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| sec-Butylbenzene | ND | | 0.00091 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Styrene | ND | | 0.00091 | 0.00064 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00091 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| **tert-Butyl alcohol (TBA)** | **0.0069** | **J** | 0.018 | 0.0063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| tert-Butylbenzene | ND | | 0.00091 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Tetrachloroethene | ND | | 0.00091 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Toluene | ND | | 0.00091 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00091 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0018 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Trichloroethene | ND | | 0.0018 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Trichlorofluoromethane | ND | | 0.0091 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Vinyl acetate | ND | | 0.0091 | 0.0036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Vinyl chloride | ND | | 0.00091 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |
| Xylenes, Total | ND | | 0.0018 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *118* | | *71 - 155* | *03/24/21 19:28* | *03/26/21 04:26* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 04:26* | *1* |
| *Dibromofluoromethane (Surr)* | *100* | | *79 - 133* | *03/24/21 19:28* | *03/26/21 04:26* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 04:26* | *1* |

## Client Sample ID: SGP-1-20

**Lab Sample ID: 440-280935-2**

**Date Collected: 03/23/21 08:30**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.086 | 0.048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 09:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *114* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 09:16* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 16:21 | 1 |
| C23-C40 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 16:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *105* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 16:21* | *1* |

## Client Sample ID: SGP-2-5

**Lab Sample ID: 440-280935-3**

**Date Collected: 03/23/21 09:15**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.0010 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0069 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 2,2-Dichloropropane | ND | | 0.0051 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0046 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| **Acetone** | **0.019** | **J** | 0.020 | 0.010 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| **Benzene** | **0.00029** | **J** | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Bromodichloromethane | ND | | 0.0010 | 0.00016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Client Sample ID: SGP-2-5**
**Date Collected: 03/23/21 09:15**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-3**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromoform | ND | | 0.0051 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Bromomethane | ND | | 0.020 | 0.0067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Chloroform | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Chloromethane | ND | | 0.020 | 0.0016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00051 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| **Ethanol** | **0.083** | **J** | 0.26 | 0.067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0051 | 0.0017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Naphthalene | ND | | 0.010 | 0.0053 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00071 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Styrene | ND | | 0.0010 | 0.00071 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| **tert-Butyl alcohol (TBA)** | **0.010** | **J** | 0.020 | 0.0071 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Tetrachloroethene | ND | | 0.0010 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Toluene | ND | | 0.0010 | 0.00061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 04:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *119* | | *71 - 155* | *03/24/21 19:28* | *03/26/21 04:51* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 04:51* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *79 - 133* | *03/24/21 19:28* | *03/26/21 04:51* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 04:51* | *1* |

## Client Sample ID: SGP-2-5

**Lab Sample ID: 440-280935-3**

**Date Collected: 03/23/21 09:15**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.077 | 0.043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 09:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *105* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 09:40* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | 4.6 | J | 4.8 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 16:42 | 1 |
| C23-C40 | 14 | | 4.8 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 16:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *104* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 16:42* | *1* |

## Client Sample ID: SGP-2-20

**Lab Sample ID: 440-280935-4**

**Date Collected: 03/23/21 09:40**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00098 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00098 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00053 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0098 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00098 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,1-Dichloroethane | ND | | 0.00098 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,1-Dichloroethene | ND | | 0.00098 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.00098 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0098 | 0.0066 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2-Dibromoethane | ND | | 0.00098 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00098 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2-Dichloroethane | ND | | 0.00098 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,2-Dichloropropane | ND | | 0.00098 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00098 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,3-Dichloropropane | ND | | 0.00098 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00098 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 2,2-Dichloropropane | ND | | 0.0049 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 2-Chlorotoluene | ND | | 0.00098 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 4-Chlorotoluene | ND | | 0.00098 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Acetone | ND | | 0.020 | 0.0096 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Benzene | ND | | 0.00098 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Bromobenzene | ND | | 0.00098 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Bromodichloromethane | ND | | 0.00098 | 0.00016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Client Sample ID: SGP-2-20**
**Date Collected: 03/23/21 09:40**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-4**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromoform | ND | | 0.0049 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Bromomethane | ND | | 0.020 | 0.0064 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Carbon disulfide | ND | | 0.0098 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Carbon tetrachloride | ND | | 0.00098 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Chlorobenzene | ND | | 0.00098 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Chloroform | ND | | 0.00098 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00098 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00098 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Dibromomethane | ND | | 0.00098 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00098 | 0.00049 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Ethanol | ND | | 0.24 | 0.065 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Ethylbenzene | ND | | 0.00098 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00098 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0049 | 0.0016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Isopropylbenzene | ND | | 0.00098 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Methylene Chloride | ND | | 0.0098 | 0.0031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Naphthalene | ND | | 0.0098 | 0.0051 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| n-Butylbenzene | ND | | 0.00098 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| o-Xylene | ND | | 0.00098 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| p-Isopropyltoluene | ND | | 0.00098 | 0.00069 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| sec-Butylbenzene | ND | | 0.00098 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Styrene | ND | | 0.00098 | 0.00069 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00098 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.020 | 0.0068 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| tert-Butylbenzene | ND | | 0.00098 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Tetrachloroethene | ND | | 0.00098 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Toluene | ND | | 0.00098 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00098 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Trichlorofluoromethane | ND | | 0.0098 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Vinyl acetate | ND | | 0.0098 | 0.0038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Vinyl chloride | ND | | 0.00098 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *118* | | *71 - 155* | *03/24/21 19:28* | *03/26/21 05:17* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 05:17* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *79 - 133* | *03/24/21 19:28* | *03/26/21 05:17* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 05:17* | *1* |

## Client Sample ID: SGP-2-20

**Lab Sample ID: 440-280935-4**

**Date Collected: 03/23/21 09:40**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.11 | 0.059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 10:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *102* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 10:04* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 17:03 | 1 |
| C23-C40 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 17:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *104* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 17:03* | *1* |

## Client Sample ID: SGP-3-5

**Lab Sample ID: 440-280935-5**

**Date Collected: 03/23/21 10:30**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00099 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00099 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0099 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00099 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,1-Dichloroethane | ND | | 0.00099 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,1-Dichloroethene | ND | | 0.00099 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0099 | 0.0067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2-Dibromoethane | ND | | 0.00099 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00099 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2-Dichloroethane | ND | | 0.00099 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,2-Dichloropropane | ND | | 0.00099 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00099 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,3-Dichloropropane | ND | | 0.00099 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00099 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 2-Chlorotoluene | ND | | 0.00099 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 4-Chlorotoluene | ND | | 0.00099 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| **Acetone** | **0.012** | **J** | 0.020 | 0.0098 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Benzene | ND | | 0.00099 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Bromobenzene | ND | | 0.00099 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Bromodichloromethane | ND | | 0.00099 | 0.00016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Client Sample ID: SGP-3-5**
**Date Collected: 03/23/21 10:30**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-5**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromoform | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Bromomethane | ND | | 0.020 | 0.0065 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Carbon disulfide | ND | | 0.0099 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Carbon tetrachloride | ND | | 0.00099 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Chlorobenzene | ND | | 0.00099 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Chloroform | ND | | 0.00099 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00099 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00099 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Dibromomethane | ND | | 0.00099 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00099 | 0.00050 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Ethanol | ND | | 0.25 | 0.066 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Ethylbenzene | ND | | 0.00099 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00099 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0050 | 0.0017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Isopropylbenzene | ND | | 0.00099 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Methylene Chloride | ND | | 0.0099 | 0.0031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Naphthalene | ND | | 0.0099 | 0.0052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| n-Butylbenzene | ND | | 0.00099 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| o-Xylene | ND | | 0.00099 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| p-Isopropyltoluene | ND | | 0.00099 | 0.00070 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| sec-Butylbenzene | ND | | 0.00099 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Styrene | ND | | 0.00099 | 0.00070 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00099 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.020 | 0.0069 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| tert-Butylbenzene | ND | | 0.00099 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Tetrachloroethene | ND | | 0.00099 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Toluene | ND | | 0.00099 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00099 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Trichlorofluoromethane | ND | | 0.0099 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Vinyl acetate | ND | | 0.0099 | 0.0039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Vinyl chloride | ND | | 0.00099 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 05:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *120* | | *71 - 155* | *03/24/21 19:28* | *03/26/21 05:42* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 05:42* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *79 - 133* | *03/24/21 19:28* | *03/26/21 05:42* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 05:42* | *1* |

## Client Sample ID: SGP-3-5

**Lab Sample ID: 440-280935-5**

**Date Collected: 03/23/21 10:30**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.090 | 0.050 | mg/Kg | | 03/24/21 19:28 | 03/26/21 10:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *95* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 10:28* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | 6.1 | | 4.7 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 17:24 | 1 |
| C23-C40 | 4.7 | | 4.7 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 17:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *104* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 17:24* | *1* |

## Client Sample ID: SGP-3-20

**Lab Sample ID: 440-280935-6**

**Date Collected: 03/23/21 10:50**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00097 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00097 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0019 | 0.00053 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0097 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00097 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,1-Dichloroethane | ND | | 0.00097 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,1-Dichloroethene | ND | | 0.00097 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,1-Dichloropropene | ND | | 0.0019 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0019 | 0.00097 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0019 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0019 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0019 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0097 | 0.0065 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2-Dibromoethane | ND | | 0.00097 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00097 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2-Dichloroethane | ND | | 0.00097 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,2-Dichloropropane | ND | | 0.00097 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0019 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00097 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,3-Dichloropropane | ND | | 0.00097 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00097 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 2,2-Dichloropropane | ND | | 0.0048 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 2-Butanone | ND | | 0.019 | 0.0044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 2-Chlorotoluene | ND | | 0.00097 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 2-Hexanone | ND | | 0.019 | 0.0030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 4-Chlorotoluene | ND | | 0.00097 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.019 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Acetone | ND | | 0.019 | 0.0095 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Benzene | ND | | 0.00097 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Bromobenzene | ND | | 0.00097 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Bromochloromethane | ND | | 0.0019 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Bromodichloromethane | ND | | 0.00097 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Client Sample ID: SGP-3-20**
**Date Collected: 03/23/21 10:50**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-6**
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromoform | ND | | 0.0048 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Bromomethane | ND | | 0.019 | 0.0063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Carbon disulfide | ND | | 0.0097 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Carbon tetrachloride | ND | | 0.00097 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Chlorobenzene | ND | | 0.00097 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Chloroethane | ND | | 0.0019 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Chloroform | ND | | 0.00097 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Chloromethane | ND | | 0.019 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00097 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00097 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Dibromochloromethane | ND | | 0.0019 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Dibromomethane | ND | | 0.00097 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Dichlorodifluoromethane | ND | | 0.0019 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00097 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Ethanol | ND | | 0.24 | 0.064 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Ethylbenzene | ND | | 0.00097 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00097 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0048 | 0.0016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Isopropylbenzene | ND | | 0.00097 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| m,p-Xylene | ND | | 0.0019 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Methylene Chloride | ND | | 0.0097 | 0.0030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0019 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Naphthalene | ND | | 0.0097 | 0.0050 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| n-Butylbenzene | ND | | 0.00097 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| N-Propylbenzene | ND | | 0.0019 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| o-Xylene | ND | | 0.00097 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| p-Isopropyltoluene | ND | | 0.00097 | 0.00068 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| sec-Butylbenzene | ND | | 0.00097 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Styrene | ND | | 0.00097 | 0.00068 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00097 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.019 | 0.0067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| tert-Butylbenzene | ND | | 0.00097 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Tetrachloroethene | ND | | 0.00097 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Toluene | ND | | 0.00097 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00097 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0019 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Trichloroethene | ND | | 0.0019 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Trichlorofluoromethane | ND | | 0.0097 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Vinyl acetate | ND | | 0.0097 | 0.0038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Vinyl chloride | ND | | 0.00097 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |
| Xylenes, Total | ND | | 0.0019 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *120* | | *71 - 155* | *03/24/21 19:28* | *03/26/21 06:07* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 06:07* | *1* |
| *Dibromofluoromethane (Surr)* | *101* | | *79 - 133* | *03/24/21 19:28* | *03/26/21 06:07* | *1* |
| *Toluene-d8 (Surr)* | *100* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 06:07* | *1* |

## Client Sample ID: SGP-3-20

**Lab Sample ID: 440-280935-6**

**Date Collected: 03/23/21 10:50**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.097 | 0.054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 10:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 10:52* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | 7.6 | | 5.1 | 3.9 | mg/Kg | | 03/25/21 17:33 | 03/26/21 17:44 | 1 |
| C23-C40 | 5.1 | | 5.1 | 3.9 | mg/Kg | | 03/25/21 17:33 | 03/26/21 17:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *110* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 17:44* | *1* |

## Client Sample ID: SGP-4-5

**Lab Sample ID: 440-280935-7**

**Date Collected: 03/23/21 12:40**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00095 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00095 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0019 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0095 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00095 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,1-Dichloroethane | ND | | 0.00095 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,1-Dichloroethene | ND | | 0.00095 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,1-Dichloropropene | ND | | 0.0019 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0019 | 0.00095 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0019 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0019 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0019 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0095 | 0.0065 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2-Dibromoethane | ND | | 0.00095 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00095 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2-Dichloroethane | ND | | 0.00095 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,2-Dichloropropane | ND | | 0.00095 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0019 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00095 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,3-Dichloropropane | ND | | 0.00095 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00095 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 2,2-Dichloropropane | ND | | 0.0048 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 2-Butanone | ND | | 0.019 | 0.0043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 2-Chlorotoluene | ND | | 0.00095 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 2-Hexanone | ND | | 0.019 | 0.0029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 4-Chlorotoluene | ND | | 0.00095 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.019 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Acetone | ND | | 0.019 | 0.0094 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Benzene | ND | | 0.00095 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Bromobenzene | ND | | 0.00095 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Bromochloromethane | ND | | 0.0019 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Bromodichloromethane | ND | | 0.00095 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Client Sample ID: SGP-4-5**
**Date Collected: 03/23/21 12:40**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-7**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromoform | ND | | 0.0048 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Bromomethane | ND | | 0.019 | 0.0063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Carbon disulfide | ND | | 0.0095 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Carbon tetrachloride | ND | | 0.00095 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Chlorobenzene | ND | | 0.00095 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Chloroethane | ND | | 0.0019 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Chloroform | ND | | 0.00095 | 0.00056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Chloromethane | ND | | 0.019 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00095 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00095 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Dibromochloromethane | ND | | 0.0019 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Dibromomethane | ND | | 0.00095 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Dichlorodifluoromethane | ND | | 0.0019 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00095 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Ethanol | ND | | 0.24 | 0.063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Ethylbenzene | ND | | 0.00095 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00095 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0048 | 0.0016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Isopropylbenzene | ND | | 0.00095 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| m,p-Xylene | ND | | 0.0019 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Methylene Chloride | ND | | 0.0095 | 0.0030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0019 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Naphthalene | ND | | 0.0095 | 0.0050 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| n-Butylbenzene | ND | | 0.00095 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| N-Propylbenzene | ND | | 0.0019 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| o-Xylene | ND | | 0.00095 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| p-Isopropyltoluene | ND | | 0.00095 | 0.00067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| sec-Butylbenzene | ND | | 0.00095 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Styrene | ND | | 0.00095 | 0.00067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00095 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.019 | 0.0067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| tert-Butylbenzene | ND | | 0.00095 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Tetrachloroethene | ND | | 0.00095 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Toluene | ND | | 0.00095 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00095 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0019 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Trichloroethene | ND | | 0.0019 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Trichlorofluoromethane | ND | | 0.0095 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Vinyl acetate | ND | | 0.0095 | 0.0037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Vinyl chloride | ND | | 0.00095 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |
| Xylenes, Total | ND | | 0.0019 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 06:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *124* | | *71 - 155* | *03/24/21 19:28* | *03/26/21 06:33* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 06:33* | *1* |
| *Dibromofluoromethane (Surr)* | *103* | | *79 - 133* | *03/24/21 19:28* | *03/26/21 06:33* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *80 - 120* | *03/24/21 19:28* | *03/26/21 06:33* | *1* |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

## Client Sample ID: SGP-4-5
**Date Collected: 03/23/21 12:40**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-7
**Matrix: Solid**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.078 | 0.043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 11:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *113* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 11:15* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 18:05 | 1 |
| C23-C40 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 18:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *105* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 18:05* | *1* |

### Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00099 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| 4,4'-DDT | ND | | 0.0050 | 0.00036 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Endrin | ND | | 0.0050 | 0.00033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00048 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00088 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *114* | | *37 - 151* | *03/25/21 08:00* | *03/26/21 04:24* | *1* |
| *Tetrachloro-m-xylene* | *102* | | *38 - 148* | *03/25/21 08:00* | *03/26/21 04:24* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0038 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |
| 2,4-DB | ND | *1 | 0.10 | 0.047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |
| Dalapon | ND | *1 | 0.25 | 0.074 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |
| Dicamba | ND | | 0.010 | 0.0048 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |
| Dichlorprop | ND | | 0.10 | 0.050 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |

## Client Sample ID: SGP-4-5

**Date Collected: 03/23/21 12:40**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-7

**Matrix: Solid**

### Method: 8151A - Herbicides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dinoseb | ND | *- *1 | 0.10 | 0.020 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |
| MCPP | ND | | 10 | 6.7 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *122* | | *21 - 161* | *03/24/21 16:36* | *03/26/21 20:21* | *1* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.0 | 1.3 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| Arsenic | ND | | 2.5 | 2.2 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Barium** | **43** | | 0.50 | 0.22 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| Beryllium | ND | | 0.25 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Cadmium** | **0.27** | **J** | 0.50 | 0.20 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Chromium** | **6.9** | | 0.99 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Cobalt** | **4.4** | | 0.99 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Copper** | **7.4** | | 0.99 | 0.50 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Lead** | **2.1** | **J** | 5.0 | 0.96 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| Molybdenum | ND | | 0.50 | 0.45 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Nickel** | **4.6** | | 0.50 | 0.43 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| Selenium | ND | | 5.0 | 1.8 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| Silver | ND | | 0.99 | 0.22 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| Thallium | ND | | 5.0 | 1.5 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Vanadium** | **11** | | 0.99 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |
| **Zinc** | **20** | | 9.9 | 5.1 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:16 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.026** | **J** | 0.082 | 0.013 | mg/Kg | | 03/25/21 20:00 | 03/26/21 15:25 | 1 |

## Client Sample ID: SGP-4-20

**Date Collected: 03/23/21 12:50**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-8

**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00055 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00047 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.0010 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0068 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |

**Client Sample ID: SGP-4-20**
**Date Collected: 03/23/21 12:50**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-8**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0045 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0029 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| **Acetone** | **0.011** | **J** | 0.020 | 0.0099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Benzene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Bromodichloromethane | ND | | 0.0010 | 0.00016 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Bromoform | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Bromomethane | ND | | 0.020 | 0.0066 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Chloroform | ND | | 0.0010 | 0.00059 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00050 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Ethanol | ND | | 0.25 | 0.066 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0050 | 0.0017 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0031 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Naphthalene | ND | | 0.010 | 0.0052 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00070 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Styrene | ND | | 0.0010 | 0.00070 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| **tert-Butyl alcohol (TBA)** | **0.0081** | **J** | 0.020 | 0.0070 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |

## Client Sample ID: SGP-4-20

**Date Collected: 03/23/21 12:50**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-8**
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | ND | | 0.0010 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Toluene | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0039 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *111* | | *71 - 155* | *03/24/21 19:28* | *03/25/21 23:06* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *80 - 120* | *03/24/21 19:28* | *03/25/21 23:06* | *1* |
| *Dibromofluoromethane (Surr)* | *103* | | *79 - 133* | *03/24/21 19:28* | *03/25/21 23:06* | *1* |
| *Toluene-d8 (Surr)* | *98* | | *80 - 120* | *03/24/21 19:28* | *03/25/21 23:06* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.11 | 0.060 | mg/Kg | | 03/24/21 19:28 | 03/26/21 12:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *110* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 12:50* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.9 | mg/Kg | | 03/25/21 17:33 | 03/26/21 18:26 | 1 |
| C23-C40 | ND | | 5.0 | 3.9 | mg/Kg | | 03/25/21 17:33 | 03/26/21 18:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *105* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 18:26* | *1* |

## Client Sample ID: SGP-5-5

**Date Collected: 03/23/21 13:15**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-9**
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0017 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0017 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0033 | 0.00090 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.017 | 0.00077 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0017 | 0.00077 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,1-Dichloroethane | ND | | 0.0017 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,1-Dichloroethene | ND | | 0.0017 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,1-Dichloropropene | ND | | 0.0033 | 0.00064 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0033 | 0.0017 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0033 | 0.00069 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0033 | 0.00068 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0033 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.017 | 0.011 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,2-Dibromoethane | ND | | 0.0017 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Client Sample ID: SGP-5-5**
**Date Collected: 03/23/21 13:15**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-9**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene | ND | | 0.0017 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,2-Dichloroethane | ND | | 0.0017 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,2-Dichloropropane | ND | | 0.0017 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0033 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0017 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,3-Dichloropropane | ND | | 0.0017 | 0.00049 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0017 | 0.00051 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 2,2-Dichloropropane | ND | | 0.0083 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 2-Butanone | ND | | 0.033 | 0.0075 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 2-Chlorotoluene | ND | | 0.0017 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 2-Hexanone | ND | | 0.033 | 0.0051 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 4-Chlorotoluene | ND | | 0.0017 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.033 | 0.0048 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| **Acetone** | **0.042** | | 0.033 | 0.016 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| **Benzene** | **0.00058** | **J** | 0.0017 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Bromobenzene | ND | | 0.0017 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Bromochloromethane | ND | | 0.0033 | 0.00074 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Bromodichloromethane | ND | | 0.0017 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Bromoform | ND | | 0.0083 | 0.0022 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Bromomethane | ND | | 0.033 | 0.011 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Carbon disulfide | ND | | 0.017 | 0.00066 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Carbon tetrachloride | ND | | 0.0017 | 0.00050 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Chlorobenzene | ND | | 0.0017 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Chloroethane | ND | | 0.0033 | 0.0025 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Chloroform | ND | | 0.0017 | 0.00098 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Chloromethane | ND | | 0.033 | 0.0025 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0017 | 0.00056 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0017 | 0.00058 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Dibromochloromethane | ND | | 0.0033 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Dibromomethane | ND | | 0.0017 | 0.00051 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Dichlorodifluoromethane | ND | | 0.0033 | 0.00075 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0017 | 0.00083 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Ethanol | ND | | 0.41 | 0.11 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Ethylbenzene | ND | | 0.0017 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0017 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0083 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Isopropylbenzene | ND | | 0.0017 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| m,p-Xylene | ND | | 0.0033 | 0.00078 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Methylene Chloride | ND | | 0.017 | 0.0052 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0033 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Naphthalene | ND | | 0.017 | 0.0086 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| n-Butylbenzene | ND | | 0.0017 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| N-Propylbenzene | ND | | 0.0033 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| o-Xylene | ND | | 0.0017 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| p-Isopropyltoluene | ND | | 0.0017 | 0.0012 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| sec-Butylbenzene | ND | | 0.0017 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Styrene | ND | | 0.0017 | 0.0012 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0017 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.033 | 0.012 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |

**Client Sample ID: SGP-5-5**
**Date Collected: 03/23/21 13:15**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-9**
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | 0.0017 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Tetrachloroethene | ND | | 0.0017 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Toluene | ND | | 0.0017 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0017 | 0.00050 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0033 | 0.00046 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Trichloroethene | ND | | 0.0033 | 0.00064 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Trichlorofluoromethane | ND | | 0.017 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Vinyl acetate | ND | | 0.017 | 0.0065 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Vinyl chloride | ND | | 0.0017 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |
| Xylenes, Total | ND | | 0.0033 | 0.00099 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *111* | | *71 - 155* | *03/24/21 19:28* | *03/25/21 23:31* | *1* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *80 - 120* | *03/24/21 19:28* | *03/25/21 23:31* | *1* |
| *Dibromofluoromethane (Surr)* | *104* | | *79 - 133* | *03/24/21 19:28* | *03/25/21 23:31* | *1* |
| *Toluene-d8 (Surr)* | *95* | | *80 - 120* | *03/24/21 19:28* | *03/25/21 23:31* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.10 | 0.057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 13:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *109* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 13:14* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C13-C22** | **5.3** | | 5.1 | 3.9 | mg/Kg | | 03/25/21 17:33 | 03/26/21 18:47 | 1 |
| **C23-C40** | **4.6** | **J** | 5.1 | 3.9 | mg/Kg | | 03/25/21 17:33 | 03/26/21 18:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *104* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 18:47* | *1* |

### Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0049 | 0.00097 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| 4,4'-DDE | ND | | 0.0049 | 0.00053 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| 4,4'-DDT | ND | | 0.0049 | 0.00035 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Aldrin | ND | | 0.0049 | 0.00029 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| alpha-BHC | ND | | 0.0049 | 0.0030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| alpha-Chlordane | ND | | 0.0049 | 0.0013 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| beta-BHC | ND | | 0.0049 | 0.0036 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Chlordane | ND | | 0.025 | 0.0023 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| delta-BHC | ND | | 0.0049 | 0.0033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Dieldrin | ND | | 0.0049 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Endosulfan I | ND | | 0.0049 | 0.00043 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Endosulfan II | ND | | 0.0049 | 0.00030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Endosulfan sulfate | ND | | 0.0049 | 0.00040 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Endrin | ND | | 0.0049 | 0.00033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Endrin aldehyde | ND | | 0.0049 | 0.00072 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Endrin ketone | ND | | 0.0049 | 0.00047 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| gamma-BHC | ND | | 0.0049 | 0.00061 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |

## Client Sample ID: SGP-5-5

**Date Collected: 03/23/21 13:15**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-9

**Matrix: Solid**

### Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| gamma-Chlordane | ND | | 0.0049 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Heptachlor | ND | | 0.0049 | 0.00087 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Heptachlor epoxide | ND | | 0.0049 | 0.00066 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Methoxychlor | ND | | 0.0049 | 0.00080 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |
| Toxaphene | ND | | 0.025 | 0.019 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *113* | | *37 - 151* | *03/25/21 08:00* | *03/26/21 04:38* | *1* |
| *Tetrachloro-m-xylene* | *101* | | *38 - 148* | *03/25/21 08:00* | *03/26/21 04:38* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| 2,4-DB | ND | *1 | 0.10 | 0.047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| Dalapon | ND | *1 | 0.25 | 0.073 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| Dicamba | ND | | 0.010 | 0.0048 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| Dichlorprop | ND | | 0.10 | 0.050 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| Dinoseb | ND | *- *1 | 0.10 | 0.019 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |
| MCPP | ND | | 10 | 6.7 | mg/Kg | | 03/24/21 16:36 | 03/26/21 20:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *113* | | *21 - 161* | *03/24/21 16:36* | *03/26/21 20:43* | *1* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.1 | 1.4 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Arsenic** | **4.1** | | 2.6 | 2.4 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Barium** | **130** | | 0.52 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| Beryllium | ND | L | 0.26 | 0.18 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Cadmium** | **0.71** | | 0.52 | 0.21 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Chromium** | **21** | | 1.0 | 0.18 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Cobalt** | **12** | | 1.0 | 0.24 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Copper** | **22** | | 1.0 | 0.53 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Lead** | **4.5** | **J** | 5.2 | 1.0 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| Molybdenum | ND | | 0.52 | 0.47 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Nickel** | **14** | | 0.52 | 0.45 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| Selenium | ND | | 5.2 | 1.9 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| Silver | ND | | 1.0 | 0.24 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| Thallium | ND | | 5.2 | 1.6 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Vanadium** | **34** | | 1.0 | 0.18 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |
| **Zinc** | **58** | | 10 | 5.4 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:19 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.10** | | 0.088 | 0.014 | mg/Kg | | 03/25/21 20:00 | 03/26/21 15:27 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Client Sample ID: SGP-5-20**
**Date Collected: 03/23/21 13:25**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-10**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0021 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00049 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,1-Dichloropropene | ND | | 0.0021 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0021 | 0.0010 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0021 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0021 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0021 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0071 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0021 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 2,2-Dichloropropane | ND | | 0.0052 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 2-Butanone | ND | | 0.021 | 0.0047 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 2-Hexanone | ND | | 0.021 | 0.0032 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.021 | 0.0030 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| **Acetone** | **0.013** | **J** | 0.021 | 0.010 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Benzene | ND | | 0.0010 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Bromochloromethane | ND | | 0.0021 | 0.00047 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Bromodichloromethane | ND | | 0.0010 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Bromoform | ND | | 0.0052 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Bromomethane | ND | | 0.021 | 0.0069 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Chloroethane | ND | | 0.0021 | 0.0016 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Chloroform | ND | | 0.0010 | 0.00062 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Chloromethane | ND | | 0.021 | 0.0016 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Dibromochloromethane | ND | | 0.0021 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Dichlorodifluoromethane | ND | | 0.0021 | 0.00047 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Ethanol | ND | | 0.26 | 0.069 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |

**Client Sample ID: SGP-5-20**
**Date Collected: 03/23/21 13:25**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280935-10**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ND | | 0.0052 | 0.0017 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| m,p-Xylene | ND | | 0.0021 | 0.00050 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0033 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0021 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Naphthalene | ND | | 0.010 | 0.0054 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| N-Propylbenzene | ND | | 0.0021 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00073 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Styrene | ND | | 0.0010 | 0.00073 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.021 | 0.0073 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Tetrachloroethene | ND | | 0.0010 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Toluene | ND | | 0.0010 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0021 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Trichloroethene | ND | | 0.0021 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0041 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |
| Xylenes, Total | ND | | 0.0021 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/25/21 23:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *71 - 155* | *03/24/21 19:28* | *03/25/21 23:57* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *80 - 120* | *03/24/21 19:28* | *03/25/21 23:57* | *1* |
| *Dibromofluoromethane (Surr)* | *95* | | *79 - 133* | *03/24/21 19:28* | *03/25/21 23:57* | *1* |
| *Toluene-d8 (Surr)* | *98* | | *80 - 120* | *03/24/21 19:28* | *03/25/21 23:57* | *1* |

## Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.10 | 0.056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 13:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *112* | | *42 - 126* | *03/24/21 19:28* | *03/26/21 13:38* | *1* |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 4.9 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 19:07 | 1 |
| C23-C40 | ND | | 4.9 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 19:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *100* | | *60 - 138* | *03/25/21 17:33* | *03/26/21 19:07* | *1* |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Solid**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (71-155) | (80-120) | (79-133) | (80-120) |
| 440-280935-1 | SGP-1-5 | 117 | 99 | 101 | 99 |
| 440-280935-2 | SGP-1-20 | 118 | 100 | 100 | 99 |
| 440-280935-3 | SGP-2-5 | 119 | 100 | 102 | 99 |
| 440-280935-4 | SGP-2-20 | 118 | 100 | 102 | 99 |
| 440-280935-5 | SGP-3-5 | 120 | 100 | 102 | 99 |
| 440-280935-6 | SGP-3-20 | 120 | 101 | 101 | 100 |
| 440-280935-7 | SGP-4-5 | 124 | 101 | 103 | 99 |
| 440-280935-8 | SGP-4-20 | 111 | 96 | 103 | 98 |
| 440-280935-9 | SGP-5-5 | 111 | 95 | 104 | 95 |
| 440-280935-10 | SGP-5-20 | 97 | 96 | 95 | 98 |
| LCS 570-138692/4 | Lab Control Sample | 99 | 99 | 102 | 102 |
| LCS 570-138697/4 | Lab Control Sample | 98 | 93 | 98 | 96 |
| LCSD 570-138692/5 | Lab Control Sample Dup | 100 | 99 | 102 | 101 |
| LCSD 570-138697/5 | Lab Control Sample Dup | 105 | 93 | 99 | 96 |
| MB 570-138692/9 | Method Blank | 103 | 99 | 96 | 99 |
| MB 570-138697/7 | Method Blank | 101 | 98 | 98 | 99 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

**Matrix: Solid**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | BFB1 |
| Lab Sample ID | Client Sample ID | (42-126) |
| 440-280935-1 | SGP-1-5 | 104 |
| 440-280935-2 | SGP-1-20 | 114 |
| 440-280935-3 | SGP-2-5 | 105 |
| 440-280935-4 | SGP-2-20 | 102 |
| 440-280935-5 | SGP-3-5 | 95 |
| 440-280935-6 | SGP-3-20 | 104 |
| 440-280935-7 | SGP-4-5 | 113 |
| 440-280935-8 | SGP-4-20 | 110 |
| 440-280935-9 | SGP-5-5 | 109 |
| 440-280935-10 | SGP-5-20 | 112 |
| LCS 570-138805/36 | Lab Control Sample | 112 |
| LCSD 570-138805/37 | Lab Control Sample Dup | 104 |
| MB 570-138805/38 | Method Blank | 97 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Solid**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OTCSN1 | | | | | | | | | | | | |
| Lab Sample ID | Client Sample ID | (60-138) | | | | | | | | | | | | |
| 440-280935-1 | SGP-1-5 | 100 | | | | | | | | | | | | |
| 440-280935-2 | SGP-1-20 | 105 | | | | | | | | | | | | |
| 440-280935-3 | SGP-2-5 | 104 | | | | | | | | | | | | |
| 440-280935-4 | SGP-2-20 | 104 | | | | | | | | | | | | |
| 440-280935-5 | SGP-3-5 | 104 | | | | | | | | | | | | |
| 440-280935-6 | SGP-3-20 | 110 | | | | | | | | | | | | |
| 440-280935-7 | SGP-4-5 | 105 | | | | | | | | | | | | |
| 440-280935-8 | SGP-4-20 | 105 | | | | | | | | | | | | |
| 440-280935-9 | SGP-5-5 | 104 | | | | | | | | | | | | |
| 440-280935-10 | SGP-5-20 | 100 | | | | | | | | | | | | |
| 570-54755-A-1-A MS | Matrix Spike | 97 | | | | | | | | | | | | |
| 570-54755-A-1-B MSD | Matrix Spike Duplicate | 96 | | | | | | | | | | | | |
| LCS 570-138648/2-A | Lab Control Sample | 99 | | | | | | | | | | | | |
| LCSD 570-138648/3-A | Lab Control Sample Dup | 104 | | | | | | | | | | | | |
| MB 570-138648/1-A | Method Blank | 105 | | | | | | | | | | | | |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

## Method: 8081A - Organochlorine Pesticides (GC)

**Matrix: Solid**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DCB1 | TCX1 | | | | | | | | | | | |
| Lab Sample ID | Client Sample ID | (37-151) | (38-148) | | | | | | | | | | | |
| 440-280935-1 | SGP-1-5 | 97 | 91 | | | | | | | | | | | |
| 440-280935-7 | SGP-4-5 | 114 | 102 | | | | | | | | | | | |
| 440-280935-9 | SGP-5-5 | 113 | 101 | | | | | | | | | | | |
| 440-280940-F-1-B MS | Matrix Spike | 119 | 110 | | | | | | | | | | | |
| 440-280940-F-1-C MSD | Matrix Spike Duplicate | 120 | 113 | | | | | | | | | | | |
| LCS 570-138530/2-A | Lab Control Sample | 109 | 104 | | | | | | | | | | | |
| LCSD 570-138530/3-A | Lab Control Sample Dup | 115 | 108 | | | | | | | | | | | |
| MB 570-138530/1-A | Method Blank | 111 | 103 | | | | | | | | | | | |

**Surrogate Legend**

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8151A - Herbicides (GC)

**Matrix: Solid**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DCPAA1 | | | | | | | | | | | | |
| Lab Sample ID | Client Sample ID | (21-161) | | | | | | | | | | | | |
| 440-280935-1 | SGP-1-5 | 126 | | | | | | | | | | | | |
| 440-280935-7 | SGP-4-5 | 122 | | | | | | | | | | | | |
| 440-280935-9 | SGP-5-5 | 113 | | | | | | | | | | | | |
| 570-53790-A-2-AK MS | Matrix Spike | 41 | | | | | | | | | | | | |
| 570-53790-A-2-AL MSD | Matrix Spike Duplicate | 54 | | | | | | | | | | | | |
| LCS 570-138415/2-A | Lab Control Sample | 71 | | | | | | | | | | | | |
| LCSD 570-138415/3-A | Lab Control Sample Dup | 109 | | | | | | | | | | | | |
| MB 570-138415/1-A | Method Blank | 93 | | | | | | | | | | | | |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

**Surrogate Legend**

DCPAA = 2,4-Dichlorophenylacetic acid

# Method Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | ECL 2 |
| 8015B | Gasoline Range Organics - (GC) | SW846 | ECL 2 |
| 8015B | Diesel Range Organics(DRO)/Oil Range Organics (ORO) | SW846 | ECL 1 |
| 8081A | Organochlorine Pesticides (GC) | SW846 | ECL 1 |
| 8151A | Herbicides (GC) | SW846 | ECL 1 |
| 6010B | Metals (ICP) | SW846 | ECL 1 |
| 7471A | Mercury (CVAA) | SW846 | ECL 1 |
| 3050B | Preparation, Metals | SW846 | ECL 1 |
| 3546 | Microwave Extraction | SW846 | ECL 1 |
| 3550C | Ultrasonic Extraction | SW846 | ECL 1 |
| 5035 | Closed System Purge and Trap | SW846 | ECL 2 |
| 7471A | Preparation, Mercury | SW846 | ECL 1 |
| 8151A | Extraction (Herbicides) | SW846 | ECL 1 |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Client Sample ID: SGP-1-5

**Date Collected: 03/23/21 08:15**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-1

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.824 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138692 | 03/26/21 04:01 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.629 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 08:52 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 9.99 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 16:01 | A1W | ECL 1 |
| Total/NA | Prep | 3546 | | | 20.29 g | 10 mL | 138530 | 03/25/21 08:00 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 138769 | 03/26/21 04:10 | UHHN | ECL 1 |
| Total/NA | Prep | 8151A | | | 49.79 g | 5 mL | 138415 | 03/24/21 16:36 | UFLU | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 139038 | 03/26/21 19:58 | J7WE | ECL 1 |
| Total/NA | Prep | 3050B | | | 1.96 g | 100 mL | 138796 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 139319 | 03/26/21 18:13 | UWCT | ECL 1 |
| Total/NA | Prep | 7471A | | | 0.63 g | 100 mL | 138797 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 7471A | | 1 | | | 139047 | 03/26/21 15:20 | VYQ5 | ECL 1 |

## Client Sample ID: SGP-1-20

**Date Collected: 03/23/21 08:30**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-2

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.503 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138692 | 03/26/21 04:26 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.817 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 09:16 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.05 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 16:21 | A1W | ECL 1 |

## Client Sample ID: SGP-2-5

**Date Collected: 03/23/21 09:15**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-3

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.9 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138692 | 03/26/21 04:51 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 6.494 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 09:40 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.52 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 16:42 | A1W | ECL 1 |

## Client Sample ID: SGP-2-20

**Lab Sample ID: 440-280935-4**

**Date Collected: 03/23/21 09:40**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.105 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138692 | 03/26/21 05:17 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 4.701 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 10:04 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.01 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 17:03 | A1W | ECL 1 |

## Client Sample ID: SGP-3-5

**Lab Sample ID: 440-280935-5**

**Date Collected: 03/23/21 10:30**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.028 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138692 | 03/26/21 05:42 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.526 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 10:28 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.53 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 17:24 | A1W | ECL 1 |

## Client Sample ID: SGP-3-20

**Lab Sample ID: 440-280935-6**

**Date Collected: 03/23/21 10:50**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.18 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138692 | 03/26/21 06:07 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.162 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 10:52 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 9.86 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 17:44 | A1W | ECL 1 |

## Client Sample ID: SGP-4-5

**Lab Sample ID: 440-280935-7**

**Date Collected: 03/23/21 12:40**

**Matrix: Solid**

**Date Received: 03/23/21 18:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.237 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138692 | 03/26/21 06:33 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 6.444 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 11:15 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.09 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 18:05 | A1W | ECL 1 |
| Total/NA | Prep | 3546 | | | 20.05 g | 10 mL | 138530 | 03/25/21 08:00 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 138769 | 03/26/21 04:24 | UHHN | ECL 1 |

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

## Client Sample ID: SGP-4-5

**Date Collected: 03/23/21 12:40**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-7

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 8151A | | | 49.15 g | 5 mL | 138415 | 03/24/21 16:36 | UFLU | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 139038 | 03/26/21 20:21 | J7WE | ECL 1 |
| Total/NA | Prep | 3050B | | | 2.02 g | 100 mL | 138796 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 139319 | 03/26/21 18:16 | UWCT | ECL 1 |
| Total/NA | Prep | 7471A | | | 0.61 g | 100 mL | 138797 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 7471A | | 1 | | | 139047 | 03/26/21 15:25 | VYQ5 | ECL 1 |

## Client Sample ID: SGP-4-20

**Date Collected: 03/23/21 12:50**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-8

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.977 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138697 | 03/25/21 23:06 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 4.604 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 12:50 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 9.97 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 18:26 | A1W | ECL 1 |

## Client Sample ID: SGP-5-5

**Date Collected: 03/23/21 13:15**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-9

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 3.02 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138697 | 03/25/21 23:31 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 4.895 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 13:14 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 9.89 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 18:47 | A1W | ECL 1 |
| Total/NA | Prep | 3546 | | | 20.28 g | 10 mL | 138530 | 03/25/21 08:00 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 138769 | 03/26/21 04:38 | UHHN | ECL 1 |
| Total/NA | Prep | 8151A | | | 49.62 g | 5 mL | 138415 | 03/24/21 16:36 | UFLU | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 139038 | 03/26/21 20:43 | J7WE | ECL 1 |
| Total/NA | Prep | 3050B | | | 1.91 g | 100 mL | 138796 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 139319 | 03/26/21 18:19 | UWCT | ECL 1 |
| Total/NA | Prep | 7471A | | | 0.57 g | 100 mL | 138797 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 7471A | | 1 | | | 139047 | 03/26/21 15:27 | VYQ5 | ECL 1 |

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

## Client Sample ID: SGP-5-20

**Date Collected: 03/23/21 13:25**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280935-10

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.78 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138697 | 03/25/21 23:57 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 4.97 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 13:38 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.23 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 19:07 | A1W | ECL 1 |

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-138692/9**
**Matrix: Solid**
**Analysis Batch: 138692**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00023 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00054 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00046 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00046 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.0010 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00042 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00041 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0068 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00031 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0045 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00024 | mg/Kg | | | 03/25/21 23:00 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0029 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Acetone | ND | | 0.020 | 0.0098 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Benzene | ND | | 0.0010 | 0.00026 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Bromodichloromethane | ND | | 0.0010 | 0.00016 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Bromoform | ND | | 0.0050 | 0.0013 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Bromomethane | ND | | 0.020 | 0.0066 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00040 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Chloroform | ND | | 0.0010 | 0.00059 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | | 03/25/21 23:00 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00034 | mg/Kg | | | 03/25/21 23:00 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00035 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00031 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00050 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Ethanol | ND | | 0.25 | 0.066 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 23:00 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-138692/9**
**Matrix: Solid**
**Analysis Batch: 138692**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00024 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0050 | 0.0017 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 23:00 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00047 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0031 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Naphthalene | ND | | 0.010 | 0.0052 | mg/Kg | | | 03/25/21 23:00 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 23:00 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 23:00 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 23:00 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 03/25/21 23:00 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Styrene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00019 | mg/Kg | | | 03/25/21 23:00 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.020 | 0.0070 | mg/Kg | | | 03/25/21 23:00 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Tetrachloroethene | ND | | 0.0010 | 0.00022 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Toluene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 23:00 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 23:00 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00028 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00027 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0039 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00038 | mg/Kg | | | 03/25/21 23:00 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 23:00 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *175* | | *01 - 133* | | *75/23/21 259 77* | *1* |
| *4-8ro6 oBuoromenf ene (Surr)* | *: :* | | *b7 - 127* | | *75/23/21 259 77* | *1* |
| *Dimro6 oBuoro6 ethane (Surr)* | *: z* | | *0: - 155* | | *75/23/21 259 77* | *1* |
| *Toluene-db (Surr)* | *: :* | | *b7 - 127* | | *75/23/21 259 77* | *1* |

**Lab Sample ID: LCS 570-138692/4**
**Matrix: Solid**
**Analysis Batch: 138692**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0497 | | mg/Kg | | 99 | 73 - 133 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0480 | | mg/Kg | | 96 | 71 - 131 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0506 | | mg/Kg | | 101 | 77 - 120 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0507 | | mg/Kg | | 101 | 80 - 120 |
| 1,1-Dichloroethane | 0.0500 | 0.0482 | | mg/Kg | | 96 | 74 - 120 |
| 1,1-Dichloroethene | 0.0500 | 0.0470 | | mg/Kg | | 94 | 71 - 125 |
| 1,1-Dichloropropene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 69 - 120 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0548 | | mg/Kg | | 110 | 73 - 127 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0491 | | mg/Kg | | 98 | 60 - 120 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0531 | | mg/Kg | | 106 | 74 - 128 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0508 | | mg/Kg | | 102 | 75 - 123 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-138692/4**
**Matrix: Solid**
**Analysis Batch: 138692**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0468 | | mg/Kg | | 94 | 54 - 132 |
| 1,2-Dibromoethane | 0.0500 | 0.0516 | | mg/Kg | | 103 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0513 | | mg/Kg | | 103 | 80 - 120 |
| 1,2-Dichloroethane | 0.0500 | 0.0499 | | mg/Kg | | 100 | 79 - 121 |
| 1,2-Dichloropropane | 0.0500 | 0.0502 | | mg/Kg | | 100 | 77 - 123 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0499 | | mg/Kg | | 100 | 80 - 123 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0509 | | mg/Kg | | 102 | 80 - 120 |
| 1,3-Dichloropropane | 0.0500 | 0.0505 | | mg/Kg | | 101 | 80 - 120 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 120 |
| 2,2-Dichloropropane | 0.0500 | 0.0473 | | mg/Kg | | 95 | 58 - 142 |
| 2-Chlorotoluene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 56 - 176 |
| 4-Chlorotoluene | 0.0500 | 0.0499 | | mg/Kg | | 100 | 67 - 151 |
| Benzene | 0.0500 | 0.0473 | | mg/Kg | | 95 | 79 - 120 |
| Bromobenzene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 120 |
| Bromochloromethane | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 120 |
| Bromodichloromethane | 0.0500 | 0.0512 | | mg/Kg | | 102 | 73 - 127 |
| Bromoform | 0.0500 | 0.0493 | | mg/Kg | | 99 | 55 - 133 |
| Bromomethane | 0.0500 | 0.0502 | | mg/Kg | | 100 | 36 - 144 |
| Carbon tetrachloride | 0.0500 | 0.0512 | | mg/Kg | | 102 | 58 - 142 |
| Chlorobenzene | 0.0500 | 0.0495 | | mg/Kg | | 99 | 80 - 120 |
| Chloroethane | 0.0500 | 0.0527 | | mg/Kg | | 105 | 60 - 120 |
| Chloroform | 0.0500 | 0.0514 | | mg/Kg | | 103 | 80 - 120 |
| Chloromethane | 0.0500 | 0.0478 | | mg/Kg | | 96 | 50 - 122 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0515 | | mg/Kg | | 103 | 80 - 123 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0495 | | mg/Kg | | 99 | 74 - 128 |
| Dibromochloromethane | 0.0500 | 0.0519 | | mg/Kg | | 104 | 50 - 122 |
| Dibromomethane | 0.0500 | 0.0521 | | mg/Kg | | 104 | 70 - 130 |
| Dichlorodifluoromethane | 0.0500 | 0.0475 | | mg/Kg | | 95 | 32 - 158 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0483 | | mg/Kg | | 97 | 65 - 131 |
| Ethanol | 0.500 | 0.421 | | mg/Kg | | 84 | 32 - 158 |
| Ethylbenzene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 57 - 153 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0466 | | mg/Kg | | 93 | 58 - 136 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0551 | | mg/Kg | | 110 | 80 - 120 |
| Isopropylbenzene | 0.0500 | 0.0498 | | mg/Kg | | 100 | 80 - 129 |
| m,p-Xylene | 0.100 | 0.0968 | | mg/Kg | | 97 | 80 - 122 |
| Methylene Chloride | 0.0500 | 0.0485 | | mg/Kg | | 97 | 72 - 120 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0467 | | mg/Kg | | 93 | 64 - 124 |
| Naphthalene | 0.0500 | 0.0532 | | mg/Kg | | 106 | 64 - 124 |
| n-Butylbenzene | 0.0500 | 0.0519 | | mg/Kg | | 104 | 78 - 126 |
| N-Propylbenzene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 122 |
| o-Xylene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 79 - 127 |
| p-Isopropyltoluene | 0.0500 | 0.0510 | | mg/Kg | | 102 | 80 - 122 |
| sec-Butylbenzene | 0.0500 | 0.0504 | | mg/Kg | | 101 | 79 - 127 |
| Styrene | 0.0500 | 0.0504 | | mg/Kg | | 101 | 80 - 123 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0490 | | mg/Kg | | 98 | 63 - 129 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.228 | | mg/Kg | | 91 | 79 - 121 |
| tert-Butylbenzene | 0.0500 | 0.0498 | | mg/Kg | | 100 | 80 - 128 |
| Tetrachloroethene | 0.0500 | 0.0497 | | mg/Kg | | 99 | 75 - 123 |
| Toluene | 0.0500 | 0.0497 | | mg/Kg | | 99 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-138692/4**
**Matrix: Solid**
**Analysis Batch: 138692**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 120 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0490 | | mg/Kg | | 98 | 66 - 120 |
| Trichloroethene | 0.0500 | 0.0508 | | mg/Kg | | 102 | 80 - 120 |
| Trichlorofluoromethane | 0.0500 | 0.0521 | | mg/Kg | | 104 | 70 - 136 |
| Vinyl chloride | 0.0500 | 0.0505 | | mg/Kg | | 101 | 68 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *: :* | | *01 - 133* |
| *4-8ro6 oBuorom enf ene (Surr)* | *: :* | | *b7 - 127* |
| *Dimro6 oBuoro6 ethane (Surr)* | *172* | | *0: - 155* |
| *Toluene-db (Surr)* | *172* | | *b7 - 127* |

**Lab Sample ID: LCSD 570-138692/5**
**Matrix: Solid**
**Analysis Batch: 138692**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0499 | | mg/Kg | | 100 | 73 - 133 | 1 | 20 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0488 | | mg/Kg | | 98 | 71 - 131 | 2 | 20 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0509 | | mg/Kg | | 102 | 77 - 120 | 1 | 20 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0504 | | mg/Kg | | 101 | 80 - 120 | 1 | 20 |
| 1,1-Dichloroethane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 74 - 120 | 1 | 20 |
| 1,1-Dichloroethene | 0.0500 | 0.0472 | | mg/Kg | | 94 | 71 - 125 | 1 | 20 |
| 1,1-Dichloropropene | 0.0500 | 0.0495 | | mg/Kg | | 99 | 69 - 120 | 1 | 20 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0547 | | mg/Kg | | 109 | 73 - 127 | 0 | 20 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0494 | | mg/Kg | | 99 | 60 - 120 | 1 | 20 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0529 | | mg/Kg | | 106 | 74 - 128 | 0 | 20 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0509 | | mg/Kg | | 102 | 75 - 123 | 0 | 20 |
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 54 - 132 | 1 | 20 |
| 1,2-Dibromoethane | 0.0500 | 0.0519 | | mg/Kg | | 104 | 80 - 120 | 1 | 20 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0518 | | mg/Kg | | 104 | 80 - 120 | 1 | 20 |
| 1,2-Dichloroethane | 0.0500 | 0.0506 | | mg/Kg | | 101 | 79 - 121 | 1 | 20 |
| 1,2-Dichloropropane | 0.0500 | 0.0509 | | mg/Kg | | 102 | 77 - 123 | 1 | 25 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0504 | | mg/Kg | | 101 | 80 - 123 | 1 | 20 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0512 | | mg/Kg | | 102 | 80 - 120 | 1 | 20 |
| 1,3-Dichloropropane | 0.0500 | 0.0508 | | mg/Kg | | 102 | 80 - 120 | 0 | 20 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0509 | | mg/Kg | | 102 | 80 - 120 | 1 | 20 |
| 2,2-Dichloropropane | 0.0500 | 0.0477 | | mg/Kg | | 95 | 58 - 142 | 1 | 20 |
| 2-Chlorotoluene | 0.0500 | 0.0499 | | mg/Kg | | 100 | 56 - 176 | 2 | 20 |
| 4-Chlorotoluene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 67 - 151 | 0 | 20 |
| Benzene | 0.0500 | 0.0477 | | mg/Kg | | 95 | 79 - 120 | 1 | 20 |
| Bromobenzene | 0.0500 | 0.0508 | | mg/Kg | | 102 | 80 - 120 | 1 | 20 |
| Bromochloromethane | 0.0500 | 0.0510 | | mg/Kg | | 102 | 80 - 120 | 2 | 20 |
| Bromodichloromethane | 0.0500 | 0.0520 | | mg/Kg | | 104 | 73 - 127 | 2 | 20 |
| Bromoform | 0.0500 | 0.0506 | | mg/Kg | | 101 | 55 - 133 | 3 | 20 |
| Bromomethane | 0.0500 | 0.0508 | | mg/Kg | | 102 | 36 - 144 | 1 | 20 |
| Carbon tetrachloride | 0.0500 | 0.0523 | | mg/Kg | | 105 | 58 - 142 | 2 | 20 |
| Chlorobenzene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 120 | 1 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-138692/5**
**Matrix: Solid**
**Analysis Batch: 138692**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | 0.0500 | 0.0542 | | mg/Kg | | 108 | 60 - 120 | 3 | 20 |
| Chloroform | 0.0500 | 0.0523 | | mg/Kg | | 105 | 80 - 120 | 2 | 20 |
| Chloromethane | 0.0500 | 0.0498 | | mg/Kg | | 100 | 50 - 122 | 4 | 20 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0520 | | mg/Kg | | 104 | 80 - 123 | 1 | 20 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 74 - 128 | 1 | 20 |
| Dibromochloromethane | 0.0500 | 0.0528 | | mg/Kg | | 106 | 50 - 122 | 2 | 20 |
| Dibromomethane | 0.0500 | 0.0524 | | mg/Kg | | 105 | 70 - 130 | 1 | 20 |
| Dichlorodifluoromethane | 0.0500 | 0.0489 | | mg/Kg | | 98 | 32 - 158 | 3 | 20 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0489 | | mg/Kg | | 98 | 65 - 131 | 1 | 20 |
| Ethanol | 0.500 | 0.422 | | mg/Kg | | 84 | 32 - 158 | 0 | 27 |
| Ethylbenzene | 0.0500 | 0.0497 | | mg/Kg | | 99 | 57 - 153 | 1 | 20 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0471 | | mg/Kg | | 94 | 58 - 136 | 1 | 20 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0549 | | mg/Kg | | 110 | 80 - 120 | 0 | 20 |
| Isopropylbenzene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 129 | 0 | 20 |
| m,p-Xylene | 0.100 | 0.0978 | | mg/Kg | | 98 | 80 - 122 | 1 | 20 |
| Methylene Chloride | 0.0500 | 0.0491 | | mg/Kg | | 98 | 72 - 120 | 1 | 20 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0471 | | mg/Kg | | 94 | 64 - 124 | 1 | 20 |
| Naphthalene | 0.0500 | 0.0525 | | mg/Kg | | 105 | 64 - 124 | 1 | 20 |
| n-Butylbenzene | 0.0500 | 0.0522 | | mg/Kg | | 104 | 78 - 126 | 1 | 25 |
| N-Propylbenzene | 0.0500 | 0.0504 | | mg/Kg | | 101 | 80 - 122 | 1 | 20 |
| o-Xylene | 0.0500 | 0.0499 | | mg/Kg | | 100 | 79 - 127 | 1 | 20 |
| p-Isopropyltoluene | 0.0500 | 0.0511 | | mg/Kg | | 102 | 80 - 122 | 0 | 20 |
| sec-Butylbenzene | 0.0500 | 0.0505 | | mg/Kg | | 101 | 79 - 127 | 0 | 20 |
| Styrene | 0.0500 | 0.0508 | | mg/Kg | | 102 | 80 - 123 | 1 | 20 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0493 | | mg/Kg | | 99 | 63 - 129 | 1 | 20 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.229 | | mg/Kg | | 91 | 79 - 121 | 0 | 20 |
| tert-Butylbenzene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 128 | 1 | 20 |
| Tetrachloroethene | 0.0500 | 0.0499 | | mg/Kg | | 100 | 75 - 123 | 1 | 20 |
| Toluene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 80 - 120 | 1 | 20 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0483 | | mg/Kg | | 97 | 80 - 120 | 1 | 20 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0494 | | mg/Kg | | 99 | 66 - 120 | 1 | 20 |
| Trichloroethene | 0.0500 | 0.0515 | | mg/Kg | | 103 | 80 - 120 | 1 | 20 |
| Trichlorofluoromethane | 0.0500 | 0.0537 | | mg/Kg | | 107 | 70 - 136 | 3 | 20 |
| Vinyl chloride | 0.0500 | 0.0522 | | mg/Kg | | 104 | 68 - 120 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *177* | | *01 - 133* |
| *4-8ro6 oBuoromenf ene (Surr)* | *: :* | | *b7 - 127* |
| *Dimro6 oBuoro6 ethane (Surr)* | *172* | | *0: - 155* |
| *Toluene-db (Surr)* | *171* | | *b7 - 127* |

**Lab Sample ID: MB 570-138697/7**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00023 | mg/Kg | | | 03/25/21 22:14 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-138697/7**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00054 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00046 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00046 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.0010 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00042 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00041 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0068 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00031 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0045 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00024 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0029 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Acetone | ND | | 0.020 | 0.0098 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Benzene | ND | | 0.0010 | 0.00026 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromodichloromethane | ND | | 0.0010 | 0.00016 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromoform | ND | | 0.0050 | 0.0013 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromomethane | ND | | 0.020 | 0.0066 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00040 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Chloroform | ND | | 0.0010 | 0.00059 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | | 03/25/21 22:14 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00034 | mg/Kg | | | 03/25/21 22:14 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00035 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00031 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00050 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Ethanol | ND | | 0.25 | 0.066 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00024 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0050 | 0.0017 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-138697/7**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| m,p-Xylene | ND | | 0.0020 | 0.00047 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0031 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Naphthalene | ND | | 0.010 | 0.0052 | mg/Kg | | | 03/25/21 22:14 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 22:14 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 03/25/21 22:14 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Styrene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00019 | mg/Kg | | | 03/25/21 22:14 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.020 | 0.0070 | mg/Kg | | | 03/25/21 22:14 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Tetrachloroethene | ND | | 0.0010 | 0.00022 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Toluene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 22:14 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00028 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0039 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00038 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *171* | | *01 - 133* | | *75/23/21 229l4* | *1* |
| *4-8ro6 oBuoromenf ene (Surr)* | *: b* | | *b7 - 127* | | *75/23/21 229l4* | *1* |
| *Dimro6 oBuoro6 ethane (Surr)* | *: b* | | *0: - 155* | | *75/23/21 229l4* | *1* |
| *Toluene-db (Surr)* | *: :* | | *b7 - 127* | | *75/23/21 229l4* | *1* |

**Lab Sample ID: LCS 570-138697/4**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0503 | | mg/Kg | | 101 | 73 - 133 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0456 | | mg/Kg | | 91 | 71 - 131 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0478 | | mg/Kg | | 96 | 77 - 120 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0509 | | mg/Kg | | 102 | 80 - 120 |
| 1,1-Dichloroethane | 0.0500 | 0.0504 | | mg/Kg | | 101 | 74 - 120 |
| 1,1-Dichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 71 - 125 |
| 1,1-Dichloropropene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 69 - 120 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 73 - 127 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0481 | | mg/Kg | | 96 | 60 - 120 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0475 | | mg/Kg | | 95 | 74 - 128 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0476 | | mg/Kg | | 95 | 75 - 123 |
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0439 | | mg/Kg | | 88 | 54 - 132 |
| 1,2-Dibromoethane | 0.0500 | 0.0523 | | mg/Kg | | 105 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0471 | | mg/Kg | | 94 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-138697/4**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | 0.0500 | 0.0500 | | mg/Kg | | 100 | 79 - 121 |
| 1,2-Dichloropropane | 0.0500 | 0.0547 | | mg/Kg | | 109 | 77 - 123 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0463 | | mg/Kg | | 93 | 80 - 123 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0467 | | mg/Kg | | 93 | 80 - 120 |
| 1,3-Dichloropropane | 0.0500 | 0.0499 | | mg/Kg | | 100 | 80 - 120 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0469 | | mg/Kg | | 94 | 80 - 120 |
| 2,2-Dichloropropane | 0.0500 | 0.0479 | | mg/Kg | | 96 | 58 - 142 |
| 2-Chlorotoluene | 0.0500 | 0.0443 | | mg/Kg | | 89 | 56 - 176 |
| 4-Chlorotoluene | 0.0500 | 0.0437 | | mg/Kg | | 87 | 67 - 151 |
| Benzene | 0.0500 | 0.0468 | | mg/Kg | | 94 | 79 - 120 |
| Bromobenzene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 80 - 120 |
| Bromochloromethane | 0.0500 | 0.0489 | | mg/Kg | | 98 | 80 - 120 |
| Bromodichloromethane | 0.0500 | 0.0503 | | mg/Kg | | 101 | 73 - 127 |
| Bromoform | 0.0500 | 0.0488 | | mg/Kg | | 98 | 55 - 133 |
| Bromomethane | 0.0500 | 0.0323 | | mg/Kg | | 65 | 36 - 144 |
| Carbon tetrachloride | 0.0500 | 0.0483 | | mg/Kg | | 97 | 58 - 142 |
| Chlorobenzene | 0.0500 | 0.0458 | | mg/Kg | | 92 | 80 - 120 |
| Chloroethane | 0.0500 | 0.0407 | | mg/Kg | | 81 | 60 - 120 |
| Chloroform | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 120 |
| Chloromethane | 0.0500 | 0.0477 | | mg/Kg | | 95 | 50 - 122 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0463 | | mg/Kg | | 93 | 80 - 123 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 74 - 128 |
| Dibromochloromethane | 0.0500 | 0.0509 | | mg/Kg | | 102 | 50 - 122 |
| Dibromomethane | 0.0500 | 0.0459 | | mg/Kg | | 92 | 70 - 130 |
| Dichlorodifluoromethane | 0.0500 | 0.0438 | | mg/Kg | | 88 | 32 - 158 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0632 | | mg/Kg | | 126 | 65 - 131 |
| Ethanol | 0.500 | 0.621 | | mg/Kg | | 124 | 32 - 158 |
| Ethylbenzene | 0.0500 | 0.0445 | | mg/Kg | | 89 | 57 - 153 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0552 | | mg/Kg | | 110 | 58 - 136 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0426 | | mg/Kg | | 85 | 80 - 120 |
| Isopropylbenzene | 0.0500 | 0.0466 | | mg/Kg | | 93 | 80 - 129 |
| m,p-Xylene | 0.100 | 0.0874 | | mg/Kg | | 87 | 80 - 122 |
| Methylene Chloride | 0.0500 | 0.0472 | | mg/Kg | | 94 | 72 - 120 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0487 | | mg/Kg | | 97 | 64 - 124 |
| Naphthalene | 0.0500 | 0.0465 | | mg/Kg | | 93 | 64 - 124 |
| n-Butylbenzene | 0.0500 | 0.0439 | | mg/Kg | | 88 | 78 - 126 |
| N-Propylbenzene | 0.0500 | 0.0439 | | mg/Kg | | 88 | 80 - 122 |
| o-Xylene | 0.0500 | 0.0439 | | mg/Kg | | 88 | 79 - 127 |
| p-Isopropyltoluene | 0.0500 | 0.0445 | | mg/Kg | | 89 | 80 - 122 |
| sec-Butylbenzene | 0.0500 | 0.0462 | | mg/Kg | | 92 | 79 - 127 |
| Styrene | 0.0500 | 0.0478 | | mg/Kg | | 96 | 80 - 123 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0509 | | mg/Kg | | 102 | 63 - 129 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.270 | | mg/Kg | | 108 | 79 - 121 |
| tert-Butylbenzene | 0.0500 | 0.0460 | | mg/Kg | | 92 | 80 - 128 |
| Tetrachloroethene | 0.0500 | 0.0462 | | mg/Kg | | 92 | 75 - 123 |
| Toluene | 0.0500 | 0.0452 | | mg/Kg | | 90 | 80 - 120 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0436 | | mg/Kg | | 87 | 80 - 120 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0516 | | mg/Kg | | 103 | 66 - 120 |
| Trichloroethene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-138697/4**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | 0.0500 | 0.0484 | | mg/Kg | | 97 | 70 - 136 |
| Vinyl chloride | 0.0500 | 0.0444 | | mg/Kg | | 89 | 68 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *: b* | | *01 - 133* |
| *4-8ro6 oB uoromenf ene (Surr)* | *: 5* | | *b7 - 127* |
| *Dimro6 oB uoro6 ethane (Surr)* | *: b* | | *0: - 155* |
| *Toluene-db (Surr)* | *: z* | | *b7 - 127* |

**Lab Sample ID: LCSD 570-138697/5**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0524 | | mg/Kg | | 105 | 73 - 133 | 4 | 20 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0471 | | mg/Kg | | 94 | 71 - 131 | 3 | 20 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0497 | | mg/Kg | | 99 | 77 - 120 | 4 | 20 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0527 | | mg/Kg | | 105 | 80 - 120 | 3 | 20 |
| 1,1-Dichloroethane | 0.0500 | 0.0507 | | mg/Kg | | 101 | 74 - 120 | 1 | 20 |
| 1,1-Dichloroethene | 0.0500 | 0.0515 | | mg/Kg | | 103 | 71 - 125 | 3 | 20 |
| 1,1-Dichloropropene | 0.0500 | 0.0515 | | mg/Kg | | 103 | 69 - 120 | 5 | 20 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0514 | | mg/Kg | | 103 | 73 - 127 | 5 | 20 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0506 | | mg/Kg | | 101 | 60 - 120 | 5 | 20 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 74 - 128 | 4 | 20 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0490 | | mg/Kg | | 98 | 75 - 123 | 3 | 20 |
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0443 | | mg/Kg | | 89 | 54 - 132 | 1 | 20 |
| 1,2-Dibromoethane | 0.0500 | 0.0530 | | mg/Kg | | 106 | 80 - 120 | 1 | 20 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0498 | | mg/Kg | | 100 | 80 - 120 | 6 | 20 |
| 1,2-Dichloroethane | 0.0500 | 0.0508 | | mg/Kg | | 102 | 79 - 121 | 1 | 20 |
| 1,2-Dichloropropane | 0.0500 | 0.0558 | | mg/Kg | | 112 | 77 - 123 | 2 | 25 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 123 | 4 | 20 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 80 - 120 | 3 | 20 |
| 1,3-Dichloropropane | 0.0500 | 0.0515 | | mg/Kg | | 103 | 80 - 120 | 3 | 20 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0482 | | mg/Kg | | 96 | 80 - 120 | 3 | 20 |
| 2,2-Dichloropropane | 0.0500 | 0.0498 | | mg/Kg | | 100 | 58 - 142 | 4 | 20 |
| 2-Chlorotoluene | 0.0500 | 0.0455 | | mg/Kg | | 91 | 56 - 176 | 3 | 20 |
| 4-Chlorotoluene | 0.0500 | 0.0453 | | mg/Kg | | 91 | 67 - 151 | 4 | 20 |
| Benzene | 0.0500 | 0.0476 | | mg/Kg | | 95 | 79 - 120 | 2 | 20 |
| Bromobenzene | 0.0500 | 0.0514 | | mg/Kg | | 103 | 80 - 120 | 4 | 20 |
| Bromochloromethane | 0.0500 | 0.0511 | | mg/Kg | | 102 | 80 - 120 | 4 | 20 |
| Bromodichloromethane | 0.0500 | 0.0518 | | mg/Kg | | 104 | 73 - 127 | 3 | 20 |
| Bromoform | 0.0500 | 0.0518 | | mg/Kg | | 104 | 55 - 133 | 6 | 20 |
| Bromomethane | 0.0500 | 0.0332 | | mg/Kg | | 66 | 36 - 144 | 3 | 20 |
| Carbon tetrachloride | 0.0500 | 0.0481 | | mg/Kg | | 96 | 58 - 142 | 0 | 20 |
| Chlorobenzene | 0.0500 | 0.0468 | | mg/Kg | | 94 | 80 - 120 | 2 | 20 |
| Chloroethane | 0.0500 | 0.0429 | | mg/Kg | | 86 | 60 - 120 | 5 | 20 |
| Chloroform | 0.0500 | 0.0496 | | mg/Kg | | 99 | 80 - 120 | 3 | 20 |
| Chloromethane | 0.0500 | 0.0484 | | mg/Kg | | 97 | 50 - 122 | 2 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-138697/5**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 123 | 4 | 20 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0517 | | mg/Kg | | 103 | 74 - 128 | 4 | 20 |
| Dibromochloromethane | 0.0500 | 0.0535 | | mg/Kg | | 107 | 50 - 122 | 5 | 20 |
| Dibromomethane | 0.0500 | 0.0474 | | mg/Kg | | 95 | 70 - 130 | 3 | 20 |
| Dichlorodifluoromethane | 0.0500 | 0.0465 | | mg/Kg | | 93 | 32 - 158 | 6 | 20 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0646 | | mg/Kg | | 129 | 65 - 131 | 2 | 20 |
| Ethanol | 0.500 | 0.593 | | mg/Kg | | 119 | 32 - 158 | 5 | 27 |
| Ethylbenzene | 0.0500 | 0.0453 | | mg/Kg | | 91 | 57 - 153 | 2 | 20 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0583 | | mg/Kg | | 117 | 58 - 136 | 5 | 20 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0445 | | mg/Kg | | 89 | 80 - 120 | 4 | 20 |
| Isopropylbenzene | 0.0500 | 0.0478 | | mg/Kg | | 96 | 80 - 129 | 3 | 20 |
| m,p-Xylene | 0.100 | 0.0906 | | mg/Kg | | 91 | 80 - 122 | 4 | 20 |
| Methylene Chloride | 0.0500 | 0.0482 | | mg/Kg | | 96 | 72 - 120 | 2 | 20 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0498 | | mg/Kg | | 100 | 64 - 124 | 2 | 20 |
| Naphthalene | 0.0500 | 0.0485 | | mg/Kg | | 97 | 64 - 124 | 4 | 20 |
| n-Butylbenzene | 0.0500 | 0.0454 | | mg/Kg | | 91 | 78 - 126 | 3 | 25 |
| N-Propylbenzene | 0.0500 | 0.0454 | | mg/Kg | | 91 | 80 - 122 | 3 | 20 |
| o-Xylene | 0.0500 | 0.0455 | | mg/Kg | | 91 | 79 - 127 | 4 | 20 |
| p-Isopropyltoluene | 0.0500 | 0.0462 | | mg/Kg | | 92 | 80 - 122 | 4 | 20 |
| sec-Butylbenzene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 79 - 127 | 4 | 20 |
| Styrene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 80 - 123 | 3 | 20 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0523 | | mg/Kg | | 105 | 63 - 129 | 3 | 20 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.253 | | mg/Kg | | 101 | 79 - 121 | 6 | 20 |
| tert-Butylbenzene | 0.0500 | 0.0475 | | mg/Kg | | 95 | 80 - 128 | 3 | 20 |
| Tetrachloroethene | 0.0500 | 0.0486 | | mg/Kg | | 97 | 75 - 123 | 5 | 20 |
| Toluene | 0.0500 | 0.0460 | | mg/Kg | | 92 | 80 - 120 | 2 | 20 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0455 | | mg/Kg | | 91 | 80 - 120 | 4 | 20 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0529 | | mg/Kg | | 106 | 66 - 120 | 2 | 20 |
| Trichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 120 | 2 | 20 |
| Trichlorofluoromethane | 0.0500 | 0.0518 | | mg/Kg | | 104 | 70 - 136 | 7 | 20 |
| Vinyl chloride | 0.0500 | 0.0458 | | mg/Kg | | 92 | 68 - 120 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *173* | | *01 - 133* |
| *4-8ro6 oB uoromenf ene (Surr)* | *: 5* | | *b7 - 127* |
| *Dimro6 oB uoro6 ethane (Surr)* | *: :* | | *0: - 155* |
| *Toluene-db (Surr)* | *: z* | | *b7 - 127* |

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-138805/38**
**Matrix: Solid**
**Analysis Batch: 138805**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.10 | 0.056 | mg/Kg | | | 03/26/21 01:47 | 1 |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: MB 570-138805/38**
**Matrix: Solid**
**Analysis Batch: 138805**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 70 | | 42 - 122 | | 03/25/21 14:04 | 1 |

**Lab Sample ID: LCS 570-138805/36**
**Matrix: Solid**
**Analysis Batch: 138805**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | 1.99 | 1.90 | | mg/Kg | | 96 | 70 - 124 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 112 | | 42 - 122 |

**Lab Sample ID: LCSD 570-138805/37**
**Matrix: Solid**
**Analysis Batch: 138805**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | 1.99 | 1.91 | | mg/Kg | | 96 | 70 - 124 | 0 | 18 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 174 | | 42 - 122 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Lab Sample ID: MB 570-138648/1-A**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 12:26 | 03/25/21 14:05 | 1 |
| C23-C40 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 12:26 | 03/25/21 14:05 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 173 | | 57 - 150 | 03/25/21 12:26 | 03/25/21 14:05 | 1 |

**Lab Sample ID: LCS 570-138648/2-A**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 400 | 442 | | mg/Kg | | 111 | 80 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 150 | | 57 - 150 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Lab Sample ID: LCSD 570-138648/3-A**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 400 | 451 | | mg/Kg | | 113 | 80 - 130 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *174* | | *z7 - 15b* |

**Lab Sample ID: 570-54755-A-1-A MS**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 424 | 440 | | mg/Kg | | 104 | 43 - 165 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *: 0* | | *z7 - 15b* |

**Lab Sample ID: 570-54755-A-1-B MSD**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 407 | 394 | | mg/Kg | | 97 | 43 - 165 | 11 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *: z* | | *z7 - 15b* |

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 570-138530/1-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00099 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| 4,4'-DDT | ND | | 0.0050 | 0.00036 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endrin | ND | | 0.0050 | 0.00033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 570-138530/1-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00048 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00089 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *111* | | *50 - 131* | *75/23/21 7b97 7* | *75/2z/21 719I:* | *1* |
| *Tetrachloro-6 -xylene* | *175* | | *5b - 14b* | *75/23/21 7b97 7* | *75/2z/21 719I:* | *1* |

**Lab Sample ID: LCS 570-138530/2-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0250 | 0.0372 | | mg/Kg | | 149 | 54 - 154 |
| 4,4'-DDE | 0.0250 | 0.0343 | | mg/Kg | | 137 | 51 - 149 |
| 4,4'-DDT | 0.0250 | 0.0333 | | mg/Kg | | 133 | 39 - 152 |
| Aldrin | 0.0250 | 0.0320 | | mg/Kg | | 128 | 52 - 138 |
| alpha-BHC | 0.0250 | 0.0332 | | mg/Kg | | 133 | 51 - 140 |
| alpha-Chlordane | 0.0250 | 0.0340 | | mg/Kg | | 136 | 53 - 141 |
| beta-BHC | 0.0250 | 0.0330 | | mg/Kg | | 132 | 53 - 141 |
| delta-BHC | 0.0250 | 0.0230 | | mg/Kg | | 92 | 20 - 132 |
| Dieldrin | 0.0250 | 0.0330 | | mg/Kg | | 132 | 52 - 144 |
| Endosulfan I | 0.0250 | 0.0338 | | mg/Kg | | 135 | 49 - 139 |
| Endosulfan II | 0.0250 | 0.0333 | | mg/Kg | | 133 | 51 - 150 |
| Endosulfan sulfate | 0.0250 | 0.0320 | | mg/Kg | | 128 | 45 - 139 |
| Endrin | 0.0250 | 0.0344 | | mg/Kg | | 137 | 53 - 151 |
| Endrin aldehyde | 0.0250 | 0.0322 | | mg/Kg | | 129 | 31 - 146 |
| gamma-BHC | 0.0250 | 0.0339 | | mg/Kg | | 136 | 53 - 141 |
| gamma-Chlordane | 0.0250 | 0.0329 | | mg/Kg | | 132 | 46 - 156 |
| Heptachlor | 0.0250 | 0.0325 | | mg/Kg | | 130 | 52 - 144 |
| Heptachlor epoxide | 0.0250 | 0.0322 | | mg/Kg | | 129 | 54 - 141 |
| Methoxychlor | 0.0250 | 0.0332 | | mg/Kg | | 133 | 47 - 148 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *17:* | | *50 - 131* |
| *Tetrachloro-6 -xylene* | *174* | | *5b - 14b* |

**Lab Sample ID: LCSD 570-138530/3-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0250 | 0.0395 | *+ | mg/Kg | | 158 | 54 - 154 | 6 | 30 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 570-138530/3-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDE | | | 0.0250 | 0.0366 | | mg/Kg | | 146 | 51 - 149 | 7 | 28 |
| 4,4'-DDT | | | 0.0250 | 0.0346 | | mg/Kg | | 139 | 39 - 152 | 4 | 31 |
| Aldrin | | | 0.0250 | 0.0335 | | mg/Kg | | 134 | 52 - 138 | 4 | 30 |
| alpha-BHC | | | 0.0250 | 0.0347 | | mg/Kg | | 139 | 51 - 140 | 4 | 29 |
| alpha-Chlordane | | | 0.0250 | 0.0357 | *+ | mg/Kg | | 143 | 53 - 141 | 5 | 28 |
| beta-BHC | | | 0.0250 | 0.0346 | | mg/Kg | | 138 | 53 - 141 | 5 | 29 |
| delta-BHC | | | 0.0250 | 0.0244 | | mg/Kg | | 98 | 20 - 132 | 6 | 40 |
| Dieldrin | | | 0.0250 | 0.0344 | | mg/Kg | | 138 | 52 - 144 | 4 | 28 |
| Endosulfan I | | | 0.0250 | 0.0356 | *+ | mg/Kg | | 142 | 49 - 139 | 5 | 28 |
| Endosulfan II | | | 0.0250 | 0.0343 | | mg/Kg | | 137 | 51 - 150 | 3 | 29 |
| Endosulfan sulfate | | | 0.0250 | 0.0334 | | mg/Kg | | 134 | 45 - 139 | 4 | 30 |
| Endrin | | | 0.0250 | 0.0361 | | mg/Kg | | 144 | 53 - 151 | 5 | 29 |
| Endrin aldehyde | | | 0.0250 | 0.0340 | | mg/Kg | | 136 | 31 - 146 | 5 | 40 |
| gamma-BHC | | | 0.0250 | 0.0356 | *+ | mg/Kg | | 142 | 53 - 141 | 5 | 29 |
| gamma-Chlordane | | | 0.0250 | 0.0347 | | mg/Kg | | 139 | 46 - 156 | 5 | 39 |
| Heptachlor | | | 0.0250 | 0.0337 | | mg/Kg | | 135 | 52 - 144 | 4 | 29 |
| Heptachlor epoxide | | | 0.0250 | 0.0339 | | mg/Kg | | 136 | 54 - 141 | 5 | 29 |
| Methoxychlor | | | 0.0250 | 0.0350 | | mg/Kg | | 140 | 47 - 148 | 5 | 29 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *113* | | *50 - 131* |
| *Tetrachloro-6 -xylene* | *17b* | | *5b - 14b* |

**Lab Sample ID: 440-280940-F-1-B MS**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | F1 | 0.0249 | 0.0428 | E F1 | mg/Kg | | 172 | 27 - 144 |
| 4,4'-DDE | 0.00078 | J F1 | 0.0249 | 0.0401 | E F1 | mg/Kg | | 158 | 28 - 141 |
| 4,4'-DDT | 0.00051 | J F1 p | 0.0249 | 0.0379 | | mg/Kg | | 150 | 10 - 154 |
| Aldrin | ND | F1 | 0.0249 | 0.0356 | F1 | mg/Kg | | 143 | 26 - 125 |
| alpha-BHC | ND | F1 | 0.0249 | 0.0362 | F1 | mg/Kg | | 146 | 24 - 125 |
| alpha-Chlordane | ND | F1 | 0.0249 | 0.0384 | F1 | mg/Kg | | 154 | 17 - 144 |
| beta-BHC | ND | F1 | 0.0249 | 0.0362 | F1 | mg/Kg | | 146 | 28 - 125 |
| delta-BHC | ND | | 0.0249 | 0.0256 | | mg/Kg | | 103 | 10 - 125 |
| Dieldrin | ND | | 0.0249 | 0.0358 | | mg/Kg | | 144 | 19 - 145 |
| Endosulfan I | ND | F1 | 0.0249 | 0.0369 | F1 | mg/Kg | | 148 | 25 - 125 |
| Endosulfan II | ND | | 0.0249 | 0.0362 | F1 | mg/Kg | | 145 | 13 - 142 |
| Endosulfan sulfate | ND | F1 | 0.0249 | 0.0356 | F1 | mg/Kg | | 143 | 14 - 126 |
| Endrin | ND | F1 | 0.0249 | 0.0385 | F1 | mg/Kg | | 155 | 28 - 139 |
| Endrin aldehyde | ND | F1 | 0.0249 | 0.0355 | F1 | mg/Kg | | 143 | 12 - 125 |
| gamma-BHC | ND | F1 | 0.0249 | 0.0370 | F1 | mg/Kg | | 149 | 24 - 125 |
| gamma-Chlordane | ND | | 0.0249 | 0.0366 | | mg/Kg | | 147 | 10 - 160 |
| Heptachlor | ND | F1 | 0.0249 | 0.0351 | F1 | mg/Kg | | 141 | 19 - 127 |
| Heptachlor epoxide | ND | F1 | 0.0249 | 0.0353 | F1 | mg/Kg | | 142 | 33 - 123 |
| Methoxychlor | ND | F1 | 0.0249 | 0.0381 | F1 | mg/Kg | | 153 | 19 - 128 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 440-280940-F-1-B MS**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| DC8 Decachloromiphenyl (Surr) | 11: | | 50 - 131 |
| Tetrachloro-6 -xylene | 117 | | 5b - 14b |

**Lab Sample ID: 440-280940-F-1-C MSD**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | F1 | 0.0248 | 0.0447 | E F1 | mg/Kg | | 180 | 27 - 144 | 4 | 40 |
| 4,4'-DDE | 0.00078 | J F1 | 0.0248 | 0.0429 | E F1 | mg/Kg | | 170 | 28 - 141 | 7 | 32 |
| 4,4'-DDT | 0.00051 | J F1 p | 0.0248 | 0.0390 | F1 | mg/Kg | | 155 | 10 - 154 | 3 | 40 |
| Aldrin | ND | F1 | 0.0248 | 0.0365 | F1 | mg/Kg | | 147 | 26 - 125 | 3 | 40 |
| alpha-BHC | ND | F1 | 0.0248 | 0.0380 | F1 | mg/Kg | | 153 | 24 - 125 | 5 | 40 |
| alpha-Chlordane | ND | F1 | 0.0248 | 0.0405 | E F1 | mg/Kg | | 163 | 17 - 144 | 5 | 40 |
| beta-BHC | ND | F1 | 0.0248 | 0.0379 | F1 | mg/Kg | | 153 | 28 - 125 | 5 | 39 |
| delta-BHC | ND | | 0.0248 | 0.0269 | | mg/Kg | | 109 | 10 - 125 | 5 | 40 |
| Dieldrin | ND | | 0.0248 | 0.0372 | F1 | mg/Kg | | 150 | 19 - 145 | 4 | 39 |
| Endosulfan I | ND | F1 | 0.0248 | 0.0384 | F1 | mg/Kg | | 155 | 25 - 125 | 4 | 39 |
| Endosulfan II | ND | | 0.0248 | 0.0372 | F1 | mg/Kg | | 150 | 13 - 142 | 3 | 40 |
| Endosulfan sulfate | ND | F1 | 0.0248 | 0.0366 | F1 | mg/Kg | | 147 | 14 - 126 | 3 | 38 |
| Endrin | ND | F1 | 0.0248 | 0.0399 | E F1 | mg/Kg | | 161 | 28 - 139 | 4 | 40 |
| Endrin aldehyde | ND | F1 | 0.0248 | 0.0369 | F1 | mg/Kg | | 149 | 12 - 125 | 4 | 40 |
| gamma-BHC | ND | F1 | 0.0248 | 0.0387 | F1 | mg/Kg | | 156 | 24 - 125 | 4 | 40 |
| gamma-Chlordane | ND | | 0.0248 | 0.0386 | | mg/Kg | | 156 | 10 - 160 | 5 | 40 |
| Heptachlor | ND | F1 | 0.0248 | 0.0361 | F1 | mg/Kg | | 146 | 19 - 127 | 3 | 40 |
| Heptachlor epoxide | ND | F1 | 0.0248 | 0.0368 | F1 | mg/Kg | | 148 | 33 - 123 | 4 | 34 |
| Methoxychlor | ND | F1 | 0.0248 | 0.0388 | F1 | mg/Kg | | 157 | 19 - 128 | 2 | 40 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| DC8 Decachloromiphenyl (Surr) | 127 | | 50 - 131 |
| Tetrachloro-6 -xylene | 115 | | 5b - 14b |

## Method: 8151A - Herbicides (GC)

**Lab Sample ID: MB 570-138415/1-A**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| 2,4-DB | ND | | 0.10 | 0.047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| Dinoseb | ND | | 0.10 | 0.019 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |

## Method: 8151A - Herbicides (GC) (Continued)

**Lab Sample ID: MB 570-138415/1-A**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *: 5* | | *21 - 1z1* | *75/24/21 1z95z* | *75/2z/21 719Bb* | *1* |

**Lab Sample ID: LCS 570-138415/2-A**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.0400 | 0.0422 | | mg/Kg | | 105 | 20 - 153 |
| 2,4,5-TP (Silvex) | 0.0400 | 0.0343 | | mg/Kg | | 86 | 20 - 147 |
| 2,4-D | 0.400 | 0.434 | | mg/Kg | | 108 | 20 - 153 |
| 2,4-DB | 0.400 | 0.172 | | mg/Kg | | 43 | 20 - 180 |
| Dalapon | 1.00 | 0.640 | | mg/Kg | | 64 | 20 - 146 |
| Dicamba | 0.0400 | 0.0384 | | mg/Kg | | 96 | 20 - 153 |
| Dichlorprop | 0.400 | 0.417 | | mg/Kg | | 104 | 20 - 146 |
| Dinoseb | 0.200 | ND | *- | mg/Kg | | 2 | 10 - 76 |
| MCPA | 40.0 | 41.2 | | mg/Kg | | 103 | 20 - 142 |
| MCPP | 40.0 | 39.5 | | mg/Kg | | 99 | 23 - 142 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *01* | | *21 - 1z1* |

**Lab Sample ID: LCSD 570-138415/3-A**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.0400 | 0.0384 | | mg/Kg | | 96 | 20 - 153 | 9 | 30 |
| 2,4,5-TP (Silvex) | 0.0400 | 0.0276 | | mg/Kg | | 69 | 20 - 147 | 22 | 30 |
| 2,4-D | 0.400 | 0.396 | | mg/Kg | | 99 | 20 - 153 | 9 | 30 |
| 2,4-DB | 0.400 | 0.239 | p *1 | mg/Kg | | 60 | 20 - 180 | 33 | 30 |
| Dalapon | 1.00 | 0.897 | *1 | mg/Kg | | 90 | 20 - 146 | 33 | 30 |
| Dicamba | 0.0400 | 0.0397 | | mg/Kg | | 99 | 20 - 153 | 3 | 30 |
| Dichlorprop | 0.400 | 0.392 | | mg/Kg | | 98 | 20 - 146 | 6 | 30 |
| Dinoseb | 0.200 | ND | *- *1 | mg/Kg | | 0.9 | 10 - 76 | 85 | 30 |
| MCPA | 40.0 | 42.6 | | mg/Kg | | 106 | 20 - 142 | 3 | 30 |
| MCPP | 40.0 | 40.2 | | mg/Kg | | 101 | 23 - 142 | 2 | 28 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *17:* | | *21 - 1z1* |

## Method: 8151A - Herbicides (GC) (Continued)

**Lab Sample ID: 570-53790-A-2-AK MS**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0403 | 0.0339 | | mg/Kg | | 84 | 20 - 168 |
| 2,4,5-TP (Silvex) | ND | | 0.0403 | 0.0254 | | mg/Kg | | 63 | 20 - 149 |
| 2,4-D | ND | | 0.403 | 0.399 | | mg/Kg | | 99 | 20 - 149 |
| 2,4-DB | ND | *1 | 0.403 | 0.102 | p | mg/Kg | | 25 | 20 - 180 |
| Dalapon | ND | *1 | 1.01 | 0.694 | | mg/Kg | | 69 | 20 - 136 |
| Dicamba | ND | | 0.0403 | 0.0329 | | mg/Kg | | 82 | 20 - 140 |
| Dichlorprop | ND | | 0.403 | 0.304 | | mg/Kg | | 75 | 20 - 142 |
| Dinoseb | ND | F1 *- *1 | 0.201 | ND | F1 | mg/Kg | | 0 | 10 - 109 |
| MCPA | ND | | 40.3 | 31.8 | | mg/Kg | | 79 | 20 - 137 |
| MCPP | ND | | 40.3 | 30.6 | | mg/Kg | | 76 | 20 - 138 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *41* | | *21 - 1z1* |

**Lab Sample ID: 570-53790-A-2-AL MSD**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0401 | 0.0370 | | mg/Kg | | 92 | 20 - 168 | 9 | 40 |
| 2,4,5-TP (Silvex) | ND | | 0.0401 | 0.0280 | | mg/Kg | | 70 | 20 - 149 | 10 | 30 |
| 2,4-D | ND | | 0.401 | 0.404 | | mg/Kg | | 101 | 20 - 149 | 1 | 38 |
| 2,4-DB | ND | *1 | 0.401 | 0.114 | p | mg/Kg | | 28 | 20 - 180 | 11 | 40 |
| Dalapon | ND | *1 | 1.00 | 0.807 | | mg/Kg | | 81 | 20 - 136 | 15 | 40 |
| Dicamba | ND | | 0.0401 | 0.0357 | | mg/Kg | | 89 | 20 - 140 | 8 | 37 |
| Dichlorprop | ND | | 0.401 | 0.352 | | mg/Kg | | 88 | 20 - 142 | 15 | 27 |
| Dinoseb | ND | F1 *- *1 | 0.200 | ND | F1 | mg/Kg | | 0 | 10 - 109 | NC | 40 |
| MCPA | ND | | 40.1 | 37.8 | | mg/Kg | | 94 | 20 - 137 | 17 | 40 |
| MCPP | ND | | 40.1 | 35.9 | | mg/Kg | | 90 | 20 - 138 | 16 | 36 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *34* | | *21 - 1z1* |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-138796/1-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.0 | 1.4 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Arsenic | ND | | 2.5 | 2.3 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Barium | ND | | 0.51 | 0.22 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Beryllium | ND | | 0.25 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Cadmium | ND | | 0.51 | 0.20 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Chromium | ND | | 1.0 | 0.18 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Cobalt | ND | | 1.0 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Copper | ND | | 1.0 | 0.51 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 570-138796/1-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | | 5.1 | 0.98 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Molybdenum | ND | | 0.51 | 0.46 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Nickel | ND | | 0.51 | 0.43 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Selenium | ND | | 5.1 | 1.9 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Silver | ND | | 1.0 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Thallium | ND | | 5.1 | 1.5 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Vanadium | ND | | 1.0 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Zinc | ND | | 10 | 5.2 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |

**Lab Sample ID: LCS 570-138796/2-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Antimony | 25.0 | 25.4 | | mg/Kg | | 102 | 80 - 120 |
| Arsenic | 25.0 | 23.9 | | mg/Kg | | 96 | 80 - 120 |
| Barium | 25.0 | 26.1 | | mg/Kg | | 104 | 80 - 120 |
| Beryllium | 25.0 | 25.0 | | mg/Kg | | 100 | 80 - 120 |
| Cadmium | 25.0 | 24.9 | | mg/Kg | | 100 | 80 - 120 |
| Chromium | 25.0 | 24.5 | | mg/Kg | | 98 | 80 - 120 |
| Cobalt | 25.0 | 26.0 | | mg/Kg | | 104 | 80 - 120 |
| Copper | 25.0 | 23.2 | | mg/Kg | | 93 | 80 - 120 |
| Lead | 25.0 | 26.6 | | mg/Kg | | 106 | 80 - 120 |
| Molybdenum | 25.0 | 25.9 | | mg/Kg | | 104 | 80 - 120 |
| Nickel | 25.0 | 25.6 | | mg/Kg | | 102 | 80 - 120 |
| Selenium | 25.0 | 24.7 | | mg/Kg | | 99 | 80 - 120 |
| Silver | 12.5 | 13.0 | | mg/Kg | | 104 | 80 - 120 |
| Thallium | 25.0 | 25.5 | | mg/Kg | | 102 | 80 - 120 |
| Vanadium | 25.0 | 25.2 | | mg/Kg | | 101 | 80 - 120 |
| Zinc | 25.0 | 26.0 | | mg/Kg | | 104 | 80 - 120 |

**Lab Sample ID: LCSD 570-138796/3-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.9 | 26.0 | | mg/Kg | | 105 | 80 - 120 | 2 | 20 |
| Arsenic | 24.9 | 24.2 | | mg/Kg | | 97 | 80 - 120 | 1 | 20 |
| Barium | 24.9 | 26.5 | | mg/Kg | | 106 | 80 - 120 | 1 | 20 |
| Beryllium | 24.9 | 24.8 | | mg/Kg | | 100 | 80 - 120 | 1 | 20 |
| Cadmium | 24.9 | 25.3 | | mg/Kg | | 102 | 80 - 120 | 1 | 20 |
| Chromium | 24.9 | 24.1 | | mg/Kg | | 97 | 80 - 120 | 2 | 20 |
| Cobalt | 24.9 | 25.7 | | mg/Kg | | 103 | 80 - 120 | 1 | 20 |
| Copper | 24.9 | 23.5 | | mg/Kg | | 95 | 80 - 120 | 2 | 20 |
| Lead | 24.9 | 26.6 | | mg/Kg | | 107 | 80 - 120 | 0 | 20 |
| Molybdenum | 24.9 | 26.2 | | mg/Kg | | 105 | 80 - 120 | 1 | 20 |
| Nickel | 24.9 | 25.3 | | mg/Kg | | 102 | 80 - 120 | 1 | 20 |
| Selenium | 24.9 | 25.5 | | mg/Kg | | 102 | 80 - 120 | 3 | 20 |
| Silver | 12.4 | 12.7 | | mg/Kg | | 102 | 80 - 120 | 2 | 20 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 570-138796/3-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | 24.9 | 25.6 | | mg/Kg | | 103 | 80 - 120 | 0 | 20 |
| Vanadium | 24.9 | 25.0 | | mg/Kg | | 101 | 80 - 120 | 1 | 20 |
| Zinc | 24.9 | 26.4 | | mg/Kg | | 106 | 80 - 120 | 2 | 20 |

**Lab Sample ID: 440-280940-F-1-G MS**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | F1 | 25.8 | 10.4 | F1 | mg/Kg | | 40 | 50 - 115 |
| Arsenic | 2.2 | J | 25.8 | 27.1 | | mg/Kg | | 97 | 75 - 125 |
| Barium | 50 | | 25.8 | 74.7 | | mg/Kg | | 97 | 75 - 125 |
| Beryllium | ND | | 25.8 | 27.3 | | mg/Kg | | 106 | 75 - 125 |
| Cadmium | 0.35 | J | 25.8 | 25.8 | | mg/Kg | | 99 | 75 - 125 |
| Chromium | 6.8 | | 25.8 | 33.5 | | mg/Kg | | 103 | 75 - 125 |
| Cobalt | 5.5 | | 25.8 | 31.7 | | mg/Kg | | 102 | 75 - 125 |
| Copper | 12 | | 25.8 | 35.2 | | mg/Kg | | 92 | 75 - 125 |
| Lead | 3.0 | J | 25.8 | 30.2 | | mg/Kg | | 105 | 75 - 125 |
| Molybdenum | ND | | 25.8 | 25.9 | | mg/Kg | | 101 | 75 - 125 |
| Nickel | 6.0 | | 25.8 | 33.1 | | mg/Kg | | 105 | 75 - 125 |
| Selenium | ND | | 25.8 | 23.2 | | mg/Kg | | 90 | 75 - 125 |
| Silver | ND | | 12.9 | 13.7 | | mg/Kg | | 106 | 75 - 125 |
| Thallium | ND | | 25.8 | 24.0 | | mg/Kg | | 93 | 75 - 125 |
| Vanadium | 13 | | 25.8 | 38.7 | | mg/Kg | | 98 | 75 - 125 |
| Zinc | 28 | | 25.8 | 53.5 | | mg/Kg | | 97 | 75 - 125 |

**Lab Sample ID: 440-280940-F-1-H MSD**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | F1 | 25.3 | 10.4 | F1 | mg/Kg | | 41 | 50 - 115 | 1 | 20 |
| Arsenic | 2.2 | J | 25.3 | 27.3 | | mg/Kg | | 99 | 75 - 125 | 1 | 20 |
| Barium | 50 | | 25.3 | 74.7 | | mg/Kg | | 99 | 75 - 125 | 0 | 20 |
| Beryllium | ND | | 25.3 | 26.1 | | mg/Kg | | 103 | 75 - 125 | 4 | 20 |
| Cadmium | 0.35 | J | 25.3 | 25.8 | | mg/Kg | | 101 | 75 - 125 | 0 | 20 |
| Chromium | 6.8 | | 25.3 | 32.4 | | mg/Kg | | 101 | 75 - 125 | 3 | 20 |
| Cobalt | 5.5 | | 25.3 | 30.4 | | mg/Kg | | 98 | 75 - 125 | 4 | 20 |
| Copper | 12 | | 25.3 | 35.4 | | mg/Kg | | 94 | 75 - 125 | 1 | 20 |
| Lead | 3.0 | J | 25.3 | 29.2 | | mg/Kg | | 104 | 75 - 125 | 3 | 20 |
| Molybdenum | ND | | 25.3 | 25.8 | | mg/Kg | | 102 | 75 - 125 | 1 | 20 |
| Nickel | 6.0 | | 25.3 | 31.7 | | mg/Kg | | 102 | 75 - 125 | 5 | 20 |
| Selenium | ND | | 25.3 | 23.7 | | mg/Kg | | 94 | 75 - 125 | 2 | 20 |
| Silver | ND | | 12.6 | 13.1 | | mg/Kg | | 104 | 75 - 125 | 4 | 20 |
| Thallium | ND | | 25.3 | 24.3 | | mg/Kg | | 96 | 75 - 125 | 1 | 20 |
| Vanadium | 13 | | 25.3 | 37.2 | | mg/Kg | | 94 | 75 - 125 | 4 | 20 |
| Zinc | 28 | | 25.3 | 53.5 | | mg/Kg | | 99 | 75 - 125 | 0 | 20 |

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 570-138797/1-A**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.081 | 0.013 | mg/Kg | | 03/25/21 20:00 | 03/26/21 15:03 | 1 |

**Lab Sample ID: LCS 570-138797/2-A**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.833 | 0.868 | | mg/Kg | | 104 | 85 - 121 | | |

**Lab Sample ID: LCSD 570-138797/3-A**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.833 | 0.875 | | mg/Kg | | 105 | 85 - 121 | 1 | 10 |

**Lab Sample ID: 440-280940-F-1-J MS**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.038 | J | 0.833 | 0.913 | | mg/Kg | | 105 | 71 - 137 | | |

**Lab Sample ID: 440-280940-F-1-K MSD**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.038 | J | 0.847 | 0.923 | | mg/Kg | | 104 | 71 - 137 | 1 | 14 |

## GC/MS VOA

### Prep Batch: 138473

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 5035 | |
| 440-280935-2 | SGP-1-20 | Total/NA | Solid | 5035 | |
| 440-280935-3 | SGP-2-5 | Total/NA | Solid | 5035 | |
| 440-280935-4 | SGP-2-20 | Total/NA | Solid | 5035 | |
| 440-280935-5 | SGP-3-5 | Total/NA | Solid | 5035 | |
| 440-280935-6 | SGP-3-20 | Total/NA | Solid | 5035 | |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 5035 | |
| 440-280935-8 | SGP-4-20 | Total/NA | Solid | 5035 | |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 5035 | |
| 440-280935-10 | SGP-5-20 | Total/NA | Solid | 5035 | |

### Analysis Batch: 138692

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 8260B | 138473 |
| 440-280935-2 | SGP-1-20 | Total/NA | Solid | 8260B | 138473 |
| 440-280935-3 | SGP-2-5 | Total/NA | Solid | 8260B | 138473 |
| 440-280935-4 | SGP-2-20 | Total/NA | Solid | 8260B | 138473 |
| 440-280935-5 | SGP-3-5 | Total/NA | Solid | 8260B | 138473 |
| 440-280935-6 | SGP-3-20 | Total/NA | Solid | 8260B | 138473 |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 8260B | 138473 |
| MB 570-138692/9 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 570-138692/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 570-138692/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

### Analysis Batch: 138697

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-8 | SGP-4-20 | Total/NA | Solid | 8260B | 138473 |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 8260B | 138473 |
| 440-280935-10 | SGP-5-20 | Total/NA | Solid | 8260B | 138473 |
| MB 570-138697/7 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 570-138697/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 570-138697/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

## GC VOA

### Prep Batch: 138473

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 5035 | |
| 440-280935-2 | SGP-1-20 | Total/NA | Solid | 5035 | |
| 440-280935-3 | SGP-2-5 | Total/NA | Solid | 5035 | |
| 440-280935-4 | SGP-2-20 | Total/NA | Solid | 5035 | |
| 440-280935-5 | SGP-3-5 | Total/NA | Solid | 5035 | |
| 440-280935-6 | SGP-3-20 | Total/NA | Solid | 5035 | |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 5035 | |
| 440-280935-8 | SGP-4-20 | Total/NA | Solid | 5035 | |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 5035 | |
| 440-280935-10 | SGP-5-20 | Total/NA | Solid | 5035 | |

### Analysis Batch: 138805

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 8015B | 138473 |

## GC VOA (Continued)

### Analysis Batch: 138805 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-2 | SGP-1-20 | Total/NA | Solid | 8015B | 138473 |
| 440-280935-3 | SGP-2-5 | Total/NA | Solid | 8015B | 138473 |
| 440-280935-4 | SGP-2-20 | Total/NA | Solid | 8015B | 138473 |
| 440-280935-5 | SGP-3-5 | Total/NA | Solid | 8015B | 138473 |
| 440-280935-6 | SGP-3-20 | Total/NA | Solid | 8015B | 138473 |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 8015B | 138473 |
| 440-280935-8 | SGP-4-20 | Total/NA | Solid | 8015B | 138473 |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 8015B | 138473 |
| 440-280935-10 | SGP-5-20 | Total/NA | Solid | 8015B | 138473 |
| MB 570-138805/38 | Method Blank | Total/NA | Solid | 8015B | |
| LCS 570-138805/36 | Lab Control Sample | Total/NA | Solid | 8015B | |
| LCSD 570-138805/37 | Lab Control Sample Dup | Total/NA | Solid | 8015B | |

## GC Semi VOA

### Prep Batch: 138415

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 8151A | |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 8151A | |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 8151A | |
| MB 570-138415/1-A | Method Blank | Total/NA | Solid | 8151A | |
| LCS 570-138415/2-A | Lab Control Sample | Total/NA | Solid | 8151A | |
| LCSD 570-138415/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | |
| 570-53790-A-2-AK MS | Matrix Spike | Total/NA | Solid | 8151A | |
| 570-53790-A-2-AL MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | |

### Prep Batch: 138530

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 3546 | |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 3546 | |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 3546 | |
| MB 570-138530/1-A | Method Blank | Total/NA | Solid | 3546 | |
| LCS 570-138530/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 570-138530/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| 440-280940-F-1-B MS | Matrix Spike | Total/NA | Solid | 3546 | |
| 440-280940-F-1-C MSD | Matrix Spike Duplicate | Total/NA | Solid | 3546 | |

### Prep Batch: 138648

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 3550C | |
| 440-280935-2 | SGP-1-20 | Total/NA | Solid | 3550C | |
| 440-280935-3 | SGP-2-5 | Total/NA | Solid | 3550C | |
| 440-280935-4 | SGP-2-20 | Total/NA | Solid | 3550C | |
| 440-280935-5 | SGP-3-5 | Total/NA | Solid | 3550C | |
| 440-280935-6 | SGP-3-20 | Total/NA | Solid | 3550C | |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 3550C | |
| 440-280935-8 | SGP-4-20 | Total/NA | Solid | 3550C | |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 3550C | |
| 440-280935-10 | SGP-5-20 | Total/NA | Solid | 3550C | |
| MB 570-138648/1-A | Method Blank | Total/NA | Solid | 3550C | |
| LCS 570-138648/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |

## GC Semi VOA (Continued)

### Prep Batch: 138648 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCSD 570-138648/3-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| 570-54755-A-1-A MS | Matrix Spike | Total/NA | Solid | 3550C | |
| 570-54755-A-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 3550C | |

### Analysis Batch: 138653

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 570-138648/1-A | Method Blank | Total/NA | Solid | 8015B | 138648 |
| LCS 570-138648/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 138648 |
| LCSD 570-138648/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 138648 |
| 570-54755-A-1-A MS | Matrix Spike | Total/NA | Solid | 8015B | 138648 |
| 570-54755-A-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B | 138648 |

### Analysis Batch: 138769

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 8081A | 138530 |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 8081A | 138530 |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 8081A | 138530 |
| MB 570-138530/1-A | Method Blank | Total/NA | Solid | 8081A | 138530 |
| LCS 570-138530/2-A | Lab Control Sample | Total/NA | Solid | 8081A | 138530 |
| LCSD 570-138530/3-A | Lab Control Sample Dup | Total/NA | Solid | 8081A | 138530 |
| 440-280940-F-1-B MS | Matrix Spike | Total/NA | Solid | 8081A | 138530 |
| 440-280940-F-1-C MSD | Matrix Spike Duplicate | Total/NA | Solid | 8081A | 138530 |

### Analysis Batch: 138775

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 570-138415/1-A | Method Blank | Total/NA | Solid | 8151A | 138415 |
| LCS 570-138415/2-A | Lab Control Sample | Total/NA | Solid | 8151A | 138415 |
| LCSD 570-138415/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | 138415 |
| 570-53790-A-2-AK MS | Matrix Spike | Total/NA | Solid | 8151A | 138415 |
| 570-53790-A-2-AL MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | 138415 |

### Analysis Batch: 138947

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-2 | SGP-1-20 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-3 | SGP-2-5 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-4 | SGP-2-20 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-5 | SGP-3-5 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-6 | SGP-3-20 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-8 | SGP-4-20 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 8015B | 138648 |
| 440-280935-10 | SGP-5-20 | Total/NA | Solid | 8015B | 138648 |

### Analysis Batch: 139038

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 8151A | 138415 |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 8151A | 138415 |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 8151A | 138415 |

## Metals

### Prep Batch: 138796

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 3050B | |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 3050B | |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 3050B | |
| MB 570-138796/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 570-138796/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| LCSD 570-138796/3-A | Lab Control Sample Dup | Total/NA | Solid | 3050B | |
| 440-280940-F-1-G MS | Matrix Spike | Total/NA | Solid | 3050B | |
| 440-280940-F-1-H MSD | Matrix Spike Duplicate | Total/NA | Solid | 3050B | |

### Prep Batch: 138797

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 7471A | |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 7471A | |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 7471A | |
| MB 570-138797/1-A | Method Blank | Total/NA | Solid | 7471A | |
| LCS 570-138797/2-A | Lab Control Sample | Total/NA | Solid | 7471A | |
| LCSD 570-138797/3-A | Lab Control Sample Dup | Total/NA | Solid | 7471A | |
| 440-280940-F-1-J MS | Matrix Spike | Total/NA | Solid | 7471A | |
| 440-280940-F-1-K MSD | Matrix Spike Duplicate | Total/NA | Solid | 7471A | |

### Analysis Batch: 139047

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 7471A | 138797 |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 7471A | 138797 |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 7471A | 138797 |
| MB 570-138797/1-A | Method Blank | Total/NA | Solid | 7471A | 138797 |
| LCS 570-138797/2-A | Lab Control Sample | Total/NA | Solid | 7471A | 138797 |
| LCSD 570-138797/3-A | Lab Control Sample Dup | Total/NA | Solid | 7471A | 138797 |
| 440-280940-F-1-J MS | Matrix Spike | Total/NA | Solid | 7471A | 138797 |
| 440-280940-F-1-K MSD | Matrix Spike Duplicate | Total/NA | Solid | 7471A | 138797 |

### Analysis Batch: 139319

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280935-1 | SGP-1-5 | Total/NA | Solid | 6010B | 138796 |
| 440-280935-7 | SGP-4-5 | Total/NA | Solid | 6010B | 138796 |
| 440-280935-9 | SGP-5-5 | Total/NA | Solid | 6010B | 138796 |
| MB 570-138796/1-A | Method Blank | Total/NA | Solid | 6010B | 138796 |
| LCS 570-138796/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 138796 |
| LCSD 570-138796/3-A | Lab Control Sample Dup | Total/NA | Solid | 6010B | 138796 |
| 440-280940-F-1-G MS | Matrix Spike | Total/NA | Solid | 6010B | 138796 |
| 440-280940-F-1-H MSD | Matrix Spike Duplicate | Total/NA | Solid | 6010B | 138796 |

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| *- | LCS and/or LCSD is outside acceptance limits, low biased. |
| *+ | LCS and/or LCSD is outside acceptance limits, high biased. |
| *1 | LCS/LCSD RPD exceeds control limits. |
| E | Result exceeded calibration range. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| p | The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| L | A negative instrument reading had an absolute value greater than the reporting limit |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-280935-1

## Laboratory: Eurofins Calscience LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010B | 3050B | Solid | Antimony |
| 6010B | 3050B | Solid | Arsenic |
| 6010B | 3050B | Solid | Barium |
| 6010B | 3050B | Solid | Beryllium |
| 6010B | 3050B | Solid | Cadmium |
| 6010B | 3050B | Solid | Chromium |
| 6010B | 3050B | Solid | Cobalt |
| 6010B | 3050B | Solid | Copper |
| 6010B | 3050B | Solid | Lead |
| 6010B | 3050B | Solid | Molybdenum |
| 6010B | 3050B | Solid | Nickel |
| 6010B | 3050B | Solid | Selenium |
| 6010B | 3050B | Solid | Silver |
| 6010B | 3050B | Solid | Thallium |
| 6010B | 3050B | Solid | Vanadium |
| 6010B | 3050B | Solid | Zinc |
| 7471A | 7471A | Solid | Mercury |
| 8015B | 3550C | Solid | C13-C22 |
| 8015B | 3550C | Solid | C23-C40 |
| 8015B | 5035 | Solid | Gasoline Range Organics (C4-C12) |
| 8081A | 3546 | Solid | 4,4'-DDD |
| 8081A | 3546 | Solid | 4,4'-DDE |
| 8081A | 3546 | Solid | 4,4'-DDT |
| 8081A | 3546 | Solid | Aldrin |
| 8081A | 3546 | Solid | alpha-BHC |
| 8081A | 3546 | Solid | alpha-Chlordane |
| 8081A | 3546 | Solid | beta-BHC |
| 8081A | 3546 | Solid | Chlordane |
| 8081A | 3546 | Solid | delta-BHC |
| 8081A | 3546 | Solid | Dieldrin |
| 8081A | 3546 | Solid | Endosulfan I |
| 8081A | 3546 | Solid | Endosulfan II |
| 8081A | 3546 | Solid | Endosulfan sulfate |
| 8081A | 3546 | Solid | Endrin |
| 8081A | 3546 | Solid | Endrin aldehyde |
| 8081A | 3546 | Solid | Endrin ketone |
| 8081A | 3546 | Solid | gamma-BHC |
| 8081A | 3546 | Solid | gamma-Chlordane |
| 8081A | 3546 | Solid | Heptachlor |
| 8081A | 3546 | Solid | Heptachlor epoxide |
| 8081A | 3546 | Solid | Methoxychlor |
| 8081A | 3546 | Solid | Toxaphene |
| 8151A | 8151A | Solid | 2,4,5-T |
| 8151A | 8151A | Solid | 2,4,5-TP (Silvex) |
| 8151A | 8151A | Solid | 2,4-D |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

| | | | |
|---|---|---|---|
| 8151A | 8151A | Solid | 2,4-DB |
| 8151A | 8151A | Solid | Dalapon |
| 8151A | 8151A | Solid | Dicamba |
| 8151A | 8151A | Solid | Dichlorprop |
| 8151A | 8151A | Solid | Dinoseb |
| 8151A | 8151A | Solid | MCPA |
| 8151A | 8151A | Solid | MCPP |
| 8260B | 5035 | Solid | 1,1,1,2-Tetrachloroethane |
| 8260B | 5035 | Solid | 1,1,1-Trichloroethane |
| 8260B | 5035 | Solid | 1,1,2,2-Tetrachloroethane |
| 8260B | 5035 | Solid | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| 8260B | 5035 | Solid | 1,1,2-Trichloroethane |
| 8260B | 5035 | Solid | 1,1-Dichloroethane |
| 8260B | 5035 | Solid | 1,1-Dichloroethene |
| 8260B | 5035 | Solid | 1,1-Dichloropropene |
| 8260B | 5035 | Solid | 1,2,3-Trichlorobenzene |
| 8260B | 5035 | Solid | 1,2,3-Trichloropropane |
| 8260B | 5035 | Solid | 1,2,4-Trichlorobenzene |
| 8260B | 5035 | Solid | 1,2,4-Trimethylbenzene |
| 8260B | 5035 | Solid | 1,2-Dibromo-3-Chloropropane |
| 8260B | 5035 | Solid | 1,2-Dibromoethane |
| 8260B | 5035 | Solid | 1,2-Dichlorobenzene |
| 8260B | 5035 | Solid | 1,2-Dichloroethane |
| 8260B | 5035 | Solid | 1,2-Dichloropropane |
| 8260B | 5035 | Solid | 1,3,5-Trimethylbenzene |
| 8260B | 5035 | Solid | 1,3-Dichlorobenzene |
| 8260B | 5035 | Solid | 1,3-Dichloropropane |
| 8260B | 5035 | Solid | 1,4-Dichlorobenzene |
| 8260B | 5035 | Solid | 2,2-Dichloropropane |
| 8260B | 5035 | Solid | 2-Butanone |
| 8260B | 5035 | Solid | 2-Chlorotoluene |
| 8260B | 5035 | Solid | 2-Hexanone |
| 8260B | 5035 | Solid | 4-Chlorotoluene |
| 8260B | 5035 | Solid | 4-Methyl-2-pentanone |
| 8260B | 5035 | Solid | Acetone |
| 8260B | 5035 | Solid | Benzene |
| 8260B | 5035 | Solid | Bromobenzene |
| 8260B | 5035 | Solid | Bromochloromethane |
| 8260B | 5035 | Solid | Bromodichloromethane |
| 8260B | 5035 | Solid | Bromoform |
| 8260B | 5035 | Solid | Bromomethane |
| 8260B | 5035 | Solid | Carbon disulfide |
| 8260B | 5035 | Solid | Carbon tetrachloride |
| 8260B | 5035 | Solid | Chlorobenzene |
| 8260B | 5035 | Solid | Chloroethane |
| 8260B | 5035 | Solid | Chloroform |
| 8260B | 5035 | Solid | Chloromethane |
| 8260B | 5035 | Solid | cis-1,2-Dichloroethene |
| 8260B | 5035 | Solid | cis-1,3-Dichloropropene |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | | Program | Identification Number | Expiration Date |
|---|---|---|---|---|
| California | | SCAQMD LAP | 17LA0919 | 11-30-21 |
| 8260B | 5035 | Solid | Dibromochloromethane | |
| 8260B | 5035 | Solid | Dibromomethane | |
| 8260B | 5035 | Solid | Dichlorodifluoromethane | |
| 8260B | 5035 | Solid | Di-isopropyl ether (DIPE) | |
| 8260B | 5035 | Solid | Ethanol | |
| 8260B | 5035 | Solid | Ethylbenzene | |
| 8260B | 5035 | Solid | Ethyl-t-butyl ether (ETBE) | |
| 8260B | 5035 | Solid | Hexachloro-1,3-butadiene | |
| 8260B | 5035 | Solid | Isopropylbenzene | |
| 8260B | 5035 | Solid | m,p-Xylene | |
| 8260B | 5035 | Solid | Methylene Chloride | |
| 8260B | 5035 | Solid | Methyl-t-Butyl Ether (MTBE) | |
| 8260B | 5035 | Solid | Naphthalene | |
| 8260B | 5035 | Solid | n-Butylbenzene | |
| 8260B | 5035 | Solid | N-Propylbenzene | |
| 8260B | 5035 | Solid | o-Xylene | |
| 8260B | 5035 | Solid | p-Isopropyltoluene | |
| 8260B | 5035 | Solid | sec-Butylbenzene | |
| 8260B | 5035 | Solid | Styrene | |
| 8260B | 5035 | Solid | Tert-amyl-methyl ether (TAME) | |
| 8260B | 5035 | Solid | tert-Butyl alcohol (TBA) | |
| 8260B | 5035 | Solid | tert-Butylbenzene | |
| 8260B | 5035 | Solid | Tetrachloroethene | |
| 8260B | 5035 | Solid | Toluene | |
| 8260B | 5035 | Solid | trans-1,2-Dichloroethene | |
| 8260B | 5035 | Solid | trans-1,3-Dichloropropene | |
| 8260B | 5035 | Solid | Trichloroethene | |
| 8260B | 5035 | Solid | Trichlorofluoromethane | |
| 8260B | 5035 | Solid | Vinyl acetate | |
| 8260B | 5035 | Solid | Vinyl chloride | |
| 8260B | 5035 | Solid | Xylenes, Total | |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: EUROFINS - CAL
Address:
Phone: DANIELLE ROGERS
Contact: ~~CAMILLE~~
PO/SO #: CB21P020

Office Location: COLTON, CA
Project Manager: TODD MCFARLAND

Sampler's Name: TODD MCFARLAND
Sampler's Signature:

Project Number: CB21P020
Project Name: BALDWIN PARK

ANALYSIS REQUESTED: TPH CARBON CHAIN 8015; VOCs FULL SCAN 8260; CAM 17 METALS 6010/7471; HERBICIDES 8151A; PESTICIDES - OCPs 8081

LAB USE ONLY
DUE DATE.

TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 1

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers: 5-VOAs | 1-SLEEVE | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|
| S | 3/23/21 | 815 | | X | SGP-1-5 | - | 5 | X | X | |
| | | 830 | | | SGP-1-20 | - | 20 | | | |
| | | 915 | | | SGP-2-5 | - | 5 | | | |
| | | 940 | | | SGP-2-20 | - | 20 | | | |
| | | 1030 | | | SGP-3-5 | - | 5 | | | |
| | | 1050 | | | SGP 3-20 | - | 20 | | | |
| | | 1240 | | | SGP-4-5 | - | 5 | | | |
| | | 1250 | | | SGP-4-20 | - | 20 | | | |
| | | 1315 | | | SGP-5-5 | = | 5 | | | |
| ↓ | ↓ | 1325 | | ↓ | SGP-5-20 | ↓ | 20 | ↓ | ↓ | |

440-280935 Chain of Custody

TURNAROUND TIME: ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 3/23/21 | 1440 | William Rivera | 3/23/21 | 1430 |
| William Rivera | 3/23/21 | 1830 | Jorge Loguros | 3/23/21 | 1830 |
| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |

NOTES
5 DAY TAT
5035 VOAS + SLEEVE

Matrix: WW Wastewater; W Water; S Soil; L -Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml Glass wide mouth; P/O Plastic or other



N:\Environmental\Forms
Rev 6/30/2017

23/25 #93

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167264.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 2 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-280935-1 |
| Address: 7440 Lincoln Way, , | Due Date Requested: 3/29/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes.**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8015B_DRO/3550C C6-C44 w/Carbon Chains - No Silica Gel S | 8260B/5035FM_Calc (MOD) Routine + Oxy's | 8260B/5035FP_Calc (MOD) Routine + Oxy's | 8151A/8151A_SP Routine Herbicides List (full spike list | 8081A/3546 Routine Pesticides List | 6010B/3050B California Administrative Manual List | 7471A/7471A_Prep Mercury | 8015B_GRO/5035FM_Calc Gasoline Range Organics C4-C12 | 8015B_GRO/5035FP_Calc Gasoline Range Organics C4-C12 | | | | | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Preservation Code: | | | | | | | | | | | | | | | | | |
| SGP-1-5 (440-280935-1) | 3/23/21 | 08 15 Pacific | | Solid | | | X | X | X | X | X | X | X | X | X | | | | | 6 | |
| SGP-1-20 (440-280935-2) | 3/23/21 | 08.30 Pacific | | Solid | | | X | X | X | | | | | X | X | | | | | 6 | |
| SGP-2-5 (440-280935-3) | 3/23/21 | 09 15 Pacific | | Solid | | | X | X | X | | | | | X | X | | | | | 6 | |
| SGP-2-20 (440-280935-4) | 3/23/21 | 09 40 Pacific | | Solid | | | X | X | X | | | | | X | X | | | | | 6 | |
| SGP-3-5 (440-280935-5) | 3/23/21 | 10.30 Pacific | | Solid | | | X | X | X | | | | | X | X | | | | | 6 | |
| SGP-3-20 (440-280935-6) | 3/23/21 | 10:50 Pacific | | Solid | | | X | X | X | | | | | X | X | | | | | 6 | |
| SGP-4-5 (440-280935-7) | 3/23/21 | 12:40 Pacific | | Solid | | | X | X | X | X | X | X | X | X | X | | | | | 6 | |
| SGP-4-20 (440-280935-8) | 3/23/21 | 12 50 Pacific | | Solid | | | X | X | X | | | | | X | X | | | | | 6 | |
| SGP-5-5 (440-280935-9) | 3/23/21 | 13.15 Pacific | | Solid | | | X | X | X | X | X | X | X | X | X | | | | | 6 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| ***Possible Hazard Identification*** *Unconfirmed* | ***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months* |
|---|---|
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements. |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Relinquished by: | 3-24-21 1023 | GLF | | 3/24/21 1023 | ECE |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ∆ Yes ∆ No | Custody Seal No. N/A | Cooler Temperature(s) °C and Other Remarks: 2.5/1.4 SC6 |
|---|---|---|

Ver: 11/01/2020

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167264.2 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle.Roberts@Eurofinset.com | State of Origin: California | Page: Page 2 of 2 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California; State - California | | Job #: 440-280935-1 |
| Address: 7440 Lincoln Way, , | Due Date Requested: 3/29/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8015B_DRO/3550C C6-C44 w/Carbon Chains - No Silica Gel S | 8260B/5035FM_Calc (MOD) Routine + Oxy's | 8260B/5035FP_Calc (MOD) Routine + Oxy's | 8151A/8151A_SP Routine Herbicides List (full spike list | 8081A/3546 Routine Pesticides List | 6010B/3050B California Administrative Manual List | 7471A/7471A_Prep Mercury | 8015B_GRO/5035FM_Calc Gasoline Range Organics C4-C12 | 8015B_GRO/5035FP_Calc Gasoline Range Organics C4-C12 | | | | | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | | | | | | | | | |
| SGP-5-20 (440-280935-10) | 3/23/21 | 13.25 Pacific | | Solid | | | X | X | X | | | | | X | X | | | | | 6 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | | 3-24-21 1023 | ECI | | 3/24/21 1023 | ECI |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No: N/A | Cooler Temperature(s) °C and Other Remarks: 2.5 / 1.4 SC6 |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-280935-1

**Login Number: 280935**
**List Number: 1**
**Creator: Lagunas, Jorge L**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-280935-1

**Login Number: 280935**
**List Number: 2**
**Creator: Ortiz-Luis, Michael**

**List Source: Eurofins Calscience**
**List Creation: 03/24/21 04:09 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 1.4 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

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# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-280940-1
Client Project/Site: Broken Horn Saddler V

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*3/30/2021 2:37:55 PM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280940-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Solid | 03/22/21 09:06 | 03/23/21 18:30 | |
| 440-280940-2 | B-1-10 | Solid | 03/22/21 09:20 | 03/23/21 18:30 | |
| 440-280940-3 | B-2-5 | Solid | 03/23/21 12:48 | 03/23/21 18:30 | |
| 440-280940-4 | B-2-110 | Solid | 03/23/21 14:30 | 03/23/21 18:30 | |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280940-1

## Job ID: 440-280940-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-280940-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/23/2021 6:30 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8º C.

**GC/MS VOA**
Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-138697.

Method 8260B: The initial calibration curve analyzed in batch 570-138697 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC VOA**
Method 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 138805.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC Semi VOA**
Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-138530 and analytical batch 570-138769 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8151A: The continuing calibration verification (CCV) associated with batch 570-138775 recovered above the upper control limit for 2,4,5-TP (Silvex) and 2,4-DB. he samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 570-138775/34).

Method 8151A: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 570-138415 and analytical batch 570-138775 recovered outside control limits for the following analyte(s): Dinoseb. Dinoseb has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8151A: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-138415 and analytical batch 570-138775 recovered outside control limits for the following analytes: 2,4-DB and Dalapon.

Method 8151A: The matrix spike/matrix spike duplicate (MS/MSD) for preparation batch 570-138415 and analytical batch 570-138775 exceeded control limits for the following analyte(s): Dinoseb, Note that this analyte is a known poor performer when analyzed using this method.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-138796 and analytical batch 570-139319 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Job ID: 440-280940-1 (Continued)

### Laboratory: Eurofins Calscience Irvine (Continued)

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280940-1

## Client Sample ID: B-1-5 — Lab Sample ID: 440-280940-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.018 | J | 0.019 | 0.0094 | mg/Kg | 1 | | 8260B | Total/NA |
| C23-C40 | 4.9 | | 4.7 | 3.7 | mg/Kg | 1 | | 8015B | Total/NA |
| 4,4'-DDE | 0.00078 | J F1 | 0.0050 | 0.00054 | mg/Kg | 1 | | 8081A | Total/NA |
| 4,4'-DDT | 0.00051 | J F1 p | 0.0050 | 0.00036 | mg/Kg | 1 | | 8081A | Total/NA |
| Arsenic | 2.2 | J | 2.4 | 2.2 | mg/Kg | 1 | | 6010B | Total/NA |
| Barium | 50 | | 0.49 | 0.22 | mg/Kg | 1 | | 6010B | Total/NA |
| Cadmium | 0.35 | J | 0.49 | 0.20 | mg/Kg | 1 | | 6010B | Total/NA |
| Chromium | 6.8 | | 0.98 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 5.5 | | 0.98 | 0.22 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 12 | | 0.98 | 0.49 | mg/Kg | 1 | | 6010B | Total/NA |
| Lead | 3.0 | J | 4.9 | 0.94 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 6.0 | | 0.49 | 0.42 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 13 | | 0.98 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 28 | | 9.8 | 5.0 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.038 | J | 0.081 | 0.013 | mg/Kg | 1 | | 7471A | Total/NA |

## Client Sample ID: B-1-10 — Lab Sample ID: 440-280940-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.017 | | 0.014 | 0.0070 | mg/Kg | 1 | | 8260B | Total/NA |
| Benzene | 0.00030 | J | 0.00071 | 0.00018 | mg/Kg | 1 | | 8260B | Total/NA |
| C13-C22 | 5.5 | | 5.0 | 3.8 | mg/Kg | 1 | | 8015B | Total/NA |
| C23-C40 | 5.3 | | 5.0 | 3.8 | mg/Kg | 1 | | 8015B | Total/NA |

## Client Sample ID: B-2-5 — Lab Sample ID: 440-280940-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.022 | | 0.018 | 0.0089 | mg/Kg | 1 | | 8260B | Total/NA |
| Benzene | 0.00023 | J | 0.00090 | 0.00023 | mg/Kg | 1 | | 8260B | Total/NA |
| C13-C22 | 14 | | 4.8 | 3.7 | mg/Kg | 1 | | 8015B | Total/NA |
| C23-C40 | 140 | | 4.8 | 3.7 | mg/Kg | 1 | | 8015B | Total/NA |
| 4,4'-DDT | 0.00086 | J p | 0.0050 | 0.00036 | mg/Kg | 1 | | 8081A | Total/NA |
| Dieldrin | 0.00032 | J | 0.0050 | 0.00025 | mg/Kg | 1 | | 8081A | Total/NA |
| gamma-Chlordane | 0.00030 | J p | 0.0050 | 0.00026 | mg/Kg | 1 | | 8081A | Total/NA |
| Arsenic | 2.6 | | 2.5 | 2.3 | mg/Kg | 1 | | 6010B | Total/NA |
| Barium | 59 | | 0.50 | 0.22 | mg/Kg | 1 | | 6010B | Total/NA |
| Cadmium | 0.50 | | 0.50 | 0.20 | mg/Kg | 1 | | 6010B | Total/NA |
| Chromium | 12 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 6.6 | | 1.0 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 14 | | 1.0 | 0.51 | mg/Kg | 1 | | 6010B | Total/NA |
| Lead | 22 | | 5.0 | 0.97 | mg/Kg | 1 | | 6010B | Total/NA |
| Molybdenum | 0.55 | | 0.50 | 0.45 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 7.8 | | 0.50 | 0.43 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 17 | | 1.0 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 54 | | 10 | 5.1 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.032 | J | 0.082 | 0.013 | mg/Kg | 1 | | 7471A | Total/NA |

## Client Sample ID: B-2-110 — Lab Sample ID: 440-280940-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C23-C40 | 4.0 | J | 4.8 | 3.7 | mg/Kg | 1 | | 8015B | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280940-1

**Client Sample ID: B-1-5**
**Date Collected: 03/22/21 09:06**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280940-1**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00096 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00096 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0019 | 0.00052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0096 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00096 | 0.00044 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,1-Dichloroethane | ND | | 0.00096 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,1-Dichloroethene | ND | | 0.00096 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,1-Dichloropropene | ND | | 0.0019 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0019 | 0.00096 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0019 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0019 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0019 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0096 | 0.0065 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2-Dibromoethane | ND | | 0.00096 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00096 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2-Dichloroethane | ND | | 0.00096 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,2-Dichloropropane | ND | | 0.00096 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0019 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00096 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,3-Dichloropropane | ND | | 0.00096 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00096 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 2,2-Dichloropropane | ND | | 0.0048 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 2-Butanone | ND | | 0.019 | 0.0043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 2-Chlorotoluene | ND | | 0.00096 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 2-Hexanone | ND | | 0.019 | 0.0029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 4-Chlorotoluene | ND | | 0.00096 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.019 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| **Acetone** | **0.018** | **J** | 0.019 | 0.0094 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Benzene | ND | | 0.00096 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Bromobenzene | ND | | 0.00096 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Bromochloromethane | ND | | 0.0019 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Bromodichloromethane | ND | | 0.00096 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Bromoform | ND | | 0.0048 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Bromomethane | ND | | 0.019 | 0.0063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Carbon disulfide | ND | | 0.0096 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Carbon tetrachloride | ND | | 0.00096 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Chlorobenzene | ND | | 0.00096 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Chloroethane | ND | | 0.0019 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Chloroform | ND | | 0.00096 | 0.00056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Chloromethane | ND | | 0.019 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00096 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00096 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Dibromochloromethane | ND | | 0.0019 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Dibromomethane | ND | | 0.00096 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Dichlorodifluoromethane | ND | | 0.0019 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00096 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Ethanol | ND | | 0.24 | 0.063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Ethylbenzene | ND | | 0.00096 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00096 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |

**Client Sample ID: B-1-5**
**Date Collected: 03/22/21 09:06**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280940-1**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ND | | 0.0048 | 0.0016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Isopropylbenzene | ND | | 0.00096 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| m,p-Xylene | ND | | 0.0019 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Methylene Chloride | ND | | 0.0096 | 0.0030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0019 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Naphthalene | ND | | 0.0096 | 0.0050 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| n-Butylbenzene | ND | | 0.00096 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| N-Propylbenzene | ND | | 0.0019 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| o-Xylene | ND | | 0.00096 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| p-Isopropyltoluene | ND | | 0.00096 | 0.00067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| sec-Butylbenzene | ND | | 0.00096 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Styrene | ND | | 0.00096 | 0.00067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00096 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.019 | 0.0067 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| tert-Butylbenzene | ND | | 0.00096 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Tetrachloroethene | ND | | 0.00096 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Toluene | ND | | 0.00096 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00096 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0019 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Trichloroethene | ND | | 0.0019 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Trichlorofluoromethane | ND | | 0.0096 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Vinyl acetate | ND | | 0.0096 | 0.0037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Vinyl chloride | ND | | 0.00096 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |
| Xylenes, Total | ND | | 0.0019 | 0.00057 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *175* | | *01 - 133* | *7/ 9249 21 1: 825* | *7/ 9269 21 7782/* | *1* |
| *4-Bromofluorobenzene (Surr)* | *: :* | | *57 - 127* | *7/ 9249 21 1: 825* | *7/ 9269 21 7782/* | *1* |
| *Dibromofluoromethane (Surr)* | *172* | | *0: - 1/ /* | *7/ 9249 21 1: 825* | *7/ 9269 21 7782/* | *1* |
| *Toluene-d5 (Surr)* | *: 5* | | *57 - 127* | *7/ 9249 21 1: 825* | *7/ 9269 21 7782/* | *1* |

## Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.096 | 0.054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 15:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *173* | | *42 - 126* | *7/ 9249 21 1: 825* | *7/ 9269 21 1381 5* | *1* |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 4.7 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 14:37 | 1 |
| **C23-C40** | **4.9** | | 4.7 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 14:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *: 0* | | *67 - 1/ 5* | *7/ 9239 21 108/ /* | *7/ 9269 21 148 0* | *1* |

## Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | F1 | 0.0050 | 0.00099 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| **4,4'-DDE** | **0.00078** | **J F1** | 0.0050 | 0.00054 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| **4,4'-DDT** | **0.00051** | **J F1 p** | 0.0050 | 0.00036 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |

## Client Sample ID: B-1-5

**Date Collected: 03/22/21 09:06**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-1

**Matrix: Solid**

### Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | F1 | 0.0050 | 0.00030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| alpha-BHC | ND | F1 | 0.0050 | 0.0030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| alpha-Chlordane | ND | F1 | 0.0050 | 0.0013 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| beta-BHC | ND | F1 | 0.0050 | 0.0037 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Endosulfan I | ND | F1 | 0.0050 | 0.00044 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Endosulfan sulfate | ND | F1 | 0.0050 | 0.00040 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Endrin | ND | F1 | 0.0050 | 0.00033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Endrin aldehyde | ND | F1 | 0.0050 | 0.00073 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Endrin ketone | ND | F1 | 0.0050 | 0.00048 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| gamma-BHC | ND | F1 | 0.0050 | 0.00062 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Heptachlor | ND | F1 | 0.0050 | 0.00089 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Heptachlor epoxide | ND | F1 | 0.0050 | 0.00067 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Methoxychlor | ND | F1 | 0.0050 | 0.00081 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 03/25/21 08:00 | 03/26/21 04:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *173* | | */ 0 - 131* | *7/ 9239 21 7587 7* | *7/ 9269 21 7488 2* | *1* |
| *Tetrachloro-m-xylene* | *: /* | | */ 5 - 145* | *7/ 9239 21 7587 7* | *7/ 9269 21 7488 2* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| 2,4-DB | ND | *1 | 0.10 | 0.047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| Dalapon | ND | *1 | 0.25 | 0.073 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| Dicamba | ND | | 0.010 | 0.0048 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| Dichlorprop | ND | | 0.10 | 0.050 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| Dinoseb | ND | *- *1 | 0.10 | 0.019 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |
| MCPP | ND | | 10 | 6.7 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *124* | | *21 - 161* | *7/ 9249 21 1686* | *7/ 9269 21 2187 6* | *1* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | F1 | 2.9 | 1.3 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Arsenic** | **2.2** | **J** | 2.4 | 2.2 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Barium** | **50** | | 0.49 | 0.22 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| Beryllium | ND | | 0.24 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Cadmium** | **0.35** | **J** | 0.49 | 0.20 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Chromium** | **6.8** | | 0.98 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Cobalt** | **5.5** | | 0.98 | 0.22 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Copper** | **12** | | 0.98 | 0.49 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |

## Client Sample ID: B-1-5

**Date Collected: 03/22/21 09:06**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-1

**Matrix: Solid**

### Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **3.0** | **J** | 4.9 | 0.94 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| Molybdenum | ND | | 0.49 | 0.44 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Nickel** | **6.0** | | 0.49 | 0.42 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| Selenium | ND | | 4.9 | 1.8 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| Silver | ND | | 0.98 | 0.22 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| Thallium | ND | | 4.9 | 1.4 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Vanadium** | **13** | | 0.98 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |
| **Zinc** | **28** | | 9.8 | 5.0 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:50 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.038** | **J** | 0.081 | 0.013 | mg/Kg | | 03/25/21 20:00 | 03/26/21 15:09 | 1 |

## Client Sample ID: B-1-10

**Date Collected: 03/22/21 09:20**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-2

**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00071 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00071 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0014 | 0.00039 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0071 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00071 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,1-Dichloroethane | ND | | 0.00071 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,1-Dichloroethene | ND | | 0.00071 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,1-Dichloropropene | ND | | 0.0014 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0014 | 0.00071 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0014 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0014 | 0.00029 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0014 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0071 | 0.0048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2-Dibromoethane | ND | | 0.00071 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00071 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2-Dichloroethane | ND | | 0.00071 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,2-Dichloropropane | ND | | 0.00071 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0014 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00071 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,3-Dichloropropane | ND | | 0.00071 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00071 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 2,2-Dichloropropane | ND | | 0.0036 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 2-Butanone | ND | | 0.014 | 0.0032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 2-Chlorotoluene | ND | | 0.00071 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 2-Hexanone | ND | | 0.014 | 0.0022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 4-Chlorotoluene | ND | | 0.00071 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.014 | 0.0021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| **Acetone** | **0.017** | | 0.014 | 0.0070 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| **Benzene** | **0.00030** | **J** | 0.00071 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Bromobenzene | ND | | 0.00071 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Bromochloromethane | ND | | 0.0014 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |

**Client Sample ID: B-1-10**
**Date Collected: 03/22/21 09:20**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280940-2**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | 0.00071 | 0.00011 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Bromoform | ND | | 0.0036 | 0.00094 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Bromomethane | ND | | 0.014 | 0.0047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Carbon disulfide | ND | | 0.0071 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Carbon tetrachloride | ND | | 0.00071 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Chlorobenzene | ND | | 0.00071 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Chloroethane | ND | | 0.0014 | 0.0011 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Chloroform | ND | | 0.00071 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Chloromethane | ND | | 0.014 | 0.0011 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00071 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00071 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Dibromochloromethane | ND | | 0.0014 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Dibromomethane | ND | | 0.00071 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Dichlorodifluoromethane | ND | | 0.0014 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00071 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Ethanol | ND | | 0.18 | 0.047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Ethylbenzene | ND | | 0.00071 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00071 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0036 | 0.0012 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Isopropylbenzene | ND | | 0.00071 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| m,p-Xylene | ND | | 0.0014 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Methylene Chloride | ND | | 0.0071 | 0.0022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0014 | 0.00013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Naphthalene | ND | | 0.0071 | 0.0037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| n-Butylbenzene | ND | | 0.00071 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| N-Propylbenzene | ND | | 0.0014 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| o-Xylene | ND | | 0.00071 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| p-Isopropyltoluene | ND | | 0.00071 | 0.00050 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| sec-Butylbenzene | ND | | 0.00071 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Styrene | ND | | 0.00071 | 0.00050 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00071 | 0.00014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.014 | 0.0050 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| tert-Butylbenzene | ND | | 0.00071 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Tetrachloroethene | ND | | 0.00071 | 0.00016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Toluene | ND | | 0.00071 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00071 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0014 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Trichloroethene | ND | | 0.0014 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Trichlorofluoromethane | ND | | 0.0071 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Vinyl acetate | ND | | 0.0071 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Vinyl chloride | ND | | 0.00071 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |
| Xylenes, Total | ND | | 0.0014 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 00:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *175* | | *01 - 133* | *7/ 9 24 21 1: 8 25* | *7/ 9 26 21 7 7 8 45* | *1* |
| *4-Bromofluorobenzene (Surr)* | *: 0* | | *57 - 127* | *7/ 9 24 21 1: 8 25* | *7/ 9 26 21 7 7 8 45* | *1* |
| *Dibromofluoromethane (Surr)* | *172* | | *0: - 1/ /* | *7/ 9 24 21 1: 8 25* | *7/ 9 26 21 7 7 8 45* | *1* |
| *Toluene-d5 (Surr)* | *: 0* | | *57 - 127* | *7/ 9 24 21 1: 8 25* | *7/ 9 26 21 7 7 8 45* | *1* |

## Client Sample ID: B-1-10

**Date Collected: 03/22/21 09:20**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-2

**Matrix: Solid**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.10 | 0.056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 15:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *112* | | *42 - 126* | *7/ 9 24 21 1: 8 25* | *7/ 9 26 21 13 8 42* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C13-C22** | **5.5** | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 14:57 | 1 |
| **C23-C40** | **5.3** | | 5.0 | 3.8 | mg/Kg | | 03/25/21 17:33 | 03/26/21 14:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *: :* | | *67 - 1/ 5* | *7/ 9 23 21 108 / /* | *7/ 9 26 21 14 8 30* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| 2,4-DB | ND | *1 | 0.10 | 0.047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| Dalapon | ND | *1 | 0.25 | 0.072 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| Dinoseb | ND | *- *1 | 0.10 | 0.019 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *124* | | *21 - 161* | *7/ 9 24 21 168 6* | *7/ 9 26 21 21 8 2:* | *1* |

## Client Sample ID: B-2-5

**Date Collected: 03/23/21 12:48**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-3

**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00090 | 0.00026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00090 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0018 | 0.00049 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0090 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00090 | 0.00042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,1-Dichloroethane | ND | | 0.00090 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,1-Dichloroethene | ND | | 0.00090 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,1-Dichloropropene | ND | | 0.0018 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0018 | 0.00090 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0018 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0018 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0018 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0090 | 0.0061 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,2-Dibromoethane | ND | | 0.00090 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00090 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,2-Dichloroethane | ND | | 0.00090 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280940-1

**Client Sample ID: B-2-5**
**Date Collected: 03/23/21 12:48**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280940-3**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ND | | 0.00090 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0018 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00090 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,3-Dichloropropane | ND | | 0.00090 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00090 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 2,2-Dichloropropane | ND | | 0.0045 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 2-Butanone | ND | | 0.018 | 0.0041 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 2-Chlorotoluene | ND | | 0.00090 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 2-Hexanone | ND | | 0.018 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 4-Chlorotoluene | ND | | 0.00090 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.018 | 0.0026 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| **Acetone** | **0.022** | | 0.018 | 0.0089 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| **Benzene** | **0.00023** | **J** | 0.00090 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Bromobenzene | ND | | 0.00090 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Bromochloromethane | ND | | 0.0018 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Bromodichloromethane | ND | | 0.00090 | 0.00014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Bromoform | ND | | 0.0045 | 0.0012 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Bromomethane | ND | | 0.018 | 0.0059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Carbon disulfide | ND | | 0.0090 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Carbon tetrachloride | ND | | 0.00090 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Chlorobenzene | ND | | 0.00090 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Chloroethane | ND | | 0.0018 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Chloroform | ND | | 0.00090 | 0.00053 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Chloromethane | ND | | 0.018 | 0.0014 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00090 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00090 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Dibromochloromethane | ND | | 0.0018 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Dibromomethane | ND | | 0.00090 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Dichlorodifluoromethane | ND | | 0.0018 | 0.00041 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00090 | 0.00045 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Ethanol | ND | | 0.23 | 0.059 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Ethylbenzene | ND | | 0.00090 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00090 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0045 | 0.0015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Isopropylbenzene | ND | | 0.00090 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| m,p-Xylene | ND | | 0.0018 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Methylene Chloride | ND | | 0.0090 | 0.0028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0018 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Naphthalene | ND | | 0.0090 | 0.0047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| n-Butylbenzene | ND | | 0.00090 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| N-Propylbenzene | ND | | 0.0018 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| o-Xylene | ND | | 0.00090 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| p-Isopropyltoluene | ND | | 0.00090 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| sec-Butylbenzene | ND | | 0.00090 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Styrene | ND | | 0.00090 | 0.00063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00090 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.018 | 0.0063 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| tert-Butylbenzene | ND | | 0.00090 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Tetrachloroethene | ND | | 0.00090 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |

## Client Sample ID: B-2-5
**Date Collected: 03/23/21 12:48**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-3
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 0.00090 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00090 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0018 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Trichloroethene | ND | | 0.0018 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Trichlorofluoromethane | ND | | 0.0090 | 0.00025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Vinyl acetate | ND | | 0.0090 | 0.0035 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Vinyl chloride | ND | | 0.00090 | 0.00034 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |
| Xylenes, Total | ND | | 0.0018 | 0.00054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *111* | | *01 - 133* | *7/ 9 24 9 21 1: 8 25* | *7/ 9 26 9 21 7 18 14* | *1* |
| *4-Bromofluorobenzene (Surr)* | *: 3* | | *57 - 127* | *7/ 9 24 9 21 1: 8 25* | *7/ 9 26 9 21 7 18 14* | *1* |
| *Dibromofluoromethane (Surr)* | *172* | | *0: - 1/ /* | *7/ 9 24 9 21 1: 8 25* | *7/ 9 26 9 21 7 18 14* | *1* |
| *Toluene-d5 (Surr)* | *: 3* | | *57 - 127* | *7/ 9 24 9 21 1: 8 25* | *7/ 9 26 9 21 7 18 14* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.088 | 0.049 | mg/Kg | | 03/24/21 19:28 | 03/26/21 16:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *173* | | *42 - 126* | *7/ 9 24 9 21 1: 8 25* | *7/ 9 26 9 21 16 8 6* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C13-C22** | **14** | | 4.8 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 15:19 | 1 |
| **C23-C40** | **140** | | 4.8 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 15:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *: :* | | *67 - 1/ 5* | *7/ 9 23 9 21 10 8 / /* | *7/ 9 26 9 21 13 8 1 :* | *1* |

### Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00099 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| **4,4'-DDT** | **0.00086** | **J p** | 0.0050 | 0.00036 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| **Dieldrin** | **0.00032** | **J** | 0.0050 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00041 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Endrin | ND | | 0.0050 | 0.00034 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00048 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00063 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| **gamma-Chlordane** | **0.00030** | **J p** | 0.0050 | 0.00026 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00089 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |

## Client Sample ID: B-2-5
**Date Collected: 03/23/21 12:48**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-3
**Matrix: Solid**

### Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 03/25/21 08:00 | 03/26/21 05:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *: 7* | | */ 0 - 131* | *7/ 9 23 9 21 7 58 7 7* | *7/ 9 26 9 21 7 38 7 6* | *1* |
| *Tetrachloro-m-xylene* | *56* | | */ 5 - 145* | *7/ 9 23 9 21 7 58 7 7* | *7/ 9 26 9 21 7 38 7 6* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| 2,4-DB | ND | *1 | 0.10 | 0.047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| Dalapon | ND | *1 | 0.25 | 0.073 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| Dicamba | ND | | 0.010 | 0.0048 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| Dichlorprop | ND | | 0.10 | 0.050 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| Dinoseb | ND | *- *1 | 0.10 | 0.019 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |
| MCPP | ND | | 10 | 6.7 | mg/Kg | | 03/24/21 16:36 | 03/26/21 21:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *126* | | *21 - 161* | *7/ 9 24 9 21 1 68 7 6* | *7/ 9 26 9 21 2 18 8 2* | *1* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.0 | 1.4 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Arsenic** | **2.6** | | 2.5 | 2.3 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Barium** | **59** | | 0.50 | 0.22 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| Beryllium | ND | | 0.25 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Cadmium** | **0.50** | | 0.50 | 0.20 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Chromium** | **12** | | 1.0 | 0.18 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Cobalt** | **6.6** | | 1.0 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Copper** | **14** | | 1.0 | 0.51 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Lead** | **22** | | 5.0 | 0.97 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Molybdenum** | **0.55** | | 0.50 | 0.45 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Nickel** | **7.8** | | 0.50 | 0.43 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| Selenium | ND | | 5.0 | 1.9 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| Silver | ND | | 1.0 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| Thallium | ND | | 5.0 | 1.5 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Vanadium** | **17** | | 1.0 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |
| **Zinc** | **54** | | 10 | 5.1 | mg/Kg | | 03/25/21 20:00 | 03/26/21 18:04 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.032** | **J** | 0.082 | 0.013 | mg/Kg | | 03/25/21 20:00 | 03/26/21 15:14 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280940-1

**Client Sample ID: B-2-110**
**Date Collected: 03/23/21 14:30**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280940-4**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00080 | 0.00023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00080 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0016 | 0.00043 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0080 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00080 | 0.00037 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,1-Dichloroethane | ND | | 0.00080 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,1-Dichloroethene | ND | | 0.00080 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,1-Dichloropropene | ND | | 0.0016 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0016 | 0.00080 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0016 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0016 | 0.00033 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0016 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0080 | 0.0054 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2-Dibromoethane | ND | | 0.00080 | 0.00016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00080 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2-Dichloroethane | ND | | 0.00080 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,2-Dichloropropane | ND | | 0.00080 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0016 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00080 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,3-Dichloropropane | ND | | 0.00080 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00080 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 2,2-Dichloropropane | ND | | 0.0040 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 2-Butanone | ND | | 0.016 | 0.0036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 2-Chlorotoluene | ND | | 0.00080 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 2-Hexanone | ND | | 0.016 | 0.0025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 4-Chlorotoluene | ND | | 0.00080 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.016 | 0.0023 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Acetone | ND | | 0.016 | 0.0078 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Benzene | ND | | 0.00080 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Bromobenzene | ND | | 0.00080 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Bromochloromethane | ND | | 0.0016 | 0.00035 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Bromodichloromethane | ND | | 0.00080 | 0.00013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Bromoform | ND | | 0.0040 | 0.0011 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Bromomethane | ND | | 0.016 | 0.0052 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Carbon disulfide | ND | | 0.0080 | 0.00032 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Carbon tetrachloride | ND | | 0.00080 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Chlorobenzene | ND | | 0.00080 | 0.00021 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Chloroethane | ND | | 0.0016 | 0.0012 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Chloroform | ND | | 0.00080 | 0.00047 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Chloromethane | ND | | 0.016 | 0.0012 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00080 | 0.00027 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00080 | 0.00028 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Dibromochloromethane | ND | | 0.0016 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Dibromomethane | ND | | 0.00080 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Dichlorodifluoromethane | ND | | 0.0016 | 0.00036 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00080 | 0.00040 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Ethanol | ND | | 0.20 | 0.053 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Ethylbenzene | ND | | 0.00080 | 0.00016 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00080 | 0.00019 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |

**Client Sample ID: B-2-110**
**Date Collected: 03/23/21 14:30**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280940-4**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ND | | 0.0040 | 0.0013 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Isopropylbenzene | ND | | 0.00080 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| m,p-Xylene | ND | | 0.0016 | 0.00038 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Methylene Chloride | ND | | 0.0080 | 0.0025 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0016 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Naphthalene | ND | | 0.0080 | 0.0042 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| n-Butylbenzene | ND | | 0.00080 | 0.00017 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| N-Propylbenzene | ND | | 0.0016 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| o-Xylene | ND | | 0.00080 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| p-Isopropyltoluene | ND | | 0.00080 | 0.00056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| sec-Butylbenzene | ND | | 0.00080 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Styrene | ND | | 0.00080 | 0.00056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00080 | 0.00015 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.016 | 0.0056 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| tert-Butylbenzene | ND | | 0.00080 | 0.00020 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Tetrachloroethene | ND | | 0.00080 | 0.00018 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Toluene | ND | | 0.00080 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00080 | 0.00024 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0016 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Trichloroethene | ND | | 0.0016 | 0.00031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Trichlorofluoromethane | ND | | 0.0080 | 0.00022 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Vinyl acetate | ND | | 0.0080 | 0.0031 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Vinyl chloride | ND | | 0.00080 | 0.00030 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |
| Xylenes, Total | ND | | 0.0016 | 0.00048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 01:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *172* | | *01 - 133* | *7/ 9249 21 1: 825* | *7/ 9269 21 718 :* | *1* |
| *4-Bromofluorobenzene (Surr)* | *: 5* | | *57 - 127* | *7/ 9249 21 1: 825* | *7/ 9269 21 718 :* | *1* |
| *Dibromofluoromethane (Surr)* | *: 5* | | *0: - 1/ /* | *7/ 9249 21 1: 825* | *7/ 9269 21 718 :* | *1* |
| *Toluene-d5 (Surr)* | *: 0* | | *57 - 127* | *7/ 9249 21 1: 825* | *7/ 9269 21 718 :* | *1* |

## Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.086 | 0.048 | mg/Kg | | 03/24/21 19:28 | 03/26/21 16:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *17:* | | *42 - 126* | *7/ 9249 21 1: 825* | *7/ 9269 21 168 7* | *1* |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 4.8 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 15:39 | 1 |
| **C23-C40** | **4.0** | **J** | 4.8 | 3.7 | mg/Kg | | 03/25/21 17:33 | 03/26/21 15:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *170* | | *67 - 1/ 5* | *7/ 9239 21 108 /* | *7/ 9269 21 138 :* | *1* |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280940-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (71-155) | (80-120) | (79-133) | (80-120) |
| 440-280940-1 | B-1-5 | 108 | 99 | 102 | 98 |
| 440-280940-2 | B-1-10 | 108 | 97 | 102 | 97 |
| 440-280940-3 | B-2-5 | 111 | 95 | 102 | 95 |
| 440-280940-4 | B-2-110 | 102 | 98 | 98 | 97 |
| LCS 570-138697/4 | Lab Control Sample | 98 | 93 | 98 | 96 |
| LCSD 570-138697/5 | Lab Control Sample Dup | 105 | 93 | 99 | 96 |
| MB 570-138697/7 | Method Blank | 101 | 98 | 98 | 99 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | BFB1 |
| Lab Sample ID | Client Sample ID | (42-126) |
| 440-280940-1 | B-1-5 | 105 |
| 440-280940-2 | B-1-10 | 112 |
| 440-280940-3 | B-2-5 | 105 |
| 440-280940-4 | B-2-110 | 109 |
| LCS 570-138805/36 | Lab Control Sample | 112 |
| LCSD 570-138805/37 | Lab Control Sample Dup | 104 |
| MB 570-138805/38 | Method Blank | 97 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | OTCSN1 |
| Lab Sample ID | Client Sample ID | (60-138) |
| 440-280940-1 | B-1-5 | 97 |
| 440-280940-2 | B-1-10 | 99 |
| 440-280940-3 | B-2-5 | 99 |
| 440-280940-4 | B-2-110 | 107 |
| 570-54755-A-1-A MS | Matrix Spike | 97 |
| 570-54755-A-1-B MSD | Matrix Spike Duplicate | 96 |
| LCS 570-138648/2-A | Lab Control Sample | 99 |
| LCSD 570-138648/3-A | Lab Control Sample Dup | 104 |
| MB 570-138648/1-A | Method Blank | 105 |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# Surrogate Summary

Client: Terracon Consultants Inc
Job ID: 440-280940-1
Project/Site: Broken Horn Saddler V

## Method: 8081A - Organochlorine Pesticides (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | DCB1 (37-151) | TCX1 (38-148) |
| 440-280940-1 | B-1-5 | 105 | 93 |
| 440-280940-1 MS | B-1-5 | 119 | 110 |
| 440-280940-1 MSD | B-1-5 | 120 | 113 |
| 440-280940-3 | B-2-5 | 90 | 86 |
| LCS 570-138530/2-A | Lab Control Sample | 109 | 104 |
| LCSD 570-138530/3-A | Lab Control Sample Dup | 115 | 108 |
| MB 570-138530/1-A | Method Blank | 111 | 103 |

**Surrogate Legend**

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

## Method: 8151A - Herbicides (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | DCPAA1 (21-161) |
| 440-280940-1 | B-1-5 | 124 |
| 440-280940-2 | B-1-10 | 124 |
| 440-280940-3 | B-2-5 | 126 |
| 570-53790-A-2-AK MS | Matrix Spike | 41 |
| 570-53790-A-2-AL MSD | Matrix Spike Duplicate | 54 |
| LCS 570-138415/2-A | Lab Control Sample | 71 |
| LCSD 570-138415/3-A | Lab Control Sample Dup | 109 |
| MB 570-138415/1-A | Method Blank | 93 |

**Surrogate Legend**

DCPAA = 2,4-Dichlorophenylacetic acid

# Method Summary

5 1Ci e nl ttTroi 5oi ac1eTi ea li r
stoulreP Ge : / toSl i Boti j Tdd1 t w

Job ID: 440-280940-3

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 82W0/ | wo1TeG 6tVTi C 5oOgoci da mp 5R( j G | j k 84W | M5 ) 2 |
| 803E/ | p Tao1CI L Ti Vl 6tVTi Ca - mp 5G | j k 84W | M5 ) 2 |
| 803E/ | DCal 1L Ti Vl 6tVTi CamDL 6 GB5 C1L Ti Vl 6tVTi Ca m6 L 6 G | j k 84W | M5 ) 3 |
| 8083R | 6tVTi orA1btCI sl aeCCDl a mp 5G | j k 84W | M5 ) 3 |
| 83E3R | Bl tbCCDl a mp 5G | j k 84W | M5 ) 3 |
| W030/ | ( leT1a m5 sG | j k 84W | M5 ) 3 |
| h4h3R | ( l trctHm5 wRRG | j k 84W | M5 ) 3 |
| 70E0/ | stl gTtTeGi y ( leT1a | j k 84W | M5 ) 3 |
| 7E4W | ( Cto, Tvl MxeTreGi | j k 84W | M5 ) 3 |
| 7EE05 | U1tTaoi C MxeTreGi | j k 84W | M5 ) 3 |
| E07E | 5 1bal d j Hael O sctVl Ti d ntTg | j k 84W | M5 ) 2 |
| h4h3R | stl gTtTeGi y( l trctH | j k 84W | M5 ) 3 |
| 83E3R | MxeTreGi mBl tbCCDl aG | j k 84W | M5 ) 3 |

**Protocol References:**

j k 84W= "nl ae( leAoda Fot MvT1cTeCV j o1Cl k Tael ysAHaCCT1P5 Al OCCT1( leAoda"ynACCd MdGGi yNovl Obl t 398WRi d lea UgdTel a.

**Laboratory References:**

M5 ) 3 = MctofCa 5T1arCi r l ) ) 5 ) Cro1 yh440 ) Cro1 k THyp Ttdl i p tovl y5 R 92843ynM) rh34G89E-E494

M5 ) 2 = MctofCa 5T1arCi r l ) ) 5 ) TOgaoi yh44E ) TOgaoi Rvl yp Ttdl i p tovl y5 R 92843ynM) rh34G89E-E494

## Client Sample ID: B-1-5

**Date Collected: 03/22/21 09:06**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-1

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.235 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138697 | 03/26/21 00:23 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.189 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 15:18 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.53 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 14:37 | A1W | ECL 1 |
| Total/NA | Prep | 3546 | | | 20.00 g | 10 mL | 138530 | 03/25/21 08:00 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 138769 | 03/26/21 04:52 | UHHN | ECL 1 |
| Total/NA | Prep | 8151A | | | 49.59 g | 5 mL | 138415 | 03/24/21 16:36 | UFLU | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 139038 | 03/26/21 21:06 | J7WE | ECL 1 |
| Total/NA | Prep | 3050B | | | 2.05 g | 100 mL | 138796 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 139319 | 03/26/21 17:50 | UWCT | ECL 1 |
| Total/NA | Prep | 7471A | | | 0.62 g | 100 mL | 138797 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 7471A | | 1 | | | 139047 | 03/26/21 15:09 | VYQ5 | ECL 1 |

## Client Sample ID: B-1-10

**Date Collected: 03/22/21 09:20**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-2

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 7.019 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138697 | 03/26/21 00:48 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 4.94 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 15:42 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.00 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 14:57 | A1W | ECL 1 |
| Total/NA | Prep | 8151A | | | 50.06 g | 5 mL | 138415 | 03/24/21 16:36 | UFLU | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 139038 | 03/26/21 21:29 | J7WE | ECL 1 |

## Client Sample ID: B-2-5

**Date Collected: 03/23/21 12:48**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-3

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.545 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138697 | 03/26/21 01:14 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.66 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 16:06 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.41 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 15:19 | A1W | ECL 1 |
| Total/NA | Prep | 3546 | | | 19.93 g | 10 mL | 138530 | 03/25/21 08:00 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 138769 | 03/26/21 05:06 | UHHN | ECL 1 |
| Total/NA | Prep | 8151A | | | 49.63 g | 5 mL | 138415 | 03/24/21 16:36 | UFLU | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 139038 | 03/26/21 21:52 | J7WE | ECL 1 |

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280940-1

## Client Sample ID: B-2-5

**Date Collected: 03/23/21 12:48**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-3

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3050B | | | 1.99 g | 100 mL | 138796 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 139319 | 03/26/21 18:04 | UWCT | ECL 1 |
| Total/NA | Prep | 7471A | | | 0.61 g | 100 mL | 138797 | 03/25/21 20:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 7471A | | 1 | | | 139047 | 03/26/21 15:14 | VYQ5 | ECL 1 |

## Client Sample ID: B-2-110

**Date Collected: 03/23/21 14:30**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280940-4

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 6.27 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 138697 | 03/26/21 01:39 | A1W | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.8 g | 5 g | 138473 | 03/24/21 19:28 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 138805 | 03/26/21 16:30 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.31 g | 10 mL | 138648 | 03/25/21 17:33 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 138947 | 03/26/21 15:39 | A1W | ECL 1 |

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-138697/7**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00023 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00054 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00046 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00046 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.0010 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00042 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00041 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0068 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00031 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0045 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00024 | mg/Kg | | | 03/25/21 22:14 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0029 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Acetone | ND | | 0.020 | 0.0098 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Benzene | ND | | 0.0010 | 0.00026 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromodichloromethane | ND | | 0.0010 | 0.00016 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromoform | ND | | 0.0050 | 0.0013 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Bromomethane | ND | | 0.020 | 0.0066 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00040 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Chloroform | ND | | 0.0010 | 0.00059 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | | 03/25/21 22:14 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00034 | mg/Kg | | | 03/25/21 22:14 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00035 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00031 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00050 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Ethanol | ND | | 0.25 | 0.066 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 22:14 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-138697/7**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00024 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0050 | 0.0017 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00047 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0031 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Naphthalene | ND | | 0.010 | 0.0052 | mg/Kg | | | 03/25/21 22:14 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/25/21 22:14 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 03/25/21 22:14 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Styrene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00019 | mg/Kg | | | 03/25/21 22:14 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.020 | 0.0070 | mg/Kg | | | 03/25/21 22:14 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Tetrachloroethene | ND | | 0.0010 | 0.00022 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Toluene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/25/21 22:14 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00028 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00027 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0039 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00038 | mg/Kg | | | 03/25/21 22:14 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/25/21 22:14 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *171* | | *51 - 100* | | *73/20/21 229/4* | *1* |
| *4-6roB omuorof enbene (Surr)* | *: 8* | | *87 - 127* | | *73/20/21 229/4* | *1* |
| *Dif roB omuoroB ethane (Surr)* | *: 8* | | *5: - 133* | | *73/20/21 229/4* | *1* |
| *zoluene-d8 (Surr)* | *: :* | | *87 - 127* | | *73/20/21 229/4* | *1* |

**Lab Sample ID: LCS 570-138697/4**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0503 | | mg/Kg | | 101 | 73 - 133 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0456 | | mg/Kg | | 91 | 71 - 131 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0478 | | mg/Kg | | 96 | 77 - 120 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0509 | | mg/Kg | | 102 | 80 - 120 |
| 1,1-Dichloroethane | 0.0500 | 0.0504 | | mg/Kg | | 101 | 74 - 120 |
| 1,1-Dichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 71 - 125 |
| 1,1-Dichloropropene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 69 - 120 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 73 - 127 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0481 | | mg/Kg | | 96 | 60 - 120 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0475 | | mg/Kg | | 95 | 74 - 128 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0476 | | mg/Kg | | 95 | 75 - 123 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-138697/4**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0439 | | mg/Kg | | 88 | 54 - 132 |
| 1,2-Dibromoethane | 0.0500 | 0.0523 | | mg/Kg | | 105 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0471 | | mg/Kg | | 94 | 80 - 120 |
| 1,2-Dichloroethane | 0.0500 | 0.0500 | | mg/Kg | | 100 | 79 - 121 |
| 1,2-Dichloropropane | 0.0500 | 0.0547 | | mg/Kg | | 109 | 77 - 123 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0463 | | mg/Kg | | 93 | 80 - 123 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0467 | | mg/Kg | | 93 | 80 - 120 |
| 1,3-Dichloropropane | 0.0500 | 0.0499 | | mg/Kg | | 100 | 80 - 120 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0469 | | mg/Kg | | 94 | 80 - 120 |
| 2,2-Dichloropropane | 0.0500 | 0.0479 | | mg/Kg | | 96 | 58 - 142 |
| 2-Chlorotoluene | 0.0500 | 0.0443 | | mg/Kg | | 89 | 56 - 176 |
| 4-Chlorotoluene | 0.0500 | 0.0437 | | mg/Kg | | 87 | 67 - 151 |
| Benzene | 0.0500 | 0.0468 | | mg/Kg | | 94 | 79 - 120 |
| Bromobenzene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 80 - 120 |
| Bromochloromethane | 0.0500 | 0.0489 | | mg/Kg | | 98 | 80 - 120 |
| Bromodichloromethane | 0.0500 | 0.0503 | | mg/Kg | | 101 | 73 - 127 |
| Bromoform | 0.0500 | 0.0488 | | mg/Kg | | 98 | 55 - 133 |
| Bromomethane | 0.0500 | 0.0323 | | mg/Kg | | 65 | 36 - 144 |
| Carbon tetrachloride | 0.0500 | 0.0483 | | mg/Kg | | 97 | 58 - 142 |
| Chlorobenzene | 0.0500 | 0.0458 | | mg/Kg | | 92 | 80 - 120 |
| Chloroethane | 0.0500 | 0.0407 | | mg/Kg | | 81 | 60 - 120 |
| Chloroform | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 120 |
| Chloromethane | 0.0500 | 0.0477 | | mg/Kg | | 95 | 50 - 122 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0463 | | mg/Kg | | 93 | 80 - 123 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 74 - 128 |
| Dibromochloromethane | 0.0500 | 0.0509 | | mg/Kg | | 102 | 50 - 122 |
| Dibromomethane | 0.0500 | 0.0459 | | mg/Kg | | 92 | 70 - 130 |
| Dichlorodifluoromethane | 0.0500 | 0.0438 | | mg/Kg | | 88 | 32 - 158 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0632 | | mg/Kg | | 126 | 65 - 131 |
| Ethanol | 0.500 | 0.621 | | mg/Kg | | 124 | 32 - 158 |
| Ethylbenzene | 0.0500 | 0.0445 | | mg/Kg | | 89 | 57 - 153 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0552 | | mg/Kg | | 110 | 58 - 136 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0426 | | mg/Kg | | 85 | 80 - 120 |
| Isopropylbenzene | 0.0500 | 0.0466 | | mg/Kg | | 93 | 80 - 129 |
| m,p-Xylene | 0.100 | 0.0874 | | mg/Kg | | 87 | 80 - 122 |
| Methylene Chloride | 0.0500 | 0.0472 | | mg/Kg | | 94 | 72 - 120 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0487 | | mg/Kg | | 97 | 64 - 124 |
| Naphthalene | 0.0500 | 0.0465 | | mg/Kg | | 93 | 64 - 124 |
| n-Butylbenzene | 0.0500 | 0.0439 | | mg/Kg | | 88 | 78 - 126 |
| N-Propylbenzene | 0.0500 | 0.0439 | | mg/Kg | | 88 | 80 - 122 |
| o-Xylene | 0.0500 | 0.0439 | | mg/Kg | | 88 | 79 - 127 |
| p-Isopropyltoluene | 0.0500 | 0.0445 | | mg/Kg | | 89 | 80 - 122 |
| sec-Butylbenzene | 0.0500 | 0.0462 | | mg/Kg | | 92 | 79 - 127 |
| Styrene | 0.0500 | 0.0478 | | mg/Kg | | 96 | 80 - 123 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0509 | | mg/Kg | | 102 | 63 - 129 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.270 | | mg/Kg | | 108 | 79 - 121 |
| tert-Butylbenzene | 0.0500 | 0.0460 | | mg/Kg | | 92 | 80 - 128 |
| Tetrachloroethene | 0.0500 | 0.0462 | | mg/Kg | | 92 | 75 - 123 |
| Toluene | 0.0500 | 0.0452 | | mg/Kg | | 90 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-138697/4**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 0.0500 | 0.0436 | | mg/Kg | | 87 | 80 - 120 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0516 | | mg/Kg | | 103 | 66 - 120 |
| Trichloroethene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 80 - 120 |
| Trichlorofluoromethane | 0.0500 | 0.0484 | | mg/Kg | | 97 | 70 - 136 |
| Vinyl chloride | 0.0500 | 0.0444 | | mg/Kg | | 89 | 68 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *: 8* | | *51 - 100* |
| *4-6roB omuorof enbene (Surr)* | *: 3* | | *87 - 127* |
| *Dif roB omuoroB ethane (Surr)* | *: 8* | | *5: - 133* |
| *zoluene-d8 (Surr)* | *: T* | | *87 - 127* |

**Lab Sample ID: LCSD 570-138697/5**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0524 | | mg/Kg | | 105 | 73 - 133 | 4 | 20 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0471 | | mg/Kg | | 94 | 71 - 131 | 3 | 20 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0497 | | mg/Kg | | 99 | 77 - 120 | 4 | 20 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0527 | | mg/Kg | | 105 | 80 - 120 | 3 | 20 |
| 1,1-Dichloroethane | 0.0500 | 0.0507 | | mg/Kg | | 101 | 74 - 120 | 1 | 20 |
| 1,1-Dichloroethene | 0.0500 | 0.0515 | | mg/Kg | | 103 | 71 - 125 | 3 | 20 |
| 1,1-Dichloropropene | 0.0500 | 0.0515 | | mg/Kg | | 103 | 69 - 120 | 5 | 20 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0514 | | mg/Kg | | 103 | 73 - 127 | 5 | 20 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0506 | | mg/Kg | | 101 | 60 - 120 | 5 | 20 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 74 - 128 | 4 | 20 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0490 | | mg/Kg | | 98 | 75 - 123 | 3 | 20 |
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0443 | | mg/Kg | | 89 | 54 - 132 | 1 | 20 |
| 1,2-Dibromoethane | 0.0500 | 0.0530 | | mg/Kg | | 106 | 80 - 120 | 1 | 20 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0498 | | mg/Kg | | 100 | 80 - 120 | 6 | 20 |
| 1,2-Dichloroethane | 0.0500 | 0.0508 | | mg/Kg | | 102 | 79 - 121 | 1 | 20 |
| 1,2-Dichloropropane | 0.0500 | 0.0558 | | mg/Kg | | 112 | 77 - 123 | 2 | 25 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 123 | 4 | 20 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 80 - 120 | 3 | 20 |
| 1,3-Dichloropropane | 0.0500 | 0.0515 | | mg/Kg | | 103 | 80 - 120 | 3 | 20 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0482 | | mg/Kg | | 96 | 80 - 120 | 3 | 20 |
| 2,2-Dichloropropane | 0.0500 | 0.0498 | | mg/Kg | | 100 | 58 - 142 | 4 | 20 |
| 2-Chlorotoluene | 0.0500 | 0.0455 | | mg/Kg | | 91 | 56 - 176 | 3 | 20 |
| 4-Chlorotoluene | 0.0500 | 0.0453 | | mg/Kg | | 91 | 67 - 151 | 4 | 20 |
| Benzene | 0.0500 | 0.0476 | | mg/Kg | | 95 | 79 - 120 | 2 | 20 |
| Bromobenzene | 0.0500 | 0.0514 | | mg/Kg | | 103 | 80 - 120 | 4 | 20 |
| Bromochloromethane | 0.0500 | 0.0511 | | mg/Kg | | 102 | 80 - 120 | 4 | 20 |
| Bromodichloromethane | 0.0500 | 0.0518 | | mg/Kg | | 104 | 73 - 127 | 3 | 20 |
| Bromoform | 0.0500 | 0.0518 | | mg/Kg | | 104 | 55 - 133 | 6 | 20 |
| Bromomethane | 0.0500 | 0.0332 | | mg/Kg | | 66 | 36 - 144 | 3 | 20 |
| Carbon tetrachloride | 0.0500 | 0.0481 | | mg/Kg | | 96 | 58 - 142 | 0 | 20 |
| Chlorobenzene | 0.0500 | 0.0468 | | mg/Kg | | 94 | 80 - 120 | 2 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-138697/5**
**Matrix: Solid**
**Analysis Batch: 138697**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | 0.0500 | 0.0429 | | mg/Kg | | 86 | 60 - 120 | 5 | 20 |
| Chloroform | 0.0500 | 0.0496 | | mg/Kg | | 99 | 80 - 120 | 3 | 20 |
| Chloromethane | 0.0500 | 0.0484 | | mg/Kg | | 97 | 50 - 122 | 2 | 20 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 123 | 4 | 20 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0517 | | mg/Kg | | 103 | 74 - 128 | 4 | 20 |
| Dibromochloromethane | 0.0500 | 0.0535 | | mg/Kg | | 107 | 50 - 122 | 5 | 20 |
| Dibromomethane | 0.0500 | 0.0474 | | mg/Kg | | 95 | 70 - 130 | 3 | 20 |
| Dichlorodifluoromethane | 0.0500 | 0.0465 | | mg/Kg | | 93 | 32 - 158 | 6 | 20 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0646 | | mg/Kg | | 129 | 65 - 131 | 2 | 20 |
| Ethanol | 0.500 | 0.593 | | mg/Kg | | 119 | 32 - 158 | 5 | 27 |
| Ethylbenzene | 0.0500 | 0.0453 | | mg/Kg | | 91 | 57 - 153 | 2 | 20 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0583 | | mg/Kg | | 117 | 58 - 136 | 5 | 20 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0445 | | mg/Kg | | 89 | 80 - 120 | 4 | 20 |
| Isopropylbenzene | 0.0500 | 0.0478 | | mg/Kg | | 96 | 80 - 129 | 3 | 20 |
| m,p-Xylene | 0.100 | 0.0906 | | mg/Kg | | 91 | 80 - 122 | 4 | 20 |
| Methylene Chloride | 0.0500 | 0.0482 | | mg/Kg | | 96 | 72 - 120 | 2 | 20 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0498 | | mg/Kg | | 100 | 64 - 124 | 2 | 20 |
| Naphthalene | 0.0500 | 0.0485 | | mg/Kg | | 97 | 64 - 124 | 4 | 20 |
| n-Butylbenzene | 0.0500 | 0.0454 | | mg/Kg | | 91 | 78 - 126 | 3 | 25 |
| N-Propylbenzene | 0.0500 | 0.0454 | | mg/Kg | | 91 | 80 - 122 | 3 | 20 |
| o-Xylene | 0.0500 | 0.0455 | | mg/Kg | | 91 | 79 - 127 | 4 | 20 |
| p-Isopropyltoluene | 0.0500 | 0.0462 | | mg/Kg | | 92 | 80 - 122 | 4 | 20 |
| sec-Butylbenzene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 79 - 127 | 4 | 20 |
| Styrene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 80 - 123 | 3 | 20 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0523 | | mg/Kg | | 105 | 63 - 129 | 3 | 20 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.253 | | mg/Kg | | 101 | 79 - 121 | 6 | 20 |
| tert-Butylbenzene | 0.0500 | 0.0475 | | mg/Kg | | 95 | 80 - 128 | 3 | 20 |
| Tetrachloroethene | 0.0500 | 0.0486 | | mg/Kg | | 97 | 75 - 123 | 5 | 20 |
| Toluene | 0.0500 | 0.0460 | | mg/Kg | | 92 | 80 - 120 | 2 | 20 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0455 | | mg/Kg | | 91 | 80 - 120 | 4 | 20 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0529 | | mg/Kg | | 106 | 66 - 120 | 2 | 20 |
| Trichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 120 | 2 | 20 |
| Trichlorofluoromethane | 0.0500 | 0.0518 | | mg/Kg | | 104 | 70 - 136 | 7 | 20 |
| Vinyl chloride | 0.0500 | 0.0458 | | mg/Kg | | 92 | 68 - 120 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *170* | | *51 - 100* |
| *4-6roB orhuorof enbene (Surr)* | *: 3* | | *87 - 127* |
| *Dif roB orhuoroB ethane (Surr)* | *: :* | | *5: - 133* |
| *zoluene-d8 (Surr)* | *: T* | | *87 - 127* |

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-138805/38**
**Matrix: Solid**
**Analysis Batch: 138805**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.10 | 0.056 | mg/Kg | | | 03/26/21 01:47 | 1 |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-6roB orhuorof enbene (Surr) | : 5 | | 42 - 12T | | 73/2T/21 71945 | 1 |

**Lab Sample ID: LCS 570-138805/36**
**Matrix: Solid**
**Analysis Batch: 138805**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1.99 | 1.90 | | mg/Kg | | 96 | 70 - 124 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-6roB orhuorof enbene (Surr) | 112 | | 42 - 12T |

**Lab Sample ID: LCSD 570-138805/37**
**Matrix: Solid**
**Analysis Batch: 138805**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1.99 | 1.91 | | mg/Kg | | 96 | 70 - 124 | 0 | 18 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 4-6roB orhuorof enbene (Surr) | 174 | | 42 - 12T |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Lab Sample ID: MB 570-138648/1-A**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 12:26 | 03/25/21 14:05 | 1 |
| C23-C40 | ND | | 5.0 | 3.8 | mg/Kg | | 03/25/21 12:26 | 03/25/21 14:05 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 170 | | T7 - 138 | 73/20/21 1292T | 73/20/21 14970 | 1 |

**Lab Sample ID: LCS 570-138648/2-A**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 400 | 442 | | mg/Kg | | 111 | 80 - 130 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | : : | | T7 - 138 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Lab Sample ID: LCSD 570-138648/3-A**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 400 | 451 | | mg/Kg | | 113 | 80 - 130 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *174* | | *T7 - 138* |

**Lab Sample ID: 570-54755-A-1-A MS**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 424 | 440 | | mg/Kg | | 104 | 43 - 165 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *: 5* | | *T7 - 138* |

**Lab Sample ID: 570-54755-A-1-B MSD**
**Matrix: Solid**
**Analysis Batch: 138653**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 138648**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 407 | 394 | | mg/Kg | | 97 | 43 - 165 | 11 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *: T* | | *T7 - 138* |

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 570-138530/1-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00099 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| 4,4'-DDT | ND | | 0.0050 | 0.00036 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endrin | ND | | 0.0050 | 0.00033 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 570-138530/1-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00048 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00089 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 03/25/21 08:00 | 03/26/21 01:19 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC6 Decachlorof iphenyl (Surr)* | *111* | | *35 - 101* | *73/20/21 7897 7* | *73/2T/21 719I:* | *1* |
| *zetrachloro-B -xylene* | *173* | | *38 - 148* | *73/20/21 7897 7* | *73/2T/21 719I:* | *1* |

**Lab Sample ID: LCS 570-138530/2-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0250 | 0.0372 | | mg/Kg | | 149 | 54 - 154 |
| 4,4'-DDE | 0.0250 | 0.0343 | | mg/Kg | | 137 | 51 - 149 |
| 4,4'-DDT | 0.0250 | 0.0333 | | mg/Kg | | 133 | 39 - 152 |
| Aldrin | 0.0250 | 0.0320 | | mg/Kg | | 128 | 52 - 138 |
| alpha-BHC | 0.0250 | 0.0332 | | mg/Kg | | 133 | 51 - 140 |
| alpha-Chlordane | 0.0250 | 0.0340 | | mg/Kg | | 136 | 53 - 141 |
| beta-BHC | 0.0250 | 0.0330 | | mg/Kg | | 132 | 53 - 141 |
| delta-BHC | 0.0250 | 0.0230 | | mg/Kg | | 92 | 20 - 132 |
| Dieldrin | 0.0250 | 0.0330 | | mg/Kg | | 132 | 52 - 144 |
| Endosulfan I | 0.0250 | 0.0338 | | mg/Kg | | 135 | 49 - 139 |
| Endosulfan II | 0.0250 | 0.0333 | | mg/Kg | | 133 | 51 - 150 |
| Endosulfan sulfate | 0.0250 | 0.0320 | | mg/Kg | | 128 | 45 - 139 |
| Endrin | 0.0250 | 0.0344 | | mg/Kg | | 137 | 53 - 151 |
| Endrin aldehyde | 0.0250 | 0.0322 | | mg/Kg | | 129 | 31 - 146 |
| gamma-BHC | 0.0250 | 0.0339 | | mg/Kg | | 136 | 53 - 141 |
| gamma-Chlordane | 0.0250 | 0.0329 | | mg/Kg | | 132 | 46 - 156 |
| Heptachlor | 0.0250 | 0.0325 | | mg/Kg | | 130 | 52 - 144 |
| Heptachlor epoxide | 0.0250 | 0.0322 | | mg/Kg | | 129 | 54 - 141 |
| Methoxychlor | 0.0250 | 0.0332 | | mg/Kg | | 133 | 47 - 148 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DC6 Decachlorof iphenyl (Surr)* | *17:* | | *35 - 101* |
| *zetrachloro-B -xylene* | *174* | | *38 - 148* |

**Lab Sample ID: LCSD 570-138530/3-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0250 | 0.0395 | *+ | mg/Kg | | 158 | 54 - 154 | 6 | 30 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 570-138530/3-A**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDE | | | 0.0250 | 0.0366 | | mg/Kg | | 146 | 51 - 149 | 7 | 28 |
| 4,4'-DDT | | | 0.0250 | 0.0346 | | mg/Kg | | 139 | 39 - 152 | 4 | 31 |
| Aldrin | | | 0.0250 | 0.0335 | | mg/Kg | | 134 | 52 - 138 | 4 | 30 |
| alpha-BHC | | | 0.0250 | 0.0347 | | mg/Kg | | 139 | 51 - 140 | 4 | 29 |
| alpha-Chlordane | | | 0.0250 | 0.0357 | *+ | mg/Kg | | 143 | 53 - 141 | 5 | 28 |
| beta-BHC | | | 0.0250 | 0.0346 | | mg/Kg | | 138 | 53 - 141 | 5 | 29 |
| delta-BHC | | | 0.0250 | 0.0244 | | mg/Kg | | 98 | 20 - 132 | 6 | 40 |
| Dieldrin | | | 0.0250 | 0.0344 | | mg/Kg | | 138 | 52 - 144 | 4 | 28 |
| Endosulfan I | | | 0.0250 | 0.0356 | *+ | mg/Kg | | 142 | 49 - 139 | 5 | 28 |
| Endosulfan II | | | 0.0250 | 0.0343 | | mg/Kg | | 137 | 51 - 150 | 3 | 29 |
| Endosulfan sulfate | | | 0.0250 | 0.0334 | | mg/Kg | | 134 | 45 - 139 | 4 | 30 |
| Endrin | | | 0.0250 | 0.0361 | | mg/Kg | | 144 | 53 - 151 | 5 | 29 |
| Endrin aldehyde | | | 0.0250 | 0.0340 | | mg/Kg | | 136 | 31 - 146 | 5 | 40 |
| gamma-BHC | | | 0.0250 | 0.0356 | *+ | mg/Kg | | 142 | 53 - 141 | 5 | 29 |
| gamma-Chlordane | | | 0.0250 | 0.0347 | | mg/Kg | | 139 | 46 - 156 | 5 | 39 |
| Heptachlor | | | 0.0250 | 0.0337 | | mg/Kg | | 135 | 52 - 144 | 4 | 29 |
| Heptachlor epoxide | | | 0.0250 | 0.0339 | | mg/Kg | | 136 | 54 - 141 | 5 | 29 |
| Methoxychlor | | | 0.0250 | 0.0350 | | mg/Kg | | 140 | 47 - 148 | 5 | 29 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *DC6 Decachlorof iphenyl (Surr)* | *110* | | *35 - 101* |
| *zetrachloro-B -xylene* | *178* | | *38 - 148* |

**Lab Sample ID: 440-280940-1 MS**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: B-1-5**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | F1 | 0.0249 | 0.0428 | E F1 | mg/Kg | | 172 | 27 - 144 |
| 4,4'-DDE | 0.00078 | J F1 | 0.0249 | 0.0401 | E F1 | mg/Kg | | 158 | 28 - 141 |
| 4,4'-DDT | 0.00051 | J F1 p | 0.0249 | 0.0379 | | mg/Kg | | 150 | 10 - 154 |
| Aldrin | ND | F1 | 0.0249 | 0.0356 | F1 | mg/Kg | | 143 | 26 - 125 |
| alpha-BHC | ND | F1 | 0.0249 | 0.0362 | F1 | mg/Kg | | 146 | 24 - 125 |
| alpha-Chlordane | ND | F1 | 0.0249 | 0.0384 | F1 | mg/Kg | | 154 | 17 - 144 |
| beta-BHC | ND | F1 | 0.0249 | 0.0362 | F1 | mg/Kg | | 146 | 28 - 125 |
| delta-BHC | ND | | 0.0249 | 0.0256 | | mg/Kg | | 103 | 10 - 125 |
| Dieldrin | ND | | 0.0249 | 0.0358 | | mg/Kg | | 144 | 19 - 145 |
| Endosulfan I | ND | F1 | 0.0249 | 0.0369 | F1 | mg/Kg | | 148 | 25 - 125 |
| Endosulfan II | ND | | 0.0249 | 0.0362 | F1 | mg/Kg | | 145 | 13 - 142 |
| Endosulfan sulfate | ND | F1 | 0.0249 | 0.0356 | F1 | mg/Kg | | 143 | 14 - 126 |
| Endrin | ND | F1 | 0.0249 | 0.0385 | F1 | mg/Kg | | 155 | 28 - 139 |
| Endrin aldehyde | ND | F1 | 0.0249 | 0.0355 | F1 | mg/Kg | | 143 | 12 - 125 |
| gamma-BHC | ND | F1 | 0.0249 | 0.0370 | F1 | mg/Kg | | 149 | 24 - 125 |
| gamma-Chlordane | ND | | 0.0249 | 0.0366 | | mg/Kg | | 147 | 10 - 160 |
| Heptachlor | ND | F1 | 0.0249 | 0.0351 | F1 | mg/Kg | | 141 | 19 - 127 |
| Heptachlor epoxide | ND | F1 | 0.0249 | 0.0353 | F1 | mg/Kg | | 142 | 33 - 123 |
| Methoxychlor | ND | F1 | 0.0249 | 0.0381 | F1 | mg/Kg | | 153 | 19 - 128 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 440-280940-1 MS**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: B-1-5**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| DC6 Decachlorof iphenyl (Surr) | 11: | | 35 - 101 |
| zetrachloro-B -xylene | 117 | | 38 - 148 |

**Lab Sample ID: 440-280940-1 MSD**
**Matrix: Solid**
**Analysis Batch: 138769**

**Client Sample ID: B-1-5**
**Prep Type: Total/NA**
**Prep Batch: 138530**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | F1 | 0.0248 | 0.0447 | E F1 | mg/Kg | | 180 | 27 - 144 | 4 | 40 |
| 4,4'-DDE | 0.00078 | J F1 | 0.0248 | 0.0429 | E F1 | mg/Kg | | 170 | 28 - 141 | 7 | 32 |
| 4,4'-DDT | 0.00051 | J F1 p | 0.0248 | 0.0390 | F1 | mg/Kg | | 155 | 10 - 154 | 3 | 40 |
| Aldrin | ND | F1 | 0.0248 | 0.0365 | F1 | mg/Kg | | 147 | 26 - 125 | 3 | 40 |
| alpha-BHC | ND | F1 | 0.0248 | 0.0380 | F1 | mg/Kg | | 153 | 24 - 125 | 5 | 40 |
| alpha-Chlordane | ND | F1 | 0.0248 | 0.0405 | E F1 | mg/Kg | | 163 | 17 - 144 | 5 | 40 |
| beta-BHC | ND | F1 | 0.0248 | 0.0379 | F1 | mg/Kg | | 153 | 28 - 125 | 5 | 39 |
| delta-BHC | ND | | 0.0248 | 0.0269 | | mg/Kg | | 109 | 10 - 125 | 5 | 40 |
| Dieldrin | ND | | 0.0248 | 0.0372 | F1 | mg/Kg | | 150 | 19 - 145 | 4 | 39 |
| Endosulfan I | ND | F1 | 0.0248 | 0.0384 | F1 | mg/Kg | | 155 | 25 - 125 | 4 | 39 |
| Endosulfan II | ND | | 0.0248 | 0.0372 | F1 | mg/Kg | | 150 | 13 - 142 | 3 | 40 |
| Endosulfan sulfate | ND | F1 | 0.0248 | 0.0366 | F1 | mg/Kg | | 147 | 14 - 126 | 3 | 38 |
| Endrin | ND | F1 | 0.0248 | 0.0399 | E F1 | mg/Kg | | 161 | 28 - 139 | 4 | 40 |
| Endrin aldehyde | ND | F1 | 0.0248 | 0.0369 | F1 | mg/Kg | | 149 | 12 - 125 | 4 | 40 |
| gamma-BHC | ND | F1 | 0.0248 | 0.0387 | F1 | mg/Kg | | 156 | 24 - 125 | 4 | 40 |
| gamma-Chlordane | ND | | 0.0248 | 0.0386 | | mg/Kg | | 156 | 10 - 160 | 5 | 40 |
| Heptachlor | ND | F1 | 0.0248 | 0.0361 | F1 | mg/Kg | | 146 | 19 - 127 | 3 | 40 |
| Heptachlor epoxide | ND | F1 | 0.0248 | 0.0368 | F1 | mg/Kg | | 148 | 33 - 123 | 4 | 34 |
| Methoxychlor | ND | F1 | 0.0248 | 0.0388 | F1 | mg/Kg | | 157 | 19 - 128 | 2 | 40 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| DC6 Decachlorof iphenyl (Surr) | 127 | | 35 - 101 |
| zetrachloro-B -xylene | 113 | | 38 - 148 |

## Method: 8151A - Herbicides (GC)

**Lab Sample ID: MB 570-138415/1-A**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| 2,4-DB | ND | | 0.10 | 0.047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| Dinoseb | ND | | 0.10 | 0.019 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |

## Method: 8151A - Herbicides (GC) (Continued)

**Lab Sample ID: MB 570-138415/1-A**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 03/24/21 16:36 | 03/26/21 01:58 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *: 3* | | *21 - 1T1* | *73/24/21 1T9:T* | *73/2T/21 719:8* | *1* |

**Lab Sample ID: LCS 570-138415/2-A**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.0400 | 0.0422 | | mg/Kg | | 105 | 20 - 153 |
| 2,4,5-TP (Silvex) | 0.0400 | 0.0343 | | mg/Kg | | 86 | 20 - 147 |
| 2,4-D | 0.400 | 0.434 | | mg/Kg | | 108 | 20 - 153 |
| 2,4-DB | 0.400 | 0.172 | | mg/Kg | | 43 | 20 - 180 |
| Dalapon | 1.00 | 0.640 | | mg/Kg | | 64 | 20 - 146 |
| Dicamba | 0.0400 | 0.0384 | | mg/Kg | | 96 | 20 - 153 |
| Dichlorprop | 0.400 | 0.417 | | mg/Kg | | 104 | 20 - 146 |
| Dinoseb | 0.200 | ND | *- | mg/Kg | | 2 | 10 - 76 |
| MCPA | 40.0 | 41.2 | | mg/Kg | | 103 | 20 - 142 |
| MCPP | 40.0 | 39.5 | | mg/Kg | | 99 | 23 - 142 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *51* | | *21 - 1T1* |

**Lab Sample ID: LCSD 570-138415/3-A**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.0400 | 0.0384 | | mg/Kg | | 96 | 20 - 153 | 9 | 30 |
| 2,4,5-TP (Silvex) | 0.0400 | 0.0276 | | mg/Kg | | 69 | 20 - 147 | 22 | 30 |
| 2,4-D | 0.400 | 0.396 | | mg/Kg | | 99 | 20 - 153 | 9 | 30 |
| 2,4-DB | 0.400 | 0.239 | p *1 | mg/Kg | | 60 | 20 - 180 | 33 | 30 |
| Dalapon | 1.00 | 0.897 | *1 | mg/Kg | | 90 | 20 - 146 | 33 | 30 |
| Dicamba | 0.0400 | 0.0397 | | mg/Kg | | 99 | 20 - 153 | 3 | 30 |
| Dichlorprop | 0.400 | 0.392 | | mg/Kg | | 98 | 20 - 146 | 6 | 30 |
| Dinoseb | 0.200 | ND | *- *1 | mg/Kg | | 0.9 | 10 - 76 | 85 | 30 |
| MCPA | 40.0 | 42.6 | | mg/Kg | | 106 | 20 - 142 | 3 | 30 |
| MCPP | 40.0 | 40.2 | | mg/Kg | | 101 | 23 - 142 | 2 | 28 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *17:* | | *21 - 1T1* |

## Method: 8151A - Herbicides (GC) (Continued)

**Lab Sample ID: 570-53790-A-2-AK MS**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0403 | 0.0339 | | mg/Kg | | 84 | 20 - 168 |
| 2,4,5-TP (Silvex) | ND | | 0.0403 | 0.0254 | | mg/Kg | | 63 | 20 - 149 |
| 2,4-D | ND | | 0.403 | 0.399 | | mg/Kg | | 99 | 20 - 149 |
| 2,4-DB | ND | *1 | 0.403 | 0.102 | p | mg/Kg | | 25 | 20 - 180 |
| Dalapon | ND | *1 | 1.01 | 0.694 | | mg/Kg | | 69 | 20 - 136 |
| Dicamba | ND | | 0.0403 | 0.0329 | | mg/Kg | | 82 | 20 - 140 |
| Dichlorprop | ND | | 0.403 | 0.304 | | mg/Kg | | 75 | 20 - 142 |
| Dinoseb | ND | *- F1 *1 | 0.201 | ND | F1 | mg/Kg | | 0 | 10 - 109 |
| MCPA | ND | | 40.3 | 31.8 | | mg/Kg | | 79 | 20 - 137 |
| MCPP | ND | | 40.3 | 30.6 | | mg/Kg | | 76 | 20 - 138 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *41* | | *21 - 1T1* |

**Lab Sample ID: 570-53790-A-2-AL MSD**
**Matrix: Solid**
**Analysis Batch: 138775**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 138415**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0401 | 0.0370 | | mg/Kg | | 92 | 20 - 168 | 9 | 40 |
| 2,4,5-TP (Silvex) | ND | | 0.0401 | 0.0280 | | mg/Kg | | 70 | 20 - 149 | 10 | 30 |
| 2,4-D | ND | | 0.401 | 0.404 | | mg/Kg | | 101 | 20 - 149 | 1 | 38 |
| 2,4-DB | ND | *1 | 0.401 | 0.114 | p | mg/Kg | | 28 | 20 - 180 | 11 | 40 |
| Dalapon | ND | *1 | 1.00 | 0.807 | | mg/Kg | | 81 | 20 - 136 | 15 | 40 |
| Dicamba | ND | | 0.0401 | 0.0357 | | mg/Kg | | 89 | 20 - 140 | 8 | 37 |
| Dichlorprop | ND | | 0.401 | 0.352 | | mg/Kg | | 88 | 20 - 142 | 15 | 27 |
| Dinoseb | ND | *- F1 *1 | 0.200 | ND | F1 | mg/Kg | | 0 | 10 - 109 | NC | 40 |
| MCPA | ND | | 40.1 | 37.8 | | mg/Kg | | 94 | 20 - 137 | 17 | 40 |
| MCPP | ND | | 40.1 | 35.9 | | mg/Kg | | 90 | 20 - 138 | 16 | 36 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *04* | | *21 - 1T1* |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-138796/1-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.0 | 1.4 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Arsenic | ND | | 2.5 | 2.3 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Barium | ND | | 0.51 | 0.22 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Beryllium | ND | | 0.25 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Cadmium | ND | | 0.51 | 0.20 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Chromium | ND | | 1.0 | 0.18 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Cobalt | ND | | 1.0 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Copper | ND | | 1.0 | 0.51 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 570-138796/1-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | | 5.1 | 0.98 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Molybdenum | ND | | 0.51 | 0.46 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Nickel | ND | | 0.51 | 0.43 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Selenium | ND | | 5.1 | 1.9 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Silver | ND | | 1.0 | 0.23 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Thallium | ND | | 5.1 | 1.5 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Vanadium | ND | | 1.0 | 0.17 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |
| Zinc | ND | | 10 | 5.2 | mg/Kg | | 03/25/21 20:00 | 03/26/21 17:41 | 1 |

**Lab Sample ID: LCS 570-138796/2-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Antimony | 25.0 | 25.4 | | mg/Kg | | 102 | 80 - 120 |
| Arsenic | 25.0 | 23.9 | | mg/Kg | | 96 | 80 - 120 |
| Barium | 25.0 | 26.1 | | mg/Kg | | 104 | 80 - 120 |
| Beryllium | 25.0 | 25.0 | | mg/Kg | | 100 | 80 - 120 |
| Cadmium | 25.0 | 24.9 | | mg/Kg | | 100 | 80 - 120 |
| Chromium | 25.0 | 24.5 | | mg/Kg | | 98 | 80 - 120 |
| Cobalt | 25.0 | 26.0 | | mg/Kg | | 104 | 80 - 120 |
| Copper | 25.0 | 23.2 | | mg/Kg | | 93 | 80 - 120 |
| Lead | 25.0 | 26.6 | | mg/Kg | | 106 | 80 - 120 |
| Molybdenum | 25.0 | 25.9 | | mg/Kg | | 104 | 80 - 120 |
| Nickel | 25.0 | 25.6 | | mg/Kg | | 102 | 80 - 120 |
| Selenium | 25.0 | 24.7 | | mg/Kg | | 99 | 80 - 120 |
| Silver | 12.5 | 13.0 | | mg/Kg | | 104 | 80 - 120 |
| Thallium | 25.0 | 25.5 | | mg/Kg | | 102 | 80 - 120 |
| Vanadium | 25.0 | 25.2 | | mg/Kg | | 101 | 80 - 120 |
| Zinc | 25.0 | 26.0 | | mg/Kg | | 104 | 80 - 120 |

**Lab Sample ID: LCSD 570-138796/3-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | 24.9 | 26.0 | | mg/Kg | | 105 | 80 - 120 | 2 | 20 |
| Arsenic | 24.9 | 24.2 | | mg/Kg | | 97 | 80 - 120 | 1 | 20 |
| Barium | 24.9 | 26.5 | | mg/Kg | | 106 | 80 - 120 | 1 | 20 |
| Beryllium | 24.9 | 24.8 | | mg/Kg | | 100 | 80 - 120 | 1 | 20 |
| Cadmium | 24.9 | 25.3 | | mg/Kg | | 102 | 80 - 120 | 1 | 20 |
| Chromium | 24.9 | 24.1 | | mg/Kg | | 97 | 80 - 120 | 2 | 20 |
| Cobalt | 24.9 | 25.7 | | mg/Kg | | 103 | 80 - 120 | 1 | 20 |
| Copper | 24.9 | 23.5 | | mg/Kg | | 95 | 80 - 120 | 2 | 20 |
| Lead | 24.9 | 26.6 | | mg/Kg | | 107 | 80 - 120 | 0 | 20 |
| Molybdenum | 24.9 | 26.2 | | mg/Kg | | 105 | 80 - 120 | 1 | 20 |
| Nickel | 24.9 | 25.3 | | mg/Kg | | 102 | 80 - 120 | 1 | 20 |
| Selenium | 24.9 | 25.5 | | mg/Kg | | 102 | 80 - 120 | 3 | 20 |
| Silver | 12.4 | 12.7 | | mg/Kg | | 102 | 80 - 120 | 2 | 20 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 570-138796/3-A**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | | | 24.9 | 25.6 | | mg/Kg | | 103 | 80 - 120 | 0 | 20 |
| Vanadium | | | 24.9 | 25.0 | | mg/Kg | | 101 | 80 - 120 | 1 | 20 |
| Zinc | | | 24.9 | 26.4 | | mg/Kg | | 106 | 80 - 120 | 2 | 20 |

**Lab Sample ID: 440-280940-1 MS**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: B-1-5**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | F1 | 25.8 | 10.4 | F1 | mg/Kg | | 40 | 50 - 115 |
| Arsenic | 2.2 | J | 25.8 | 27.1 | | mg/Kg | | 97 | 75 - 125 |
| Barium | 50 | | 25.8 | 74.7 | | mg/Kg | | 97 | 75 - 125 |
| Beryllium | ND | | 25.8 | 27.3 | | mg/Kg | | 106 | 75 - 125 |
| Cadmium | 0.35 | J | 25.8 | 25.8 | | mg/Kg | | 99 | 75 - 125 |
| Chromium | 6.8 | | 25.8 | 33.5 | | mg/Kg | | 103 | 75 - 125 |
| Cobalt | 5.5 | | 25.8 | 31.7 | | mg/Kg | | 102 | 75 - 125 |
| Copper | 12 | | 25.8 | 35.2 | | mg/Kg | | 92 | 75 - 125 |
| Lead | 3.0 | J | 25.8 | 30.2 | | mg/Kg | | 105 | 75 - 125 |
| Molybdenum | ND | | 25.8 | 25.9 | | mg/Kg | | 101 | 75 - 125 |
| Nickel | 6.0 | | 25.8 | 33.1 | | mg/Kg | | 105 | 75 - 125 |
| Selenium | ND | | 25.8 | 23.2 | | mg/Kg | | 90 | 75 - 125 |
| Silver | ND | | 12.9 | 13.7 | | mg/Kg | | 106 | 75 - 125 |
| Thallium | ND | | 25.8 | 24.0 | | mg/Kg | | 93 | 75 - 125 |
| Vanadium | 13 | | 25.8 | 38.7 | | mg/Kg | | 98 | 75 - 125 |
| Zinc | 28 | | 25.8 | 53.5 | | mg/Kg | | 97 | 75 - 125 |

**Lab Sample ID: 440-280940-1 MSD**
**Matrix: Solid**
**Analysis Batch: 139319**

**Client Sample ID: B-1-5**
**Prep Type: Total/NA**
**Prep Batch: 138796**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | F1 | 25.3 | 10.4 | F1 | mg/Kg | | 41 | 50 - 115 | 1 | 20 |
| Arsenic | 2.2 | J | 25.3 | 27.3 | | mg/Kg | | 99 | 75 - 125 | 1 | 20 |
| Barium | 50 | | 25.3 | 74.7 | | mg/Kg | | 99 | 75 - 125 | 0 | 20 |
| Beryllium | ND | | 25.3 | 26.1 | | mg/Kg | | 103 | 75 - 125 | 4 | 20 |
| Cadmium | 0.35 | J | 25.3 | 25.8 | | mg/Kg | | 101 | 75 - 125 | 0 | 20 |
| Chromium | 6.8 | | 25.3 | 32.4 | | mg/Kg | | 101 | 75 - 125 | 3 | 20 |
| Cobalt | 5.5 | | 25.3 | 30.4 | | mg/Kg | | 98 | 75 - 125 | 4 | 20 |
| Copper | 12 | | 25.3 | 35.4 | | mg/Kg | | 94 | 75 - 125 | 1 | 20 |
| Lead | 3.0 | J | 25.3 | 29.2 | | mg/Kg | | 104 | 75 - 125 | 3 | 20 |
| Molybdenum | ND | | 25.3 | 25.8 | | mg/Kg | | 102 | 75 - 125 | 1 | 20 |
| Nickel | 6.0 | | 25.3 | 31.7 | | mg/Kg | | 102 | 75 - 125 | 5 | 20 |
| Selenium | ND | | 25.3 | 23.7 | | mg/Kg | | 94 | 75 - 125 | 2 | 20 |
| Silver | ND | | 12.6 | 13.1 | | mg/Kg | | 104 | 75 - 125 | 4 | 20 |
| Thallium | ND | | 25.3 | 24.3 | | mg/Kg | | 96 | 75 - 125 | 1 | 20 |
| Vanadium | 13 | | 25.3 | 37.2 | | mg/Kg | | 94 | 75 - 125 | 4 | 20 |
| Zinc | 28 | | 25.3 | 53.5 | | mg/Kg | | 99 | 75 - 125 | 0 | 20 |

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 570-138797/1-A**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.081 | 0.013 | mg/Kg | | 03/25/21 20:00 | 03/26/21 15:03 | 1 |

**Lab Sample ID: LCS 570-138797/2-A**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.833 | 0.868 | | mg/Kg | | 104 | 85 - 121 | | |

**Lab Sample ID: LCSD 570-138797/3-A**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.833 | 0.875 | | mg/Kg | | 105 | 85 - 121 | 1 | 10 |

**Lab Sample ID: 440-280940-1 MS**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: B-1-5**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.038 | J | 0.833 | 0.913 | | mg/Kg | | 105 | 71 - 137 | | |

**Lab Sample ID: 440-280940-1 MSD**
**Matrix: Solid**
**Analysis Batch: 139047**

**Client Sample ID: B-1-5**
**Prep Type: Total/NA**
**Prep Batch: 138797**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.038 | J | 0.847 | 0.923 | | mg/Kg | | 104 | 71 - 137 | 1 | 14 |

## GC/MS VOA

### Prep Batch: 138473

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 5035 | |
| 440-280940-2 | B-1-10 | Total/NA | Solid | 5035 | |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 5035 | |
| 440-280940-4 | B-2-110 | Total/NA | Solid | 5035 | |

### Analysis Batch: 138697

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 8260B | 138473 |
| 440-280940-2 | B-1-10 | Total/NA | Solid | 8260B | 138473 |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 8260B | 138473 |
| 440-280940-4 | B-2-110 | Total/NA | Solid | 8260B | 138473 |
| MB 570-138697/7 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 570-138697/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 570-138697/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

## GC VOA

### Prep Batch: 138473

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 5035 | |
| 440-280940-2 | B-1-10 | Total/NA | Solid | 5035 | |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 5035 | |
| 440-280940-4 | B-2-110 | Total/NA | Solid | 5035 | |

### Analysis Batch: 138805

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 8015B | 138473 |
| 440-280940-2 | B-1-10 | Total/NA | Solid | 8015B | 138473 |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 8015B | 138473 |
| 440-280940-4 | B-2-110 | Total/NA | Solid | 8015B | 138473 |
| MB 570-138805/38 | Method Blank | Total/NA | Solid | 8015B | |
| LCS 570-138805/36 | Lab Control Sample | Total/NA | Solid | 8015B | |
| LCSD 570-138805/37 | Lab Control Sample Dup | Total/NA | Solid | 8015B | |

## GC Semi VOA

### Prep Batch: 138415

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 8151A | |
| 440-280940-2 | B-1-10 | Total/NA | Solid | 8151A | |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 8151A | |
| MB 570-138415/1-A | Method Blank | Total/NA | Solid | 8151A | |
| LCS 570-138415/2-A | Lab Control Sample | Total/NA | Solid | 8151A | |
| LCSD 570-138415/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | |
| 570-53790-A-2-AK MS | Matrix Spike | Total/NA | Solid | 8151A | |
| 570-53790-A-2-AL MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | |

### Prep Batch: 138530

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 3546 | |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 3546 | |
| MB 570-138530/1-A | Method Blank | Total/NA | Solid | 3546 | |

## GC Semi VOA (Continued)

### Prep Batch: 138530 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 570-138530/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 570-138530/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| 440-280940-1 MS | B-1-5 | Total/NA | Solid | 3546 | |
| 440-280940-1 MSD | B-1-5 | Total/NA | Solid | 3546 | |

### Prep Batch: 138648

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 3550C | |
| 440-280940-2 | B-1-10 | Total/NA | Solid | 3550C | |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 3550C | |
| 440-280940-4 | B-2-110 | Total/NA | Solid | 3550C | |
| MB 570-138648/1-A | Method Blank | Total/NA | Solid | 3550C | |
| LCS 570-138648/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| LCSD 570-138648/3-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| 570-54755-A-1-A MS | Matrix Spike | Total/NA | Solid | 3550C | |
| 570-54755-A-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 3550C | |

### Analysis Batch: 138653

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 570-138648/1-A | Method Blank | Total/NA | Solid | 8015B | 138648 |
| LCS 570-138648/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 138648 |
| LCSD 570-138648/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 138648 |
| 570-54755-A-1-A MS | Matrix Spike | Total/NA | Solid | 8015B | 138648 |
| 570-54755-A-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B | 138648 |

### Analysis Batch: 138769

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 8081A | 138530 |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 8081A | 138530 |
| MB 570-138530/1-A | Method Blank | Total/NA | Solid | 8081A | 138530 |
| LCS 570-138530/2-A | Lab Control Sample | Total/NA | Solid | 8081A | 138530 |
| LCSD 570-138530/3-A | Lab Control Sample Dup | Total/NA | Solid | 8081A | 138530 |
| 440-280940-1 MS | B-1-5 | Total/NA | Solid | 8081A | 138530 |
| 440-280940-1 MSD | B-1-5 | Total/NA | Solid | 8081A | 138530 |

### Analysis Batch: 138775

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 570-138415/1-A | Method Blank | Total/NA | Solid | 8151A | 138415 |
| LCS 570-138415/2-A | Lab Control Sample | Total/NA | Solid | 8151A | 138415 |
| LCSD 570-138415/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | 138415 |
| 570-53790-A-2-AK MS | Matrix Spike | Total/NA | Solid | 8151A | 138415 |
| 570-53790-A-2-AL MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | 138415 |

### Analysis Batch: 138947

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 8015B | 138648 |
| 440-280940-2 | B-1-10 | Total/NA | Solid | 8015B | 138648 |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 8015B | 138648 |
| 440-280940-4 | B-2-110 | Total/NA | Solid | 8015B | 138648 |

## GC Semi VOA

### Analysis Batch: 139038

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 8151A | 138415 |
| 440-280940-2 | B-1-10 | Total/NA | Solid | 8151A | 138415 |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 8151A | 138415 |

## Metals

### Prep Batch: 138796

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 3050B | |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 3050B | |
| MB 570-138796/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 570-138796/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| LCSD 570-138796/3-A | Lab Control Sample Dup | Total/NA | Solid | 3050B | |
| 440-280940-1 MS | B-1-5 | Total/NA | Solid | 3050B | |
| 440-280940-1 MSD | B-1-5 | Total/NA | Solid | 3050B | |

### Prep Batch: 138797

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 7471A | |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 7471A | |
| MB 570-138797/1-A | Method Blank | Total/NA | Solid | 7471A | |
| LCS 570-138797/2-A | Lab Control Sample | Total/NA | Solid | 7471A | |
| LCSD 570-138797/3-A | Lab Control Sample Dup | Total/NA | Solid | 7471A | |
| 440-280940-1 MS | B-1-5 | Total/NA | Solid | 7471A | |
| 440-280940-1 MSD | B-1-5 | Total/NA | Solid | 7471A | |

### Analysis Batch: 139047

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 7471A | 138797 |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 7471A | 138797 |
| MB 570-138797/1-A | Method Blank | Total/NA | Solid | 7471A | 138797 |
| LCS 570-138797/2-A | Lab Control Sample | Total/NA | Solid | 7471A | 138797 |
| LCSD 570-138797/3-A | Lab Control Sample Dup | Total/NA | Solid | 7471A | 138797 |
| 440-280940-1 MS | B-1-5 | Total/NA | Solid | 7471A | 138797 |
| 440-280940-1 MSD | B-1-5 | Total/NA | Solid | 7471A | 138797 |

### Analysis Batch: 139319

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280940-1 | B-1-5 | Total/NA | Solid | 6010B | 138796 |
| 440-280940-3 | B-2-5 | Total/NA | Solid | 6010B | 138796 |
| MB 570-138796/1-A | Method Blank | Total/NA | Solid | 6010B | 138796 |
| LCS 570-138796/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 138796 |
| LCSD 570-138796/3-A | Lab Control Sample Dup | Total/NA | Solid | 6010B | 138796 |
| 440-280940-1 MS | B-1-5 | Total/NA | Solid | 6010B | 138796 |
| 440-280940-1 MSD | B-1-5 | Total/NA | Solid | 6010B | 138796 |

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| *- | LCS and/or LCSD is outside acceptance limits, low biased. |
| *+ | LCS and/or LCSD is outside acceptance limits, high biased. |
| *1 | LCS/LCSD RPD exceeds control limits. |
| E | Result exceeded calibration range. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| p | The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
5ro1ectP ite: / roSen Born j addler w

Job ID: 440-280940-3

## Laboratory: Eurofins Calscience LLC

k nless otUerh ise noted, all analytes for tUis laboratory h ere covered under eacU accreditationPertification beloh .

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | j CAQMD LA5 | 37LA0939 | 33-g0-23 |

TUe folloh inp analytes are included in tUis remort, but tUe laboratory is not certified by tUe poverninp autUority. TUis list x ay include analytes for h UicU tUe apency does not offer certification.

| Analysis MetUod | 5remMetUod | Matri6 | Analyte |
|---|---|---|---|
| N030/ | g0V0/ | j olid | Antix ony |
| N030/ | g0V0/ | j olid | Arsenic |
| N030/ | g0V0/ | j olid | / ariux |
| N030/ | g0V0/ | j olid | / erylliux |
| N030/ | g0V0/ | j olid | Cadx iux |
| N030/ | g0V0/ | j olid | CUrox iux |
| N030/ | g0V0/ | j olid | Cobalt |
| N030/ | g0V0/ | j olid | Commer |
| N030/ | g0V0/ | j olid | Lead |
| N030/ | g0V0/ | j olid | Molybdenux |
| N030/ | g0V0/ | j olid | ZicSel |
| N030/ | g0V0/ | j olid | j eleniux |
| N030/ | g0V0/ | j olid | j ilver |
| N030/ | g0V0/ | j olid | TUalliux |
| N030/ | g0V0/ | j olid | wanadiux |
| N030/ | g0V0/ | j olid | Ginc |
| 7473A | 7473A | j olid | Mercury |
| 803V/ | gVV0C | j olid | C3g-C22 |
| 803V/ | gVV0C | j olid | C2g-C40 |
| 803V/ | V0gV | j olid | Rasoline Oanpe ( rpanics )C4-C32' |
| 8083A | gV4N | j olid | 4,4ED DD |
| 8083A | gV4N | j olid | 4,4ED DH |
| 8083A | gV4N | j olid | 4,4ED DT |
| 8083A | gV4N | j olid | Aldrin |
| 8083A | gV4N | j olid | almUa-/ BC |
| 8083A | gV4N | j olid | almUa-CUlordane |
| 8083A | gV4N | j olid | beta-/ BC |
| 8083A | gV4N | j olid | CUlordane |
| 8083A | gV4N | j olid | delta-/ BC |
| 8083A | gV4N | j olid | Dieldrin |
| 8083A | gV4N | j olid | Hndosulfan I |
| 8083A | gV4N | j olid | Hndosulfan II |
| 8083A | gV4N | j olid | Hndosulfan sulfate |
| 8083A | gV4N | j olid | Hndrin |
| 8083A | gV4N | j olid | Hndrin aldeUyde |
| 8083A | gV4N | j olid | Hndrin Setone |
| 8083A | gV4N | j olid | pax x a-/ BC |
| 8083A | gV4N | j olid | pax x a-CUlordane |
| 8083A | gV4N | j olid | BemtacUlor |
| 8083A | gV4N | j olid | BemtacUlor emo6ide |
| 8083A | gV4N | j olid | MetUo6ycUlor |
| 8083A | gV4N | j olid | To6amUene |
| 83V3A | 83V3A | j olid | 2,4,V-T |
| 83V3A | 83V3A | j olid | 2,4,V-T5 )j ilve6' |
| 83V3A | 83V3A | j olid | 2,4-D |

## Laboratory: Eurofins Calscience LLC (Continued)

k nless otUerh ise noted, all analytes for tUis laboratory h ere covered under eacU accreditationPertification beloh .

| Authority | | Program | Identification Number | Expiration Date |
|---|---|---|---|---|
| California | | j CAQMD LA5 | 37LA0939 | 33-g0-23 |
| 83V3A | 83V3A | j olid | 2,4-D/ | |
| 83V3A | 83V3A | j olid | Dalamon | |
| 83V3A | 83V3A | j olid | Dicax ba | |
| 83V3A | 83V3A | j olid | DicUormrom | |
| 83V3A | 83V3A | j olid | Dinoseb | |
| 83V3A | 83V3A | j olid | MC5A | |
| 83V3A | 83V3A | j olid | MC55 | |
| 82N0/ | V0gV | j olid | 3,3,3,2-TetracUoroetUane | |
| 82N0/ | V0gV | j olid | 3,3,3-TricUoroetUane | |
| 82N0/ | V0gV | j olid | 3,3,2,2-TetracUoroetUane | |
| 82N0/ | V0gV | j olid | 3,3,2-TricUoro-3,2,2-trifluoroetUane | |
| 82N0/ | V0gV | j olid | 3,3,2-TricUoroetUane | |
| 82N0/ | V0gV | j olid | 3,3-DicUoroetUane | |
| 82N0/ | V0gV | j olid | 3,3-DicUoroetUene | |
| 82N0/ | V0gV | j olid | 3,3-DicUoromromene | |
| 82N0/ | V0gV | j olid | 3,2,g-TricUorobenzene | |
| 82N0/ | V0gV | j olid | 3,2,g-TricUoromromane | |
| 82N0/ | V0gV | j olid | 3,2,4-TricUorobenzene | |
| 82N0/ | V0gV | j olid | 3,2,4-Trix etUylbenzene | |
| 82N0/ | V0gV | j olid | 3,2-Dibrox o-g-CUoromromane | |
| 82N0/ | V0gV | j olid | 3,2-Dibrox oetUane | |
| 82N0/ | V0gV | j olid | 3,2-DicUorobenzene | |
| 82N0/ | V0gV | j olid | 3,2-DicUoroetUane | |
| 82N0/ | V0gV | j olid | 3,2-DicUoromromane | |
| 82N0/ | V0gV | j olid | 3,g,V-Trix etUylbenzene | |
| 82N0/ | V0gV | j olid | 3,g-DicUorobenzene | |
| 82N0/ | V0gV | j olid | 3,g-DicUoromromane | |
| 82N0/ | V0gV | j olid | 3,4-DicUorobenzene | |
| 82N0/ | V0gV | j olid | 2,2-DicUoromromane | |
| 82N0/ | V0gV | j olid | 2-/ utanone | |
| 82N0/ | V0gV | j olid | 2-CUorotoluene | |
| 82N0/ | V0gV | j olid | 2-Be6anone | |
| 82N0/ | V0gV | j olid | 4-CUorotoluene | |
| 82N0/ | V0gV | j olid | 4-MetUyl-2-mentanone | |
| 82N0/ | V0gV | j olid | Acetone | |
| 82N0/ | V0gV | j olid | / enzene | |
| 82N0/ | V0gV | j olid | / rox obenzene | |
| 82N0/ | V0gV | j olid | / rox ocUorox etUane | |
| 82N0/ | V0gV | j olid | / rox odicUorox etUane | |
| 82N0/ | V0gV | j olid | / rox oforx | |
| 82N0/ | V0gV | j olid | / rox ox etUane | |
| 82N0/ | V0gV | j olid | Carbon disulfide | |
| 82N0/ | V0gV | j olid | Carbon tetracUoride | |
| 82N0/ | V0gV | j olid | CUorobenzene | |
| 82N0/ | V0gV | j olid | CUoroetUane | |
| 82N0/ | V0gV | j olid | CUoroforx | |
| 82N0/ | V0gV | j olid | CUorox etUane | |
| 82N0/ | V0gV | j olid | cis-3,2-DicUoroetUene | |
| 82N0/ | V0gV | j olid | cis-3,g-DicUoromromene | |

## Laboratory: Eurofins Calscience LLC (Continued)

k nless otUerh ise noted, all analytes for tUis laboratory h ere covered under eacU accreditationPertification beloh .

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | j CAQMD LA5 | 37LA0939 | 33-g0-23 |

| | | | |
|---|---|---|---|
| 82N0/ | V0gV | j olid | Dibrox ocUorox etUane |
| 82N0/ | V0gV | j olid | Dibrox ox etUane |
| 82N0/ | V0gV | j olid | DicUorodifluorox etUane |
| 82N0/ | V0gV | j olid | Di-isomromyl etUer )DI5H' |
| 82N0/ | V0gV | j olid | HtUanol |
| 82N0/ | V0gV | j olid | HtUylbenzene |
| 82N0/ | V0gV | j olid | HtUyl-t-butyl etUer )HT/ H' |
| 82N0/ | V0gV | j olid | Be6acUoro-3,g-butadiene |
| 82N0/ | V0gV | j olid | Isomromylbenzene |
| 82N0/ | V0gV | j olid | x ,m-Xylene |
| 82N0/ | V0gV | j olid | MetUylene CUoride |
| 82N0/ | V0gV | j olid | MetUyl-t-/ utyl HtUer )MT/ H' |
| 82N0/ | V0gV | j olid | ZamUtUalene |
| 82N0/ | V0gV | j olid | n-/ utylbenzene |
| 82N0/ | V0gV | j olid | Z-5romylbenzene |
| 82N0/ | V0gV | j olid | o-Xylene |
| 82N0/ | V0gV | j olid | m-Isomromyltoluene |
| 82N0/ | V0gV | j olid | sec-/ utylbenzene |
| 82N0/ | V0gV | j olid | j tyrene |
| 82N0/ | V0gV | j olid | Tert-ax yl-x etUyl etUer )TAMH' |
| 82N0/ | V0gV | j olid | tert-/ utyl alcoUol )T/ A' |
| 82N0/ | V0gV | j olid | tert-/ utylbenzene |
| 82N0/ | V0gV | j olid | TetracUoroetUene |
| 82N0/ | V0gV | j olid | Toluene |
| 82N0/ | V0gV | j olid | trans-3,2-DicUoroetUene |
| 82N0/ | V0gV | j olid | trans-3,g-DicUoromromene |
| 82N0/ | V0gV | j olid | TricUoroetUene |
| 82N0/ | V0gV | j olid | TricUorofluorox etUane |
| 82N0/ | V0gV | j olid | winyl acetate |
| 82N0/ | V0gV | j olid | winyl cUoride |
| 82N0/ | V0gV | j olid | Xylenes, Total |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: Eurofins
Address:
Phone:
Office Location: Colton
Contact: Danielle
Project Manager: Todd & McFarland
PO/SO #:

Sampler's Name: Tom C Johnson
Sampler's Signature:

Project Number: CB21P020
Project Name: Broken Horn Saddlery

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers 8021 | 8021 Vort | TPH EPA 8015 | VOCs EPA 8260 | Herbicides EPA 8151A | OCPs 8081A | CAM 17 Metals | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 3/22 | 09:06 | | X | B-1-5 | | | X | X | X | X | X | X | X | |
| S | 3/22 | 09:20 | | X | B-1-10 | | | X | X | X | X | X | [redacted] | [redacted] | |
| S | 3/23 | 12:48 | | X | B-2-5 | | | X | X | X | X | X | X | X | |
| S | 3/23 | 14:30 | | X | B-2-110 | | | X | X | X | X | | | | |

440-280940 Chain of Custody

TURNAROUND TIME: X Normal ☐ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date: | Time: | Received by (Signature) | Date: | Time: |
|---|---|---|---|---|---|
| | 3/23 | 14:38 | William Rivera | 3/23/21 | 1438 |
| William Rivera | 3/23/21 | 1830 | | 3/23/21 | 1830 |
| | | | | | |
| | | | | | |

NOTES: 5 Day TAT

Matrix: WW Wastewater; W Water; S Soil; L -Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml Glass wide mouth; P/O Plastic or other

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167264.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle.Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-280940-1 |
| Address: 7440 Lincoln Way, | Due Date Requested: 3/29/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Preservation Codes.**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

**Analysis Requested**

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B/5035FM_Calc (MOD) Routine + Oxy's | 8260B/5035FP_Calc (MOD) Routine + Oxy's | 8151A/8151A_SP Routine Herbicides List (full spike list | 8081A/3546 Routine Pesticides List | 6010B/3050B California Administrative Manual List | 7471A/7471A_Prep Mercury | 8015B_GRO/5035FM_Calc Gasoline Range Organics C4-C12 | 8015B_GRO/5035FP_Calc Gasoline Range Organics C4-C12 | 8015B_DRO/3550C C13-C22 / C23-C40 - No Silica Gel Surrog | | | | | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | | | | | | | | | |
| B-1-5 (440-280940-1) | 3/22/21 | 09:06 Pacific | | Solid | | | X | X | X | X | X | X | X | X | | | | | | 6 | |
| B-1-10 (440-280940-2) | 3/22/21 | 09.20 Pacific | | Solid | | | X | X | X | | | | X | X | | | | | | 6 | |
| B-2-5 (440-280940-3) | 3/23/21 | 12.48 Pacific | | Solid | | | X | X | X | X | X | X | X | X | | | | | | 6 | |
| B-2-110 (440-280940-4) | 3/23/21 | 14.30 Pacific | | Solid | | | X | X | | | | | X | X | | | | | | 6 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Relinquished by: | 3-24-21 10:23 | | | 3/24/21 1023 | ECS |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ∆ Yes ∆ No | Custody Seal No.: N/A | Cooler Temperature(s) °C and Other Remarks: 2.9/1.8 SCG 2.4/1.3 SCG |
|---|---|---|

Ver: 11/01/2020

3/30/2021

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-280940-1

**Login Number: 280930**
**List Number: v**
**Creator: Lagunasw, orge L**

**List Source: J uroEns frl ine**

| 5 uestion | QnsAer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-280940-1

**Login Number: 280930**
**List Number: 2**
**Creator: 1 rtiQ2Luisw- ichael**

**List Source: JuroEns Calscience**
**List Creation: 0M23/2v 02:24 P-**

| 5 uestion | QnsAer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 1.8, 1.3 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281052-1
Client Project/Site: Broken Horn Saddlery

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/2/2021 4:35:56 PM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

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www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Solid | 03/24/21 14:46 | 03/25/21 19:00 | |
| 440-281052-2 | B-3-110 | Solid | 03/24/21 16:15 | 03/25/21 19:00 | |
| 440-281052-3 | B-4-5 | Solid | 03/25/21 12:08 | 03/25/21 19:00 | |
| 440-281052-4 | B-4-115 | Solid | 03/25/21 13:47 | 03/25/21 19:00 | |

## Job ID: 440-281052-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281052-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/21/2029 6:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properlV preserved and on ice. The temperature oythe cooler at receipt was 2.8f C.

**GC/MS VOA**
Method 82º 0B: Insuyjicient sample volume was available to peryorm a matrix spike/matrix spike duplicate (MS/MSD) associated with analVtical batch 160-9354º 1.

No additional analVtical or qualitV issues were noted, other than those described above or in the DeyjnitionsƷ lossarV page.

**GC VOA**
Method 8091B: Insuyjicient sample volume was available to peryorm a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 935164.

No additional analVtical or qualitV issues were noted, other than those described above or in the DeyjnitionsƷ lossarV page.

**GC Semi VOA**
Method 8089z: The continuing calibration veriyjcation (CCA) associated with 160-935630 recoveredoutside the control limits yor beta-BHC and gamma-BHC on one column. ; esults are conyjrmed on both columns and reported yrom the passing column.

Method 8089z: The continuing calibration veriyjcation (CCA) associated with batch 160-935630 recovered above the upper control limit yor delta-BHC. The samples associated with this CCA were non-detects yor the ayjected analVtesGthereyore, the data have been reported.

Method 8919z: The laboratorV control sample and/or the laboratorV control sample duplicate (LCS/LCSD) yor preparation batch 160-935619 and analVtical batch 160-940401 recovered outside control limits yor the yollowing analVte(s): Dinoseb. Dinoseb has been identijyed as a poor peryorming analVte when analVRed using this methodGthereyore, re-extraction/re-analVsis was not peryormed. These results have been reported and qualijyed.

Method 8919z: The matrix spike/matrix spike duplicate (MS/MSD) yor preparation batch 160-935619 and analVtical batch 160-940401 exceeded control limits yor the yollowing analVte(s): Dinoseb, Note that this analVte is a known poor peryormer when analVRed using this method.

No additional analVtical or qualitV issues were noted, other than those described above or in the DeyjnitionsƷ lossarV page.

**Metals**
Method º 090B: The absolute response yor MolVbdenum was greater than the method reporting limit (; L) in the yollowing sample: B-3-1 (440-289012-9).
The instrument raw data has been manuallV reviewed and the result can be reported as ND.

No additional analVtical or qualitV issues were noted, other than those described above or in the DeyjnitionsƷ lossarV page.

**Organic Prep**
No analVtical or qualitV issues were noted, other than those described in the DeyjnitionsƷ lossarV page.

**VOA Prep**
No analVtical or qualitV issues were noted, other than those described in the DeyjnitionsƷ lossarV page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

## Client Sample ID: B-3-5 — Lab Sample ID: 440-281052-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.014 | J | 0.021 | 0.010 | mg/Kg | 1 | | 8260B | Total/NA |
| Benzene | 0.00059 | J | 0.0011 | 0.00027 | mg/Kg | 1 | | 8260B | Total/NA |
| C23-C40 | 5.5 | | 5.2 | 4.0 | mg/Kg | 1 | | 8015B | Total/NA |
| Barium | 93 | | 0.51 | 0.22 | mg/Kg | 1 | | 6010B | Total/NA |
| Beryllium | 0.41 | | 0.25 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Cadmium | 0.32 | J | 0.51 | 0.20 | mg/Kg | 1 | | 6010B | Total/NA |
| Chromium | 14 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 6.8 | | 1.0 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 16 | | 1.0 | 0.51 | mg/Kg | 1 | | 6010B | Total/NA |
| Lead | 2.6 | J | 5.1 | 0.98 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 11 | | 0.51 | 0.43 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 22 | B | 1.0 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 34 | | 10 | 5.2 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.036 | J | 0.082 | 0.013 | mg/Kg | 1 | | 7471A | Total/NA |

## Client Sample ID: B-3-110 — Lab Sample ID: 440-281052-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.014 | J | 0.020 | 0.0098 | mg/Kg | 1 | | 8260B | Total/NA |
| tert-Butyl alcohol (TBA) | 0.0079 | J | 0.020 | 0.0070 | mg/Kg | 1 | | 8260B | Total/NA |

## Client Sample ID: B-4-5 — Lab Sample ID: 440-281052-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00032 | J | 0.00098 | 0.00025 | mg/Kg | 1 | | 8260B | Total/NA |
| C23-C40 | 7.5 | | 5.0 | 3.8 | mg/Kg | 1 | | 8015B | Total/NA |
| Barium | 16 | | 0.51 | 0.22 | mg/Kg | 1 | | 6010B | Total/NA |
| Chromium | 1.7 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 1.3 | | 1.0 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 1.2 | | 1.0 | 0.51 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 2.0 | | 0.51 | 0.43 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 2.1 | B | 1.0 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 5.7 | J | 10 | 5.2 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.027 | J | 0.082 | 0.013 | mg/Kg | 1 | | 7471A | Total/NA |

## Client Sample ID: B-4-115 — Lab Sample ID: 440-281052-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.011 | J | 0.018 | 0.0086 | mg/Kg | 1 | | 8260B | Total/NA |
| tert-Butyl alcohol (TBA) | 0.0065 | J | 0.018 | 0.0061 | mg/Kg | 1 | | 8260B | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

**Client Sample ID: B-3-5**
**Date Collected: 03/24/21 14:46**
**Date Received: 03/25/21 19:00**

**Lab Sample ID: 440-281052-1**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0011 | 0.00031 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0011 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0021 | 0.00057 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.011 | 0.00049 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0011 | 0.00049 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,1-Dichloroethane | ND | | 0.0011 | 0.00030 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,1-Dichloroethene | ND | | 0.0011 | 0.00028 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,1-Dichloropropene | ND | | 0.0021 | 0.00041 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0021 | 0.0011 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0021 | 0.00044 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0021 | 0.00043 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0021 | 0.00063 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.011 | 0.0072 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2-Dibromoethane | ND | | 0.0011 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0011 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2-Dichloroethane | ND | | 0.0011 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,2-Dichloropropane | ND | | 0.0011 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0021 | 0.00063 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0011 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,3-Dichloropropane | ND | | 0.0011 | 0.00031 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0011 | 0.00032 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 2,2-Dichloropropane | ND | | 0.0053 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 2-Butanone | ND | | 0.021 | 0.0048 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 2-Chlorotoluene | ND | | 0.0011 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 2-Hexanone | ND | | 0.021 | 0.0032 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 4-Chlorotoluene | ND | | 0.0011 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.021 | 0.0031 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| **Acetone** | **0.014** | **J** | 0.021 | 0.010 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| **Benzene** | **0.00059** | **J** | 0.0011 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Bromobenzene | ND | | 0.0011 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Bromochloromethane | ND | | 0.0021 | 0.00047 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Bromodichloromethane | ND | | 0.0011 | 0.00017 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Bromoform | ND | | 0.0053 | 0.0014 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Bromomethane | ND | | 0.021 | 0.0069 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Carbon disulfide | ND | | 0.011 | 0.00042 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Carbon tetrachloride | ND | | 0.0011 | 0.00032 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Chlorobenzene | ND | | 0.0011 | 0.00028 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Chloroethane | ND | | 0.0021 | 0.0016 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Chloroform | ND | | 0.0011 | 0.00062 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Chloromethane | ND | | 0.021 | 0.0016 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0011 | 0.00036 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0011 | 0.00037 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Dibromochloromethane | ND | | 0.0021 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Dibromomethane | ND | | 0.0011 | 0.00032 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Dichlorodifluoromethane | ND | | 0.0021 | 0.00048 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0011 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Ethanol | ND | | 0.26 | 0.070 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Ethylbenzene | ND | | 0.0011 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0011 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |

**Client Sample ID: B-3-5**
**Date Collected: 03/24/21 14:46**
**Date Received: 03/25/21 19:00**

**Lab Sample ID: 440-281052-1**
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ND | | 0.0053 | 0.0018 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Isopropylbenzene | ND | | 0.0011 | 0.00063 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| m,p-Xylene | ND | | 0.0021 | 0.00050 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Methylene Chloride | ND | | 0.011 | 0.0033 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0021 | 0.00020 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Naphthalene | ND | | 0.011 | 0.0055 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| n-Butylbenzene | ND | | 0.0011 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| N-Propylbenzene | ND | | 0.0021 | 0.00063 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| o-Xylene | ND | | 0.0011 | 0.00063 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| p-Isopropyltoluene | ND | | 0.0011 | 0.00074 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| sec-Butylbenzene | ND | | 0.0011 | 0.00063 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Styrene | ND | | 0.0011 | 0.00074 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0011 | 0.00021 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.021 | 0.0074 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| tert-Butylbenzene | ND | | 0.0011 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Tetrachloroethene | ND | | 0.0011 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Toluene | ND | | 0.0011 | 0.00063 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0011 | 0.00032 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0021 | 0.00030 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Trichloroethene | ND | | 0.0021 | 0.00041 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Trichlorofluoromethane | ND | | 0.011 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Vinyl acetate | ND | | 0.011 | 0.0041 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Vinyl chloride | ND | | 0.0011 | 0.00040 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |
| Xylenes, Total | ND | | 0.0021 | 0.00063 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *175* | | *01 - 133* | *7/ 9259 21 14:12* | *7/ 9259 21 2/ :15* | *1* |
| *4-8ro6 oBuoromenf ene (Surr)* | *5b* | | *b7 - 127* | *7/ 9259 21 14:12* | *7/ 9259 21 2/ :15* | *1* |
| *Dimro6 oBuoro6 ethane (Surr)* | *53* | | *05 - 1/ /* | *7/ 9259 21 14:12* | *7/ 9259 21 2/ :15* | *1* |
| *zoluene-db (Surr)* | *50* | | *b7 - 127* | *7/ 9259 21 14:12* | *7/ 9259 21 2/ :15* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.10 | 0.057 | mg/Kg | | 03/29/21 14:12 | 03/30/21 12:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-8ro6 oBuoromenf ene (Surr)* | *03* | | *42 - 12T* | *7/ 9259 21 14:12* | *7/ 9 79 21 12:2/* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.2 | 4.0 | mg/Kg | | 03/29/21 17:27 | 03/31/21 05:56 | 1 |
| **C23-C40** | **5.5** | | 5.2 | 4.0 | mg/Kg | | 03/29/21 17:27 | 03/31/21 05:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *173* | | *T7 - 1/ b* | *7/ 9259 21 10:20* | *7/ 9 19 21 73:3T* | *1* |

### Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00098 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00053 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| 4,4'-DDT | ND | | 0.0050 | 0.00036 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |

## Client Sample ID: B-3-5

**Date Collected: 03/24/21 14:46**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-1

**Matrix: Solid**

### Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Endrin | ND | | 0.0050 | 0.00033 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00047 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00088 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Heptachlor epoxide | ND | | 0.0050 | 0.00066 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 03/29/21 12:53 | 03/31/21 07:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *0T* | | */ 0 - 131* | *7/ 9/25/21 12:3/* | *7/ 9/ 1/21 70:1T* | *1* |
| *zetrachloro-6 -xylene* | *b7* | | */ b - 14b* | *7/ 9/25/21 12:3/* | *7/ 9/ 1/21 70:1T* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0099 | 0.0037 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.0099 | 0.0036 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| 2,4-D | ND | | 0.099 | 0.048 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| 2,4-DB | ND | | 0.099 | 0.046 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| Dicamba | ND | | 0.0099 | 0.0047 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| Dichlorprop | ND | | 0.099 | 0.049 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| Dinoseb | ND | *- | 0.099 | 0.019 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| MCPA | ND | | 20 | 10 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |
| MCPP | ND | | 9.9 | 6.6 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *122* | | *21 - 1T1* | *7/ 9/ 7/21 10:/ 0* | *7/ 9/ 7/21 73:12* | *1* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.0 | 1.4 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| Arsenic | ND | | 2.5 | 2.3 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| **Barium** | **93** | | 0.51 | 0.22 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| **Beryllium** | **0.41** | | 0.25 | 0.17 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| **Cadmium** | **0.32** | **J** | 0.51 | 0.20 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| **Chromium** | **14** | | 1.0 | 0.18 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| **Cobalt** | **6.8** | | 1.0 | 0.23 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| **Copper** | **16** | | 1.0 | 0.51 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |

## Client Sample ID: B-3-5

**Date Collected: 03/24/21 14:46**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-1

**Matrix: Solid**

### Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 2.6 | J | 5.1 | 0.98 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| Molybdenum | ND | L | 0.51 | 0.46 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| Nickel | 11 | | 0.51 | 0.43 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| Selenium | ND | | 5.1 | 1.9 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| Silver | ND | | 1.0 | 0.23 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| Thallium | ND | | 5.1 | 1.5 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| Vanadium | 22 | B | 1.0 | 0.17 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |
| Zinc | 34 | | 10 | 5.2 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:12 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.036 | J | 0.082 | 0.013 | mg/Kg | | 03/27/21 16:00 | 03/29/21 14:48 | 1 |

## Client Sample ID: B-3-110

**Date Collected: 03/24/21 16:15**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-2

**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00023 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00054 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00046 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00046 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00039 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.0010 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00042 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00041 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0068 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00028 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00031 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0045 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0029 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Acetone | 0.014 | J | 0.020 | 0.0098 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Benzene | ND | | 0.0010 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

**Client Sample ID: B-3-110**
**Date Collected: 03/24/21 16:15**
**Date Received: 03/25/21 19:00**

**Lab Sample ID: 440-281052-2**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | 0.0010 | 0.00016 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Bromoform | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Bromomethane | ND | | 0.020 | 0.0066 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00040 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Chloroform | ND | | 0.0010 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00034 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00035 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00050 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Ethanol | ND | | 0.25 | 0.066 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0050 | 0.0017 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00047 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0031 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Naphthalene | ND | | 0.010 | 0.0052 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00070 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Styrene | ND | | 0.0010 | 0.00070 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00019 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| **tert-Butyl alcohol (TBA)** | **0.0079** | **J** | 0.020 | 0.0070 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Tetrachloroethene | ND | | 0.0010 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Toluene | ND | | 0.0010 | 0.00060 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00030 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00028 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00039 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0039 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00038 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00060 | mg/Kg | | 03/29/21 14:12 | 03/29/21 23:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *170* | | *01 - 133* | *7/ 9259 21 14:12* | *7/ 9259 21 2/ :44* | *1* |
| *4-8ro6 oBuoromenf ene (Surr)* | *5b* | | *b7 - 127* | *7/ 9259 21 14:12* | *7/ 9259 21 2/ :44* | *1* |
| *Dimro6 oBuoro6 ethane (Surr)* | *54* | | *05 - 1/ /* | *7/ 9259 21 14:12* | *7/ 9259 21 2/ :44* | *1* |
| *zoluene-db (Surr)* | *50* | | *b7 - 127* | *7/ 9259 21 14:12* | *7/ 9259 21 2/ :44* | *1* |

## Client Sample ID: B-3-110

**Date Collected: 03/24/21 16:15**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-2

**Matrix: Solid**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.089 | 0.049 | mg/Kg | | 03/29/21 14:12 | 03/30/21 12:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-8ro6 oBuoromenf ene (Surr)* | *b1* | | *42 - 12T* | *7/ 925 21 14:12* | *7/ 9 79 21 12:40* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 4.8 | 3.7 | mg/Kg | | 03/29/21 17:27 | 03/31/21 06:16 | 1 |
| C23-C40 | ND | | 4.8 | 3.7 | mg/Kg | | 03/29/21 17:27 | 03/31/21 06:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *177* | | *T7 - 1/ b* | *7/ 925 21 10:20* | *7/ 9 19 21 7T:1T* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0099 | 0.0037 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.0099 | 0.0036 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| 2,4-D | ND | | 0.099 | 0.048 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| 2,4-DB | ND | | 0.099 | 0.046 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| Dicamba | ND | | 0.0099 | 0.0047 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| Dichlorprop | ND | | 0.099 | 0.049 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| Dinoseb | ND | *- | 0.099 | 0.019 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| MCPA | ND | | 20 | 10 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |
| MCPP | ND | | 9.9 | 6.6 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *113* | | *21 - 1T1* | *7/ 9 79 21 10:/ 0* | *749 729 21 73:/ 3* | *1* |

## Client Sample ID: B-4-5

**Date Collected: 03/25/21 12:08**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-3

**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00098 | 0.00028 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00098 | 0.00023 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0098 | 0.00045 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00098 | 0.00045 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,1-Dichloroethane | ND | | 0.00098 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,1-Dichloroethene | ND | | 0.00098 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00038 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.00098 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00041 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00040 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0098 | 0.0066 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,2-Dibromoethane | ND | | 0.00098 | 0.00020 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00098 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,2-Dichloroethane | ND | | 0.00098 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

**Client Sample ID: B-4-5**
**Date Collected: 03/25/21 12:08**
**Date Received: 03/25/21 19:00**

**Lab Sample ID: 440-281052-3**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ND | | 0.00098 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00098 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,3-Dichloropropane | ND | | 0.00098 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00098 | 0.00030 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 2,2-Dichloropropane | ND | | 0.0049 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0044 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 2-Chlorotoluene | ND | | 0.00098 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0030 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 4-Chlorotoluene | ND | | 0.00098 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0028 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Acetone | ND | | 0.020 | 0.0096 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| **Benzene** | **0.00032** | **J** | 0.00098 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Bromobenzene | ND | | 0.00098 | 0.00020 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00043 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Bromodichloromethane | ND | | 0.00098 | 0.00016 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Bromoform | ND | | 0.0049 | 0.0013 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Bromomethane | ND | | 0.020 | 0.0064 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Carbon disulfide | ND | | 0.0098 | 0.00039 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Carbon tetrachloride | ND | | 0.00098 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Chlorobenzene | ND | | 0.00098 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Chloroform | ND | | 0.00098 | 0.00058 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00098 | 0.00033 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00098 | 0.00034 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Dibromomethane | ND | | 0.00098 | 0.00030 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00098 | 0.00049 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Ethanol | ND | | 0.24 | 0.064 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Ethylbenzene | ND | | 0.00098 | 0.00020 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00098 | 0.00023 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0049 | 0.0016 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Isopropylbenzene | ND | | 0.00098 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00046 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Methylene Chloride | ND | | 0.0098 | 0.0030 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00018 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Naphthalene | ND | | 0.0098 | 0.0051 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| n-Butylbenzene | ND | | 0.00098 | 0.00021 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| o-Xylene | ND | | 0.00098 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| p-Isopropyltoluene | ND | | 0.00098 | 0.00068 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| sec-Butylbenzene | ND | | 0.00098 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Styrene | ND | | 0.00098 | 0.00068 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00098 | 0.00019 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.020 | 0.0068 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| tert-Butylbenzene | ND | | 0.00098 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Tetrachloroethene | ND | | 0.00098 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |

**Client Sample ID: B-4-5**
**Date Collected: 03/25/21 12:08**
**Date Received: 03/25/21 19:00**

**Lab Sample ID: 440-281052-3**
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 0.00098 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00098 | 0.00029 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00038 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Trichlorofluoromethane | ND | | 0.0098 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Vinyl acetate | ND | | 0.0098 | 0.0038 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Vinyl chloride | ND | | 0.00098 | 0.00037 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *01 - 133* | *7/ 9259 21 14:12* | *7/ 9 79 21 77:17* | *1* |
| *4-8ro6 oB uoromenf ene (Surr)* | *5b* | | *b7 - 127* | *7/ 9259 21 14:12* | *7/ 9 79 21 77:17* | *1* |
| *Dimro6 oB uoro6 ethane (Surr)* | *53* | | *05 - 1/ /* | *7/ 9259 21 14:12* | *7/ 9 79 21 77:17* | *1* |
| *zoluene-db (Surr)* | *50* | | *b7 - 127* | *7/ 9259 21 14:12* | *7/ 9 79 21 77:17* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.10 | 0.056 | mg/Kg | | 03/29/21 14:12 | 03/30/21 13:11 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-8ro6 oB uoromenf ene (Surr)* | *T/* | | *42 - 12T* | *7/ 9259 21 14:12* | *7/ 9 79 21 1/ :11* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 03/29/21 17:27 | 03/31/21 06:38 | 1 |
| **C23-C40** | **7.5** | | 5.0 | 3.8 | mg/Kg | | 03/29/21 17:27 | 03/31/21 06:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *5b* | | *T7 - 1/ b* | *7/ 9259 21 10:20* | *7/ 9 19 21 7T:/ b* | *1* |

### Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00099 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| 4,4'-DDT | ND | | 0.0050 | 0.00036 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Endrin | ND | | 0.0050 | 0.00034 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00048 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00089 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |

## Client Sample ID: B-4-5
**Date Collected: 03/25/21 12:08**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-3
**Matrix: Solid**

### Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 03/29/21 12:53 | 03/31/21 00:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *51* | | */ 0 - 131* | *7/ 9 25 21 12:3/* | *7/ 9 19 21 77:24* | *1* |
| *zetrachloro-6 -xylene* | *b5* | | */ b - 14b* | *7/ 9 25 21 12:3/* | *7/ 9 19 21 77:24* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| 2,4-D | ND | | 0.10 | 0.048 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| 2,4-DB | ND | | 0.10 | 0.046 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| Dinoseb | ND | *- | 0.10 | 0.019 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| MCPA | ND | | 20 | 10 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 03/30/21 17:37 | 04/02/21 05:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *174* | | *21 - 1T1* | *7/ 9 79 21 10:/ 0* | *749729 21 73:3b* | *1* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.0 | 1.4 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| Arsenic | ND | | 2.5 | 2.3 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| **Barium** | **16** | | 0.51 | 0.22 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| Beryllium | ND | | 0.25 | 0.17 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| Cadmium | ND | | 0.51 | 0.20 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| **Chromium** | **1.7** | | 1.0 | 0.18 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| **Cobalt** | **1.3** | | 1.0 | 0.23 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| **Copper** | **1.2** | | 1.0 | 0.51 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| Lead | ND | | 5.1 | 0.98 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| Molybdenum | ND | | 0.51 | 0.46 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| **Nickel** | **2.0** | | 0.51 | 0.43 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| Selenium | ND | | 5.1 | 1.9 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| Silver | ND | | 1.0 | 0.23 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| Thallium | ND | | 5.1 | 1.5 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| **Vanadium** | **2.1** | **B** | 1.0 | 0.17 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |
| **Zinc** | **5.7** | **J** | 10 | 5.2 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:30 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.027** | **J** | 0.082 | 0.013 | mg/Kg | | 03/27/21 16:00 | 03/29/21 14:59 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

**Client Sample ID: B-4-115**
**Date Collected: 03/25/21 13:47**
**Date Received: 03/25/21 19:00**

**Lab Sample ID: 440-281052-4**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00088 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00088 | 0.00020 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0018 | 0.00048 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0088 | 0.00040 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00088 | 0.00041 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,1-Dichloroethane | ND | | 0.00088 | 0.00025 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,1-Dichloroethene | ND | | 0.00088 | 0.00023 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,1-Dichloropropene | ND | | 0.0018 | 0.00034 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0018 | 0.00088 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0018 | 0.00037 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0018 | 0.00036 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0018 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0088 | 0.0059 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2-Dibromoethane | ND | | 0.00088 | 0.00018 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00088 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2-Dichloroethane | ND | | 0.00088 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,2-Dichloropropane | ND | | 0.00088 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0018 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00088 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,3-Dichloropropane | ND | | 0.00088 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00088 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 2,2-Dichloropropane | ND | | 0.0044 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 2-Butanone | ND | | 0.018 | 0.0040 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 2-Chlorotoluene | ND | | 0.00088 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 2-Hexanone | ND | | 0.018 | 0.0027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 4-Chlorotoluene | ND | | 0.00088 | 0.00021 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.018 | 0.0025 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| **Acetone** | **0.011** | **J** | 0.018 | 0.0086 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Benzene | ND | | 0.00088 | 0.00023 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Bromobenzene | ND | | 0.00088 | 0.00018 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Bromochloromethane | ND | | 0.0018 | 0.00039 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Bromodichloromethane | ND | | 0.00088 | 0.00014 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Bromoform | ND | | 0.0044 | 0.0012 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Bromomethane | ND | | 0.018 | 0.0058 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Carbon disulfide | ND | | 0.0088 | 0.00035 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Carbon tetrachloride | ND | | 0.00088 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Chlorobenzene | ND | | 0.00088 | 0.00023 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Chloroethane | ND | | 0.0018 | 0.0013 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Chloroform | ND | | 0.00088 | 0.00052 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Chloromethane | ND | | 0.018 | 0.0013 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00088 | 0.00030 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00088 | 0.00031 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Dibromochloromethane | ND | | 0.0018 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Dibromomethane | ND | | 0.00088 | 0.00027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Dichlorodifluoromethane | ND | | 0.0018 | 0.00040 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00088 | 0.00044 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Ethanol | ND | | 0.22 | 0.058 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Ethylbenzene | ND | | 0.00088 | 0.00018 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00088 | 0.00021 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |

**Client Sample ID: B-4-115**
**Date Collected: 03/25/21 13:47**
**Date Received: 03/25/21 19:00**

**Lab Sample ID: 440-281052-4**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ND | | 0.0044 | 0.0015 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Isopropylbenzene | ND | | 0.00088 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| m,p-Xylene | ND | | 0.0018 | 0.00041 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Methylene Chloride | ND | | 0.0088 | 0.0027 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0018 | 0.00016 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Naphthalene | ND | | 0.0088 | 0.0046 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| n-Butylbenzene | ND | | 0.00088 | 0.00018 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| N-Propylbenzene | ND | | 0.0018 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| o-Xylene | ND | | 0.00088 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| p-Isopropyltoluene | ND | | 0.00088 | 0.00061 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| sec-Butylbenzene | ND | | 0.00088 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Styrene | ND | | 0.00088 | 0.00061 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00088 | 0.00017 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| **tert-Butyl alcohol (TBA)** | **0.0065** | **J** | 0.018 | 0.0061 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| tert-Butylbenzene | ND | | 0.00088 | 0.00022 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Tetrachloroethene | ND | | 0.00088 | 0.00020 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Toluene | ND | | 0.00088 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00088 | 0.00026 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0018 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Trichloroethene | ND | | 0.0018 | 0.00034 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Trichlorofluoromethane | ND | | 0.0088 | 0.00024 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Vinyl acetate | ND | | 0.0088 | 0.0034 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Vinyl chloride | ND | | 0.00088 | 0.00033 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |
| Xylenes, Total | ND | | 0.0018 | 0.00053 | mg/Kg | | 03/29/21 14:12 | 03/30/21 00:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *17b* | | *01 - 133* | *7/ 9259 21 14:12* | *7/ 9 79 21 77:/ 3* | *1* |
| *4-8ro6 oBuoromenf ene (Surr)* | *55* | | *b7 - 127* | *7/ 9259 21 14:12* | *7/ 9 79 21 77:/ 3* | *1* |
| *Dimro6 oBuoro6 ethane (Surr)* | *53* | | *05 - 1/ /* | *7/ 9259 21 14:12* | *7/ 9 79 21 77:/ 3* | *1* |
| *zoluene-db (Surr)* | *50* | | *b7 - 127* | *7/ 9259 21 14:12* | *7/ 9 79 21 77:/ 3* | *1* |

## Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.089 | 0.049 | mg/Kg | | 03/29/21 14:12 | 03/30/21 13:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-8ro6 oBuoromenf ene (Surr)* | *Tb* | | *42 - 12T* | *7/ 9259 21 14:12* | *7/ 9 79 21 1/ :/ 3* | *1* |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 4.9 | 3.8 | mg/Kg | | 03/29/21 17:27 | 03/31/21 06:58 | 1 |
| C23-C40 | ND | | 4.9 | 3.8 | mg/Kg | | 03/29/21 17:27 | 03/31/21 06:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *170* | | *T7 - 1/ b* | *7/ 9259 21 10:20* | *7/ 9 19 21 7T:3b* | *1* |

## Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |
| 2,4-D | ND | | 0.10 | 0.048 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

**Client Sample ID: B-4-115**
**Date Collected: 03/25/21 13:47**
**Date Received: 03/25/21 19:00**

**Lab Sample ID: 440-281052-4**
**Matrix: Solid**

### Method: 8151A - Herbicides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-DB | ND | | 0.10 | 0.046 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |
| Dinoseb | ND | *- | 0.10 | 0.019 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |
| MCPA | ND | | 20 | 10 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 03/30/21 17:37 | 04/02/21 06:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *11b* | | *21 - 1T1* | *7/ 9 79 21 10:/ 0* | *749 729 21 7T:21* | *1* |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DCA (71-155) | BFB (80-120) | DBFM (79-133) | TOL (80-120) |
| 440-281052-1 | B-3-5 | 109 | 98 | 95 | 97 |
| 440-281052-2 | B-3-110 | 107 | 98 | 94 | 97 |
| 440-281052-3 | B-4-5 | 110 | 98 | 95 | 97 |
| 440-281052-4 | B-4-115 | 108 | 99 | 95 | 97 |
| LCS 570-139465/3 | Lab Control Sample | 93 | 99 | 96 | 99 |
| LCSD 570-139465/4 | Lab Control Sample Dup | 95 | 99 | 98 | 100 |
| MB 570-139465/6 | Method Blank | 97 | 97 | 91 | 97 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | BFB1 (42-126) |
| 440-281052-1 | B-3-5 | 75 |
| 440-281052-2 | B-3-110 | 81 |
| 440-281052-3 | B-4-5 | 63 |
| 440-281052-4 | B-4-115 | 68 |
| LCS 570-139574/3 | Lab Control Sample | 92 |
| LCSD 570-139574/4 | Lab Control Sample Dup | 92 |
| MB 570-139574/5 | Method Blank | 82 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | OTCSN1 (60-138) |
| 440-281052-1 | B-3-5 | 105 |
| 440-281052-2 | B-3-110 | 100 |
| 440-281052-3 | B-4-5 | 98 |
| 440-281052-4 | B-4-115 | 107 |
| 440-281110-A-1-J MS | Matrix Spike | 103 |
| 440-281110-A-1-K MSD | Matrix Spike Duplicate | 104 |
| LCS 570-139431/2-A | Lab Control Sample | 104 |
| LCSD 570-139431/3-A | Lab Control Sample Dup | 100 |
| MB 570-139431/1-A | Method Blank | 95 |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# Surrogate Summary

Client: Terracon Consultants Inc
Job ID: 440-281052-1
Project/Site: Broken Horn Saddlery

## Method: 8081A - Organochlorine Pesticides (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | DCB1 (37-151) | TCX1 (38-148) |
| 440-281052-1 | B-3-5 | 76 | 80 |
| 440-281052-3 | B-4-5 | 91 | 89 |
| 440-281052-3 MS | B-4-5 | 97 | 92 |
| 440-281052-3 MSD | B-4-5 | 88 | 85 |
| LCS 570-139367/2-A | Lab Control Sample | 117 | 111 |
| LCSD 570-139367/3-A | Lab Control Sample Dup | 103 | 96 |
| MB 570-139367/1-A | Method Blank | 105 | 102 |

**Surrogate Legend**

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8151A - Herbicides (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | DCPAA1 (21-161) |
| 440-281052-1 | B-3-5 | 122 |
| 440-281052-2 | B-3-110 | 115 |
| 440-281052-3 | B-4-5 | 104 |
| 440-281052-4 | B-4-115 | 118 |
| 570-54427-B-6-D MS | Matrix Spike | 108 |
| 570-54427-B-6-E MSD | Matrix Spike Duplicate | 119 |
| LCS 570-139751/2-A | Lab Control Sample | 124 |
| LCSD 570-139751/3-A | Lab Control Sample Dup | 110 |
| MB 570-139751/1-A | Method Blank | 104 |

**Surrogate Legend**

DCPAA = 2,4-Dichlorophenylacetic acid

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 82W0/ | 6o1TeCl VtOTi C 5 og mnoci da p( 5 PGj M | j k 84W | ) 5 E 2 |
| 8093/ | ( Tao1CI L Ti Cl VtOTi Cca - p( 5 M | j k 84W | ) 5 E 2 |
| 8093/ | DCCal 1L Ti Cl VtOTi CapDL VMR/C1L Ti Cl VtOTi Cca pVL VM | j k 84W | ) 5 E 9 |
| 8089R | VtOTi or A1btCl sl aeCCCl a p( 5 M | j k 84W | ) 5 E 9 |
| 8939R | Bl tbCCCl a p( 5 M | j k 84W | ) 5 E 9 |
| W090/ | Gl eT1a p5 s M | j k 84W | ) 5 E 9 |
| h4h9R | Gl trctwp5 6 RRM | j k 84W | ) 5 E 9 |
| H030/ | stl mTtTeCi 7 Gl eT1a | j k 84W | ) 5 E 9 |
| H34W | GCCtoy T, l ) veTreCi | j k 84W | ) 5 E 9 |
| H3305 | x 1tTaoi C ) veTreCi | j k 84W | ) 5 E 9 |
| 30H3 | 5 1bal d j waeg sctCl Ti d ntTm | j k 84W | ) 5 E 2 |
| h4h9R | stl mTtTeCi 7Gl trctw | j k 84W | ) 5 E 9 |
| 8939R | ) veTreCi pBl tbCCCl aM | j k 84W | ) 5 E 9 |

**Protocol References:**

j k 84WU=nl aeGl eAoda " ot ) , T1cTeCOj o1Cl k Tae 7s AwaCCT1P5 Al g CCT1Gl eAoda=7nACCd ) dCCi 7Fo, l g bl t 9N8WRi d lea x mdTe a.

**Laboratory References:**

) 5 E 9 U ) ctofCCa 5 T1arCCi r l EE5 ECCro1 7h440 ECCro1 k Tw7( Ttdl i ( to, l 75 R N28497n) Eph94M8N3-34N4

) 5 E 2 U ) ctofCCa 5 T1arCCi r l EE5 ETg maoi 7h443 ETg maoi R, l 7( Ttdl i ( to, l 75 R N28497n) Eph94M8N3-34N4

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

## Client Sample ID: B-3-5

**Date Collected: 03/24/21 14:46**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-1

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.732 g | 5 g | 139406 | 03/29/21 14:12 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 139465 | 03/29/21 23:19 | P4DI | ECL 2 |
| Total/NA | Prep | 5035 | | | 4.879 g | 5 g | 139406 | 03/29/21 14:12 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 139574 | 03/30/21 12:23 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 9.59 g | 10 mL | 139431 | 03/29/21 17:27 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 139625 | 03/31/21 05:56 | N5Y3 | ECL 1 |
| Total/NA | Prep | 3546 | | | 20.10 g | 10 mL | 139367 | 03/29/21 12:53 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 139730 | 03/31/21 07:16 | UHHN | ECL 1 |
| Total/NA | Prep | 8151A | | | 50.26 g | 5 mL | 139751 | 03/30/21 17:37 | UWEZ | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 140405 | 04/02/21 05:12 | UHHN | ECL 1 |
| Total/NA | Prep | 3050B | | | 1.98 g | 100 mL | 139186 | 03/27/21 16:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 139892 | 03/30/21 19:12 | ULPF | ECL 1 |
| Total/NA | Prep | 7471A | | | 0.61 g | 100 mL | 139187 | 03/27/21 16:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 7471A | | 1 | | | 139472 | 03/29/21 14:48 | VYQ5 | ECL 1 |

## Client Sample ID: B-3-110

**Date Collected: 03/24/21 16:15**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-2

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.004 g | 5 g | 139406 | 03/29/21 14:12 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 139465 | 03/29/21 23:44 | P4DI | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.64 g | 5 g | 139406 | 03/29/21 14:12 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 139574 | 03/30/21 12:47 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.33 g | 10 mL | 139431 | 03/29/21 17:27 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 139625 | 03/31/21 06:16 | N5Y3 | ECL 1 |
| Total/NA | Prep | 8151A | | | 50.35 g | 5 mL | 139751 | 03/30/21 17:37 | UWEZ | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 140405 | 04/02/21 05:35 | UHHN | ECL 1 |

## Client Sample ID: B-4-5

**Date Collected: 03/25/21 12:08**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-3

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.124 g | 5 g | 139406 | 03/29/21 14:12 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 139465 | 03/30/21 00:10 | P4DI | ECL 2 |
| Total/NA | Prep | 5035 | | | 4.987 g | 5 g | 139406 | 03/29/21 14:12 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 139574 | 03/30/21 13:11 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.09 g | 10 mL | 139431 | 03/29/21 17:27 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 139625 | 03/31/21 06:38 | N5Y3 | ECL 1 |
| Total/NA | Prep | 3546 | | | 19.98 g | 10 mL | 139367 | 03/29/21 12:53 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 139730 | 03/31/21 00:24 | UHHN | ECL 1 |
| Total/NA | Prep | 8151A | | | 50.22 g | 5 mL | 139751 | 03/30/21 17:37 | UWEZ | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 140405 | 04/02/21 05:58 | UHHN | ECL 1 |

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281052-1

## Client Sample ID: B-4-5

**Date Collected: 03/25/21 12:08**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-3

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3050B | | | 1.98 g | 100 mL | 139186 | 03/27/21 16:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 139892 | 03/30/21 19:30 | ULPF | ECL 1 |
| Total/NA | Prep | 7471A | | | 0.61 g | 100 mL | 139187 | 03/27/21 16:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 7471A | | 1 | | | 139472 | 03/29/21 14:59 | VYQ5 | ECL 1 |

## Client Sample ID: B-4-115

**Date Collected: 03/25/21 13:47**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281052-4

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.71 g | 5 g | 139406 | 03/29/21 14:12 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 139465 | 03/30/21 00:35 | P4DI | ECL 2 |
| Total/NA | Prep | 5035 | | | 5.646 g | 5 g | 139406 | 03/29/21 14:12 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 139574 | 03/30/21 13:35 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 10.18 g | 10 mL | 139431 | 03/29/21 17:27 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 139625 | 03/31/21 06:58 | N5Y3 | ECL 1 |
| Total/NA | Prep | 8151A | | | 50.20 g | 5 mL | 139751 | 03/30/21 17:37 | UWEZ | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 140405 | 04/02/21 06:21 | UHHN | ECL 1 |

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-139465/6**
**Matrix: Solid**
**Analysis Batch: 139465**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00023 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00054 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00046 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00046 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.0010 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00042 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00041 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0068 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00031 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0045 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00024 | mg/Kg | | | 03/29/21 22:28 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0029 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Acetone | ND | | 0.020 | 0.0098 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Benzene | ND | | 0.0010 | 0.00026 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Bromodichloromethane | ND | | 0.0010 | 0.00016 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Bromoform | ND | | 0.0050 | 0.0013 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Bromomethane | ND | | 0.020 | 0.0066 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00040 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Chloroform | ND | | 0.0010 | 0.00059 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | | 03/29/21 22:28 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00034 | mg/Kg | | | 03/29/21 22:28 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00035 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00031 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00050 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Ethanol | ND | | 0.25 | 0.066 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/29/21 22:28 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-139465/6**
**Matrix: Solid**
**Analysis Batch: 139465**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00024 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0050 | 0.0017 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/29/21 22:28 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00047 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0031 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Naphthalene | ND | | 0.010 | 0.0052 | mg/Kg | | | 03/29/21 22:28 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 03/29/21 22:28 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/29/21 22:28 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/29/21 22:28 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 03/29/21 22:28 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Styrene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00019 | mg/Kg | | | 03/29/21 22:28 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.020 | 0.0070 | mg/Kg | | | 03/29/21 22:28 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Tetrachloroethene | ND | | 0.0010 | 0.00022 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Toluene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 03/29/21 22:28 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00030 | mg/Kg | | | 03/29/21 22:28 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00028 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00027 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0039 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00038 | mg/Kg | | | 03/29/21 22:28 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00060 | mg/Kg | | | 03/29/21 22:28 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *75* | | *51 - 100* | | *3/ 9279 21 22:28* | *1* |
| *4-6roB omuorof enbene (Surr)* | *75* | | *83 - 123* | | *3/ 9279 21 22:28* | *1* |
| *Dif roB omuoroB ethane (Surr)* | *71* | | *57 - 1/ /* | | *3/ 9279 21 22:28* | *1* |
| *zoluene-d8 (Surr)* | *75* | | *83 - 123* | | *3/ 9279 21 22:28* | *1* |

**Lab Sample ID: LCS 570-139465/3**
**Matrix: Solid**
**Analysis Batch: 139465**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0503 | | mg/Kg | | 101 | 73 - 133 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0447 | | mg/Kg | | 89 | 71 - 131 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 77 - 120 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 120 |
| 1,1-Dichloroethane | 0.0500 | 0.0413 | | mg/Kg | | 83 | 74 - 120 |
| 1,1-Dichloroethene | 0.0500 | 0.0397 | | mg/Kg | | 79 | 71 - 125 |
| 1,1-Dichloropropene | 0.0500 | 0.0433 | | mg/Kg | | 87 | 69 - 120 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0549 | | mg/Kg | | 110 | 73 - 127 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0480 | | mg/Kg | | 96 | 60 - 120 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0535 | | mg/Kg | | 107 | 74 - 128 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 75 - 123 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-139465/3**
**Matrix: Solid**
**Analysis Batch: 139465**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0446 | | mg/Kg | | 89 | 54 - 132 |
| 1,2-Dibromoethane | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 120 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0509 | | mg/Kg | | 102 | 80 - 120 |
| 1,2-Dichloroethane | 0.0500 | 0.0468 | | mg/Kg | | 94 | 79 - 121 |
| 1,2-Dichloropropane | 0.0500 | 0.0457 | | mg/Kg | | 91 | 77 - 123 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 123 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 80 - 120 |
| 1,3-Dichloropropane | 0.0500 | 0.0475 | | mg/Kg | | 95 | 80 - 120 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 120 |
| 2,2-Dichloropropane | 0.0500 | 0.0440 | | mg/Kg | | 88 | 58 - 142 |
| 2-Chlorotoluene | 0.0500 | 0.0493 | | mg/Kg | | 99 | 56 - 176 |
| 4-Chlorotoluene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 67 - 151 |
| Benzene | 0.0500 | 0.0444 | | mg/Kg | | 89 | 79 - 120 |
| Bromobenzene | 0.0500 | 0.0525 | | mg/Kg | | 105 | 80 - 120 |
| Bromochloromethane | 0.0500 | 0.0443 | | mg/Kg | | 89 | 80 - 120 |
| Bromodichloromethane | 0.0500 | 0.0490 | | mg/Kg | | 98 | 73 - 127 |
| Bromoform | 0.0500 | 0.0484 | | mg/Kg | | 97 | 55 - 133 |
| Bromomethane | 0.0500 | 0.0474 | | mg/Kg | | 95 | 36 - 144 |
| Carbon tetrachloride | 0.0500 | 0.0477 | | mg/Kg | | 95 | 58 - 142 |
| Chlorobenzene | 0.0500 | 0.0487 | | mg/Kg | | 97 | 80 - 120 |
| Chloroethane | 0.0500 | 0.0472 | | mg/Kg | | 94 | 60 - 120 |
| Chloroform | 0.0500 | 0.0468 | | mg/Kg | | 94 | 80 - 120 |
| Chloromethane | 0.0500 | 0.0405 | | mg/Kg | | 81 | 50 - 122 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0464 | | mg/Kg | | 93 | 80 - 123 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0466 | | mg/Kg | | 93 | 74 - 128 |
| Dibromochloromethane | 0.0500 | 0.0505 | | mg/Kg | | 101 | 50 - 122 |
| Dibromomethane | 0.0500 | 0.0493 | | mg/Kg | | 99 | 70 - 130 |
| Dichlorodifluoromethane | 0.0500 | 0.0448 | | mg/Kg | | 90 | 32 - 158 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0391 | | mg/Kg | | 78 | 65 - 131 |
| Ethanol | 0.500 | 0.401 | | mg/Kg | | 80 | 32 - 158 |
| Ethylbenzene | 0.0500 | 0.0487 | | mg/Kg | | 97 | 57 - 153 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0404 | | mg/Kg | | 81 | 58 - 136 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0571 | | mg/Kg | | 114 | 80 - 120 |
| Isopropylbenzene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 129 |
| m,p-Xylene | 0.100 | 0.0956 | | mg/Kg | | 96 | 80 - 122 |
| Methylene Chloride | 0.0500 | 0.0422 | | mg/Kg | | 84 | 72 - 120 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0411 | | mg/Kg | | 82 | 64 - 124 |
| Naphthalene | 0.0500 | 0.0536 | | mg/Kg | | 107 | 64 - 124 |
| n-Butylbenzene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 78 - 126 |
| N-Propylbenzene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 80 - 122 |
| o-Xylene | 0.0500 | 0.0490 | | mg/Kg | | 98 | 79 - 127 |
| p-Isopropyltoluene | 0.0500 | 0.0497 | | mg/Kg | | 99 | 80 - 122 |
| sec-Butylbenzene | 0.0500 | 0.0488 | | mg/Kg | | 98 | 79 - 127 |
| Styrene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 123 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0464 | | mg/Kg | | 93 | 63 - 129 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.220 | | mg/Kg | | 88 | 79 - 121 |
| tert-Butylbenzene | 0.0500 | 0.0488 | | mg/Kg | | 98 | 80 - 128 |
| Tetrachloroethene | 0.0500 | 0.0515 | | mg/Kg | | 103 | 75 - 123 |
| Toluene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-139465/3**
**Matrix: Solid**
**Analysis Batch: 139465**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 0.0500 | 0.0431 | | mg/Kg | | 86 | 80 - 120 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0477 | | mg/Kg | | 95 | 66 - 120 |
| Trichloroethene | 0.0500 | 0.0482 | | mg/Kg | | 96 | 80 - 120 |
| Trichlorofluoromethane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 70 - 136 |
| Vinyl chloride | 0.0500 | 0.0465 | | mg/Kg | | 93 | 68 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *7/* | | *51 - 100* |
| *4-6roB ornuorof enbene (Surr)* | *77* | | *83 - 123* |
| *Dif roB ornuoroB ethane (Surr)* | *7T* | | *57 - 1/ /* |
| *zoluene-d8 (Surr)* | *77* | | *83 - 123* |

**Lab Sample ID: LCSD 570-139465/4**
**Matrix: Solid**
**Analysis Batch: 139465**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0509 | | mg/Kg | | 102 | 73 - 133 | 1 | 20 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 71 - 131 | 4 | 20 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0493 | | mg/Kg | | 99 | 77 - 120 | 2 | 20 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0489 | | mg/Kg | | 98 | 80 - 120 | 2 | 20 |
| 1,1-Dichloroethane | 0.0500 | 0.0427 | | mg/Kg | | 85 | 74 - 120 | 3 | 20 |
| 1,1-Dichloroethene | 0.0500 | 0.0418 | | mg/Kg | | 84 | 71 - 125 | 5 | 20 |
| 1,1-Dichloropropene | 0.0500 | 0.0444 | | mg/Kg | | 89 | 69 - 120 | 3 | 20 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0542 | | mg/Kg | | 108 | 73 - 127 | 1 | 20 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0487 | | mg/Kg | | 97 | 60 - 120 | 1 | 20 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 74 - 128 | 5 | 20 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 75 - 123 | 0 | 20 |
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0442 | | mg/Kg | | 88 | 54 - 132 | 1 | 20 |
| 1,2-Dibromoethane | 0.0500 | 0.0512 | | mg/Kg | | 102 | 80 - 120 | 2 | 20 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0508 | | mg/Kg | | 102 | 80 - 120 | 0 | 20 |
| 1,2-Dichloroethane | 0.0500 | 0.0481 | | mg/Kg | | 96 | 79 - 121 | 3 | 20 |
| 1,2-Dichloropropane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 77 - 123 | 1 | 25 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 123 | 0 | 20 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0499 | | mg/Kg | | 100 | 80 - 120 | 2 | 20 |
| 1,3-Dichloropropane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 80 - 120 | 2 | 20 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0493 | | mg/Kg | | 99 | 80 - 120 | 2 | 20 |
| 2,2-Dichloropropane | 0.0500 | 0.0451 | | mg/Kg | | 90 | 58 - 142 | 3 | 20 |
| 2-Chlorotoluene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 56 - 176 | 0 | 20 |
| 4-Chlorotoluene | 0.0500 | 0.0477 | | mg/Kg | | 95 | 67 - 151 | 1 | 20 |
| Benzene | 0.0500 | 0.0452 | | mg/Kg | | 90 | 79 - 120 | 2 | 20 |
| Bromobenzene | 0.0500 | 0.0527 | | mg/Kg | | 105 | 80 - 120 | 0 | 20 |
| Bromochloromethane | 0.0500 | 0.0457 | | mg/Kg | | 91 | 80 - 120 | 3 | 20 |
| Bromodichloromethane | 0.0500 | 0.0502 | | mg/Kg | | 100 | 73 - 127 | 2 | 20 |
| Bromoform | 0.0500 | 0.0493 | | mg/Kg | | 99 | 55 - 133 | 2 | 20 |
| Bromomethane | 0.0500 | 0.0484 | | mg/Kg | | 97 | 36 - 144 | 2 | 20 |
| Carbon tetrachloride | 0.0500 | 0.0495 | | mg/Kg | | 99 | 58 - 142 | 4 | 20 |
| Chlorobenzene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 80 - 120 | 1 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-139465/4**
**Matrix: Solid**
**Analysis Batch: 139465**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | 0.0500 | 0.0482 | | mg/Kg | | 96 | 60 - 120 | 2 | 20 |
| Chloroform | 0.0500 | 0.0482 | | mg/Kg | | 96 | 80 - 120 | 3 | 20 |
| Chloromethane | 0.0500 | 0.0426 | | mg/Kg | | 85 | 50 - 122 | 5 | 20 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0479 | | mg/Kg | | 96 | 80 - 123 | 3 | 20 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0475 | | mg/Kg | | 95 | 74 - 128 | 2 | 20 |
| Dibromochloromethane | 0.0500 | 0.0521 | | mg/Kg | | 104 | 50 - 122 | 3 | 20 |
| Dibromomethane | 0.0500 | 0.0506 | | mg/Kg | | 101 | 70 - 130 | 2 | 20 |
| Dichlorodifluoromethane | 0.0500 | 0.0450 | | mg/Kg | | 90 | 32 - 158 | 0 | 20 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0406 | | mg/Kg | | 81 | 65 - 131 | 4 | 20 |
| Ethanol | 0.500 | 0.397 | | mg/Kg | | 79 | 32 - 158 | 1 | 27 |
| Ethylbenzene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 57 - 153 | 1 | 20 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0421 | | mg/Kg | | 84 | 58 - 136 | 4 | 20 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0571 | | mg/Kg | | 114 | 80 - 120 | 0 | 20 |
| Isopropylbenzene | 0.0500 | 0.0506 | | mg/Kg | | 101 | 80 - 129 | 0 | 20 |
| m,p-Xylene | 0.100 | 0.0973 | | mg/Kg | | 97 | 80 - 122 | 2 | 20 |
| Methylene Chloride | 0.0500 | 0.0441 | | mg/Kg | | 88 | 72 - 120 | 4 | 20 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0428 | | mg/Kg | | 86 | 64 - 124 | 4 | 20 |
| Naphthalene | 0.0500 | 0.0529 | | mg/Kg | | 106 | 64 - 124 | 1 | 20 |
| n-Butylbenzene | 0.0500 | 0.0480 | | mg/Kg | | 96 | 78 - 126 | 2 | 25 |
| N-Propylbenzene | 0.0500 | 0.0495 | | mg/Kg | | 99 | 80 - 122 | 0 | 20 |
| o-Xylene | 0.0500 | 0.0495 | | mg/Kg | | 99 | 79 - 127 | 1 | 20 |
| p-Isopropyltoluene | 0.0500 | 0.0490 | | mg/Kg | | 98 | 80 - 122 | 1 | 20 |
| sec-Butylbenzene | 0.0500 | 0.0487 | | mg/Kg | | 97 | 79 - 127 | 0 | 20 |
| Styrene | 0.0500 | 0.0509 | | mg/Kg | | 102 | 80 - 123 | 1 | 20 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0471 | | mg/Kg | | 94 | 63 - 129 | 1 | 20 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.223 | | mg/Kg | | 89 | 79 - 121 | 1 | 20 |
| tert-Butylbenzene | 0.0500 | 0.0485 | | mg/Kg | | 97 | 80 - 128 | 1 | 20 |
| Tetrachloroethene | 0.0500 | 0.0522 | | mg/Kg | | 104 | 75 - 123 | 1 | 20 |
| Toluene | 0.0500 | 0.0485 | | mg/Kg | | 97 | 80 - 120 | 1 | 20 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0444 | | mg/Kg | | 89 | 80 - 120 | 3 | 20 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0489 | | mg/Kg | | 98 | 66 - 120 | 3 | 20 |
| Trichloroethene | 0.0500 | 0.0486 | | mg/Kg | | 97 | 80 - 120 | 1 | 20 |
| Trichlorofluoromethane | 0.0500 | 0.0491 | | mg/Kg | | 98 | 70 - 136 | 1 | 20 |
| Vinyl chloride | 0.0500 | 0.0472 | | mg/Kg | | 94 | 68 - 120 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *70* | | *51 - 100* |
| *4-6roB omuorof enbene (Surr)* | *77* | | *83 - 123* |
| *Dif roB omuoroB ethane (Surr)* | *78* | | *57 - 1/ /* |
| *zoluene-d8 (Surr)* | *133* | | *83 - 123* |

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-139574/5**
**Matrix: Solid**
**Analysis Batch: 139574**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.099 | 0.055 | mg/Kg | | | 03/30/21 11:34 | 1 |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-6roB orhuorof enbene (Surr) | 82 | | 42 - 12T | | 3/ 9/ 3921 11:/ 4 | 1 |

**Lab Sample ID: LCS 570-139574/3**
**Matrix: Solid**
**Analysis Batch: 139574**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1.97 | 1.95 | | mg/Kg | | 99 | 70 - 124 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-6roB orhuorof enbene (Surr) | 72 | | 42 - 12T |

**Lab Sample ID: LCSD 570-139574/4**
**Matrix: Solid**
**Analysis Batch: 139574**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1.98 | 1.81 | | mg/Kg | | 91 | 70 - 124 | 7 | 18 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 4-6roB orhuorof enbene (Surr) | 72 | | 42 - 12T |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Lab Sample ID: MB 570-139431/1-A**
**Matrix: Solid**
**Analysis Batch: 139332**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139431**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 03/29/21 15:13 | 03/30/21 06:12 | 1 |
| C23-C40 | ND | | 5.0 | 3.8 | mg/Kg | | 03/29/21 15:13 | 03/30/21 06:12 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 70 | | T3 - 1/ 8 | 3/ 9279 21 10:1/ | 3/ 9/ 3921 3T:12 | 1 |

**Lab Sample ID: LCS 570-139431/2-A**
**Matrix: Solid**
**Analysis Batch: 139332**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 139431**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 400 | 440 | | mg/Kg | | 110 | 80 - 130 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 134 | | T3 - 1/ 8 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Lab Sample ID: LCSD 570-139431/3-A**
**Matrix: Solid**
**Analysis Batch: 139332**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139431**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 400 | 441 | | mg/Kg | | 110 | 80 - 130 | 0 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *133* | | *T3 - 1/ 8* |

**Lab Sample ID: 440-281110-A-1-J MS**
**Matrix: Solid**
**Analysis Batch: 139332**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 139431**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 405 | 447 | | mg/Kg | | 110 | 43 - 165 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *13/* | | *T3 - 1/ 8* |

**Lab Sample ID: 440-281110-A-1-K MSD**
**Matrix: Solid**
**Analysis Batch: 139332**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 139431**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 381 | 435 | | mg/Kg | | 114 | 43 - 165 | 3 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *134* | | *T3 - 1/ 8* |

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 570-139367/1-A**
**Matrix: Solid**
**Analysis Batch: 139730**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139367**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00099 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| 4,4'-DDT | ND | | 0.0050 | 0.00036 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Endrin | ND | | 0.0050 | 0.00033 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 570-139367/1-A**
**Matrix: Solid**
**Analysis Batch: 139730**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139367**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00048 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00089 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 03/29/21 12:52 | 03/30/21 22:59 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC6 Decachlorof iphenyl (Surr)* | *130* | | */ 5 - 101* | *3/ 9/ 21 12:02* | *3/ 9/ 21 22:07* | *1* |
| *zetrachloro-B -xylene* | *132* | | */ 8 - 148* | *3/ 9/ 21 12:02* | *3/ 9/ 21 22:07* | *1* |

**Lab Sample ID: LCS 570-139367/2-A**
**Matrix: Solid**
**Analysis Batch: 139730**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 139367**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0250 | 0.0272 | | mg/Kg | | 109 | 54 - 154 |
| 4,4'-DDE | 0.0250 | 0.0248 | | mg/Kg | | 99 | 51 - 149 |
| 4,4'-DDT | 0.0250 | 0.0282 | | mg/Kg | | 113 | 39 - 152 |
| Aldrin | 0.0250 | 0.0243 | | mg/Kg | | 97 | 52 - 138 |
| alpha-BHC | 0.0250 | 0.0257 | | mg/Kg | | 103 | 51 - 140 |
| alpha-Chlordane | 0.0250 | 0.0252 | | mg/Kg | | 101 | 53 - 141 |
| beta-BHC | 0.0250 | 0.0244 | | mg/Kg | | 97 | 53 - 141 |
| delta-BHC | 0.0250 | 0.0258 | | mg/Kg | | 103 | 20 - 132 |
| Dieldrin | 0.0250 | 0.0247 | | mg/Kg | | 99 | 52 - 144 |
| Endosulfan I | 0.0250 | 0.0244 | | mg/Kg | | 98 | 49 - 139 |
| Endosulfan II | 0.0250 | 0.0250 | | mg/Kg | | 100 | 51 - 150 |
| Endosulfan sulfate | 0.0250 | 0.0264 | | mg/Kg | | 106 | 45 - 139 |
| Endrin | 0.0250 | 0.0258 | | mg/Kg | | 103 | 53 - 151 |
| Endrin aldehyde | 0.0250 | 0.0237 | | mg/Kg | | 95 | 31 - 146 |
| gamma-BHC | 0.0250 | 0.0261 | | mg/Kg | | 105 | 53 - 141 |
| gamma-Chlordane | 0.0250 | 0.0250 | | mg/Kg | | 100 | 46 - 156 |
| Heptachlor | 0.0250 | 0.0256 | | mg/Kg | | 102 | 52 - 144 |
| Heptachlor epoxide | 0.0250 | 0.0246 | | mg/Kg | | 98 | 54 - 141 |
| Methoxychlor | 0.0250 | 0.0279 | | mg/Kg | | 112 | 47 - 148 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DC6 Decachlorof iphenyl (Surr)* | *115* | | */ 5 - 101* |
| *zetrachloro-B -xylene* | *111* | | */ 8 - 148* |

**Lab Sample ID: LCSD 570-139367/3-A**
**Matrix: Solid**
**Analysis Batch: 139730**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139367**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0250 | 0.0237 | | mg/Kg | | 95 | 54 - 154 | 14 | 30 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 570-139367/3-A**
**Matrix: Solid**
**Analysis Batch: 139730**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139367**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDE | | | 0.0250 | 0.0216 | | mg/Kg | | 86 | 51 - 149 | 14 | 28 |
| 4,4'-DDT | | | 0.0250 | 0.0240 | | mg/Kg | | 96 | 39 - 152 | 16 | 31 |
| Aldrin | | | 0.0250 | 0.0209 | | mg/Kg | | 83 | 52 - 138 | 15 | 30 |
| alpha-BHC | | | 0.0250 | 0.0224 | | mg/Kg | | 90 | 51 - 140 | 14 | 29 |
| alpha-Chlordane | | | 0.0250 | 0.0218 | | mg/Kg | | 87 | 53 - 141 | 14 | 28 |
| beta-BHC | | | 0.0250 | 0.0212 | | mg/Kg | | 85 | 53 - 141 | 14 | 29 |
| delta-BHC | | | 0.0250 | 0.0225 | | mg/Kg | | 90 | 20 - 132 | 14 | 40 |
| Dieldrin | | | 0.0250 | 0.0212 | | mg/Kg | | 85 | 52 - 144 | 15 | 28 |
| Endosulfan I | | | 0.0250 | 0.0212 | | mg/Kg | | 85 | 49 - 139 | 14 | 28 |
| Endosulfan II | | | 0.0250 | 0.0219 | | mg/Kg | | 88 | 51 - 150 | 13 | 29 |
| Endosulfan sulfate | | | 0.0250 | 0.0227 | | mg/Kg | | 91 | 45 - 139 | 15 | 30 |
| Endrin | | | 0.0250 | 0.0223 | | mg/Kg | | 89 | 53 - 151 | 15 | 29 |
| Endrin aldehyde | | | 0.0250 | 0.0202 | | mg/Kg | | 81 | 31 - 146 | 16 | 40 |
| gamma-BHC | | | 0.0250 | 0.0225 | | mg/Kg | | 90 | 53 - 141 | 15 | 29 |
| gamma-Chlordane | | | 0.0250 | 0.0225 | | mg/Kg | | 90 | 46 - 156 | 11 | 39 |
| Heptachlor | | | 0.0250 | 0.0228 | | mg/Kg | | 91 | 52 - 144 | 11 | 29 |
| Heptachlor epoxide | | | 0.0250 | 0.0212 | | mg/Kg | | 85 | 54 - 141 | 15 | 29 |
| Methoxychlor | | | 0.0250 | 0.0244 | | mg/Kg | | 98 | 47 - 148 | 13 | 29 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *DC6 Decachlorof iphenyl (Surr)* | *13/* | | */ 5 - 101* |
| *zetrachloro-B -xylene* | *7T* | | */ 8 - 148* |

**Lab Sample ID: 440-281052-3 MS**
**Matrix: Solid**
**Analysis Batch: 139730**

**Client Sample ID: B-4-5**
**Prep Type: Total/NA**
**Prep Batch: 139367**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0249 | 0.0220 | | mg/Kg | | 88 | 27 - 144 |
| 4,4'-DDE | ND | | 0.0249 | 0.0206 | | mg/Kg | | 83 | 28 - 141 |
| 4,4'-DDT | ND | | 0.0249 | 0.0236 | | mg/Kg | | 95 | 10 - 154 |
| Aldrin | ND | | 0.0249 | 0.0197 | | mg/Kg | | 79 | 26 - 125 |
| alpha-BHC | ND | | 0.0249 | 0.0212 | | mg/Kg | | 85 | 24 - 125 |
| alpha-Chlordane | ND | | 0.0249 | 0.0208 | | mg/Kg | | 84 | 17 - 144 |
| beta-BHC | ND | | 0.0249 | 0.0200 | | mg/Kg | | 80 | 28 - 125 |
| delta-BHC | ND | | 0.0249 | 0.0216 | | mg/Kg | | 87 | 10 - 125 |
| Dieldrin | ND | | 0.0249 | 0.0202 | | mg/Kg | | 81 | 19 - 145 |
| Endosulfan I | ND | | 0.0249 | 0.0207 | | mg/Kg | | 83 | 25 - 125 |
| Endosulfan II | ND | | 0.0249 | 0.0205 | | mg/Kg | | 82 | 13 - 142 |
| Endosulfan sulfate | ND | | 0.0249 | 0.0225 | | mg/Kg | | 90 | 14 - 126 |
| Endrin | ND | | 0.0249 | 0.0214 | | mg/Kg | | 86 | 28 - 139 |
| Endrin aldehyde | ND | | 0.0249 | 0.0195 | | mg/Kg | | 78 | 12 - 125 |
| gamma-BHC | ND | | 0.0249 | 0.0214 | | mg/Kg | | 86 | 24 - 125 |
| gamma-Chlordane | ND | | 0.0249 | 0.0214 | | mg/Kg | | 86 | 10 - 160 |
| Heptachlor | ND | | 0.0249 | 0.0206 | | mg/Kg | | 83 | 19 - 127 |
| Heptachlor epoxide | ND | | 0.0249 | 0.0201 | | mg/Kg | | 81 | 33 - 123 |
| Methoxychlor | ND | | 0.0249 | 0.0232 | | mg/Kg | | 93 | 19 - 128 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 440-281052-3 MS**
**Matrix: Solid**
**Analysis Batch: 139730**

**Client Sample ID: B-4-5**
**Prep Type: Total/NA**
**Prep Batch: 139367**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| DC6 Decachlorof iphenyl (Surr) | 75 | | / 5 - 101 |
| zetrachloro-B -xylene | 72 | | / 8 - 148 |

**Lab Sample ID: 440-281052-3 MSD**
**Matrix: Solid**
**Analysis Batch: 139730**

**Client Sample ID: B-4-5**
**Prep Type: Total/NA**
**Prep Batch: 139367**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0249 | 0.0208 | | mg/Kg | | 83 | 27 - 144 | 6 | 40 |
| 4,4'-DDE | ND | | 0.0249 | 0.0187 | | mg/Kg | | 75 | 28 - 141 | 10 | 32 |
| 4,4'-DDT | ND | | 0.0249 | 0.0211 | | mg/Kg | | 85 | 10 - 154 | 11 | 40 |
| Aldrin | ND | | 0.0249 | 0.0181 | | mg/Kg | | 73 | 26 - 125 | 8 | 40 |
| alpha-BHC | ND | | 0.0249 | 0.0197 | | mg/Kg | | 79 | 24 - 125 | 8 | 40 |
| alpha-Chlordane | ND | | 0.0249 | 0.0191 | | mg/Kg | | 76 | 17 - 144 | 9 | 40 |
| beta-BHC | ND | | 0.0249 | 0.0179 | | mg/Kg | | 72 | 28 - 125 | 11 | 39 |
| delta-BHC | ND | | 0.0249 | 0.0195 | | mg/Kg | | 78 | 10 - 125 | 10 | 40 |
| Dieldrin | ND | | 0.0249 | 0.0186 | | mg/Kg | | 75 | 19 - 145 | 8 | 39 |
| Endosulfan I | ND | | 0.0249 | 0.0192 | | mg/Kg | | 77 | 25 - 125 | 8 | 39 |
| Endosulfan II | ND | | 0.0249 | 0.0187 | | mg/Kg | | 75 | 13 - 142 | 9 | 40 |
| Endosulfan sulfate | ND | | 0.0249 | 0.0207 | | mg/Kg | | 83 | 14 - 126 | 8 | 38 |
| Endrin | ND | | 0.0249 | 0.0196 | | mg/Kg | | 78 | 28 - 139 | 9 | 40 |
| Endrin aldehyde | ND | | 0.0249 | 0.0179 | | mg/Kg | | 72 | 12 - 125 | 8 | 40 |
| gamma-BHC | ND | | 0.0249 | 0.0197 | | mg/Kg | | 79 | 24 - 125 | 8 | 40 |
| gamma-Chlordane | ND | | 0.0249 | 0.0193 | | mg/Kg | | 77 | 10 - 160 | 10 | 40 |
| Heptachlor | ND | | 0.0249 | 0.0192 | | mg/Kg | | 77 | 19 - 127 | 7 | 40 |
| Heptachlor epoxide | ND | | 0.0249 | 0.0185 | | mg/Kg | | 74 | 33 - 123 | 8 | 34 |
| Methoxychlor | ND | | 0.0249 | 0.0217 | | mg/Kg | | 87 | 19 - 128 | 6 | 40 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| DC6 Decachlorof iphenyl (Surr) | 88 | | / 5 - 101 |
| zetrachloro-B -xylene | 80 | | / 8 - 148 |

## Method: 8151A - Herbicides (GC)

**Lab Sample ID: MB 570-139751/1-A**
**Matrix: Solid**
**Analysis Batch: 140405**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139751**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |
| 2,4-DB | ND | | 0.10 | 0.047 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |
| Dinoseb | ND | | 0.10 | 0.019 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |

## Method: 8151A - Herbicides (GC) (Continued)

**Lab Sample ID: MB 570-139751/1-A**
**Matrix: Solid**
**Analysis Batch: 140405**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139751**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 03/30/21 17:37 | 04/01/21 21:11 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *134* | | *21 - 1T1* | *3/ 9 39 21 15:/ 5* | *349 819 21 21:11* | *1* |

**Lab Sample ID: LCS 570-139751/2-A**
**Matrix: Solid**
**Analysis Batch: 140405**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 139751**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.0400 | 0.0447 | | mg/Kg | | 112 | 20 - 153 |
| 2,4,5-TP (Silvex) | 0.0400 | 0.0468 | | mg/Kg | | 117 | 20 - 147 |
| 2,4-D | 0.400 | 0.466 | | mg/Kg | | 116 | 20 - 153 |
| 2,4-DB | 0.400 | 0.278 | p | mg/Kg | | 69 | 20 - 180 |
| Dalapon | 1.00 | 0.791 | | mg/Kg | | 79 | 20 - 146 |
| Dicamba | 0.0400 | 0.0453 | | mg/Kg | | 113 | 20 - 153 |
| Dichlorprop | 0.400 | 0.438 | | mg/Kg | | 109 | 20 - 146 |
| Dinoseb | 0.200 | ND | *- | mg/Kg | | 2 | 10 - 76 |
| MCPA | 40.0 | 52.9 | | mg/Kg | | 132 | 20 - 142 |
| MCPP | 40.0 | 51.6 | | mg/Kg | | 129 | 23 - 142 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *124* | | *21 - 1T1* |

**Lab Sample ID: LCSD 570-139751/3-A**
**Matrix: Solid**
**Analysis Batch: 140405**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139751**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.0400 | 0.0341 | | mg/Kg | | 85 | 20 - 153 | 27 | 30 |
| 2,4,5-TP (Silvex) | 0.0400 | 0.0393 | | mg/Kg | | 98 | 20 - 147 | 17 | 30 |
| 2,4-D | 0.400 | 0.400 | | mg/Kg | | 100 | 20 - 153 | 15 | 30 |
| 2,4-DB | 0.400 | 0.233 | p | mg/Kg | | 58 | 20 - 180 | 17 | 30 |
| Dalapon | 1.00 | 0.640 | | mg/Kg | | 64 | 20 - 146 | 21 | 30 |
| Dicamba | 0.0400 | 0.0383 | | mg/Kg | | 96 | 20 - 153 | 17 | 30 |
| Dichlorprop | 0.400 | 0.376 | | mg/Kg | | 94 | 20 - 146 | 15 | 30 |
| Dinoseb | 0.200 | ND | *- | mg/Kg | | 2 | 10 - 76 | 13 | 30 |
| MCPA | 40.0 | 43.3 | | mg/Kg | | 108 | 20 - 142 | 20 | 30 |
| MCPP | 40.0 | 42.4 | | mg/Kg | | 106 | 23 - 142 | 20 | 28 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *113* | | *21 - 1T1* |

## Method: 8151A - Herbicides (GC) (Continued)

**Lab Sample ID: 570-54427-B-6-D MS**
**Matrix: Solid**
**Analysis Batch: 140405**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 139751**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0400 | 0.0324 | | mg/Kg | | 81 | 20 - 168 |
| 2,4,5-TP (Silvex) | ND | | 0.0400 | 0.0396 | | mg/Kg | | 99 | 20 - 149 |
| 2,4-D | ND | | 0.400 | 0.336 | | mg/Kg | | 84 | 20 - 149 |
| 2,4-DB | ND | | 0.400 | 0.212 | p | mg/Kg | | 53 | 20 - 180 |
| Dalapon | ND | | 1.00 | 0.657 | | mg/Kg | | 66 | 20 - 136 |
| Dicamba | ND | | 0.0400 | 0.0375 | | mg/Kg | | 94 | 20 - 140 |
| Dichlorprop | ND | | 0.400 | 0.357 | | mg/Kg | | 89 | 20 - 142 |
| Dinoseb | ND | *- F1 | 0.200 | ND | F1 | mg/Kg | | 0 | 10 - 109 |
| MCPA | ND | | 40.0 | 41.5 | | mg/Kg | | 104 | 20 - 137 |
| MCPP | ND | | 40.0 | 42.8 | | mg/Kg | | 107 | 20 - 138 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *138* | | *21 - 1T1* |

**Lab Sample ID: 570-54427-B-6-E MSD**
**Matrix: Solid**
**Analysis Batch: 140405**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 139751**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0398 | 0.0357 | | mg/Kg | | 90 | 20 - 168 | 10 | 40 |
| 2,4,5-TP (Silvex) | ND | | 0.0398 | 0.0436 | | mg/Kg | | 109 | 20 - 149 | 10 | 30 |
| 2,4-D | ND | | 0.398 | 0.355 | | mg/Kg | | 89 | 20 - 149 | 6 | 38 |
| 2,4-DB | ND | | 0.398 | 0.267 | p | mg/Kg | | 67 | 20 - 180 | 23 | 40 |
| Dalapon | ND | | 0.996 | 0.649 | | mg/Kg | | 65 | 20 - 136 | 1 | 40 |
| Dicamba | ND | | 0.0398 | 0.0380 | | mg/Kg | | 95 | 20 - 140 | 1 | 37 |
| Dichlorprop | ND | | 0.398 | 0.384 | | mg/Kg | | 96 | 20 - 142 | 7 | 27 |
| Dinoseb | ND | *- F1 | 0.199 | ND | F1 | mg/Kg | | 0 | 10 - 109 | NC | 40 |
| MCPA | ND | | 39.8 | 42.7 | | mg/Kg | | 107 | 20 - 137 | 3 | 40 |
| MCPP | ND | | 39.8 | 44.6 | | mg/Kg | | 112 | 20 - 138 | 4 | 36 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *117* | | *21 - 1T1* |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-139186/1-A**
**Matrix: Solid**
**Analysis Batch: 139892**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139186**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.0 | 1.4 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Arsenic | ND | | 2.5 | 2.3 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Barium | ND | | 0.50 | 0.22 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Beryllium | ND | | 0.25 | 0.17 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Cadmium | ND | | 0.50 | 0.20 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Chromium | ND | | 1.0 | 0.18 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Cobalt | ND | | 1.0 | 0.23 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Copper | ND | | 1.0 | 0.51 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 570-139186/1-A**
**Matrix: Solid**
**Analysis Batch: 139892**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139186**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | | 5.0 | 0.97 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Molybdenum | ND | | 0.50 | 0.45 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Nickel | ND | | 0.50 | 0.43 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Selenium | ND | | 5.0 | 1.9 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Silver | ND | | 1.0 | 0.23 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Thallium | ND | | 5.0 | 1.5 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Vanadium | 0.230 | J | 1.0 | 0.17 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |
| Zinc | ND | | 10 | 5.1 | mg/Kg | | 03/27/21 16:00 | 03/30/21 19:04 | 1 |

**Lab Sample ID: LCS 570-139186/2-A**
**Matrix: Solid**
**Analysis Batch: 139992**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 139186**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Antimony | 25.3 | 23.3 | | mg/Kg | | 92 | 80 - 120 |
| Arsenic | 25.3 | 23.1 | | mg/Kg | | 91 | 80 - 120 |
| Barium | 25.3 | 24.6 | | mg/Kg | | 97 | 80 - 120 |
| Beryllium | 25.3 | 23.3 | | mg/Kg | | 92 | 80 - 120 |
| Cadmium | 25.3 | 23.6 | | mg/Kg | | 93 | 80 - 120 |
| Chromium | 25.3 | 24.7 | | mg/Kg | | 98 | 80 - 120 |
| Cobalt | 25.3 | 23.3 | | mg/Kg | | 92 | 80 - 120 |
| Copper | 25.3 | 23.9 | | mg/Kg | | 95 | 80 - 120 |
| Lead | 25.3 | 24.8 | | mg/Kg | | 98 | 80 - 120 |
| Molybdenum | 25.3 | 24.0 | | mg/Kg | | 95 | 80 - 120 |
| Nickel | 25.3 | 25.0 | | mg/Kg | | 99 | 80 - 120 |
| Selenium | 25.3 | 23.6 | | mg/Kg | | 94 | 80 - 120 |
| Silver | 12.6 | 12.2 | | mg/Kg | | 97 | 80 - 120 |
| Thallium | 25.3 | 24.7 | | mg/Kg | | 98 | 80 - 120 |
| Vanadium | 25.3 | 22.9 | | mg/Kg | | 91 | 80 - 120 |
| Zinc | 25.3 | 24.3 | | mg/Kg | | 96 | 80 - 120 |

**Lab Sample ID: LCSD 570-139186/3-A**
**Matrix: Solid**
**Analysis Batch: 139992**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139186**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | 25.3 | 24.6 | | mg/Kg | | 98 | 80 - 120 | 5 | 20 |
| Arsenic | 25.3 | 24.3 | | mg/Kg | | 96 | 80 - 120 | 5 | 20 |
| Barium | 25.3 | 25.7 | | mg/Kg | | 102 | 80 - 120 | 4 | 20 |
| Beryllium | 25.3 | 24.0 | | mg/Kg | | 95 | 80 - 120 | 3 | 20 |
| Cadmium | 25.3 | 24.8 | | mg/Kg | | 98 | 80 - 120 | 5 | 20 |
| Chromium | 25.3 | 26.1 | | mg/Kg | | 103 | 80 - 120 | 6 | 20 |
| Cobalt | 25.3 | 24.6 | | mg/Kg | | 98 | 80 - 120 | 6 | 20 |
| Copper | 25.3 | 25.1 | | mg/Kg | | 100 | 80 - 120 | 5 | 20 |
| Lead | 25.3 | 26.0 | | mg/Kg | | 103 | 80 - 120 | 5 | 20 |
| Molybdenum | 25.3 | 25.7 | | mg/Kg | | 102 | 80 - 120 | 7 | 20 |
| Nickel | 25.3 | 26.4 | | mg/Kg | | 105 | 80 - 120 | 5 | 20 |
| Selenium | 25.3 | 25.3 | | mg/Kg | | 100 | 80 - 120 | 7 | 20 |
| Silver | 12.6 | 12.7 | | mg/Kg | | 101 | 80 - 120 | 4 | 20 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 570-139186/3-A**
**Matrix: Solid**
**Analysis Batch: 139992**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139186**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | | | 25.3 | 26.7 | | mg/Kg | | 106 | 80 - 120 | 8 | 20 |
| Vanadium | | | 25.3 | 24.3 | | mg/Kg | | 96 | 80 - 120 | 6 | 20 |
| Zinc | | | 25.3 | 25.7 | | mg/Kg | | 102 | 80 - 120 | 5 | 20 |

**Lab Sample ID: 440-281052-1 MS**
**Matrix: Solid**
**Analysis Batch: 139992**

**Client Sample ID: B-3-5**
**Prep Type: Total/NA**
**Prep Batch: 139186**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 24.6 | 18.3 | | mg/Kg | | 74 | 50 - 115 |
| Arsenic | ND | | 24.6 | 25.9 | | mg/Kg | | 105 | 75 - 125 |
| Barium | 93 | | 24.6 | 118 | | mg/Kg | | 101 | 75 - 125 |
| Beryllium | 0.41 | | 24.6 | 25.4 | | mg/Kg | | 101 | 75 - 125 |
| Cadmium | 0.32 | J | 24.6 | 24.3 | | mg/Kg | | 97 | 75 - 125 |
| Chromium | 14 | | 24.6 | 38.6 | | mg/Kg | | 100 | 75 - 125 |
| Cobalt | 6.8 | | 24.6 | 29.4 | | mg/Kg | | 92 | 75 - 125 |
| Copper | 16 | | 24.6 | 39.7 | | mg/Kg | | 97 | 75 - 125 |
| Lead | 2.6 | J | 24.6 | 27.4 | | mg/Kg | | 101 | 75 - 125 |
| Molybdenum | ND | L | 24.6 | 22.5 | | mg/Kg | | 91 | 75 - 125 |
| Nickel | 11 | | 24.6 | 35.8 | | mg/Kg | | 100 | 75 - 125 |
| Selenium | ND | | 24.6 | 20.3 | | mg/Kg | | 83 | 75 - 125 |
| Silver | ND | | 12.3 | 10.5 | | mg/Kg | | 85 | 75 - 125 |
| Thallium | ND | | 24.6 | 24.7 | | mg/Kg | | 100 | 75 - 125 |
| Vanadium | 22 | B | 24.6 | 45.2 | | mg/Kg | | 94 | 75 - 125 |
| Zinc | 34 | | 24.6 | 60.8 | | mg/Kg | | 109 | 75 - 125 |

**Lab Sample ID: 440-281052-1 MSD**
**Matrix: Solid**
**Analysis Batch: 139992**

**Client Sample ID: B-3-5**
**Prep Type: Total/NA**
**Prep Batch: 139186**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 24.5 | 21.0 | | mg/Kg | | 86 | 50 - 115 | 14 | 20 |
| Arsenic | ND | | 24.5 | 25.4 | | mg/Kg | | 104 | 75 - 125 | 2 | 20 |
| Barium | 93 | | 24.5 | 117 | | mg/Kg | | 100 | 75 - 125 | 0 | 20 |
| Beryllium | 0.41 | | 24.5 | 25.0 | | mg/Kg | | 100 | 75 - 125 | 2 | 20 |
| Cadmium | 0.32 | J | 24.5 | 24.3 | | mg/Kg | | 98 | 75 - 125 | 0 | 20 |
| Chromium | 14 | | 24.5 | 38.6 | | mg/Kg | | 101 | 75 - 125 | 0 | 20 |
| Cobalt | 6.8 | | 24.5 | 29.4 | | mg/Kg | | 92 | 75 - 125 | 0 | 20 |
| Copper | 16 | | 24.5 | 39.5 | | mg/Kg | | 97 | 75 - 125 | 1 | 20 |
| Lead | 2.6 | J | 24.5 | 27.3 | | mg/Kg | | 101 | 75 - 125 | 1 | 20 |
| Molybdenum | ND | L | 24.5 | 23.1 | | mg/Kg | | 94 | 75 - 125 | 3 | 20 |
| Nickel | 11 | | 24.5 | 35.7 | | mg/Kg | | 100 | 75 - 125 | 0 | 20 |
| Selenium | ND | | 24.5 | 21.7 | | mg/Kg | | 89 | 75 - 125 | 7 | 20 |
| Silver | ND | | 12.3 | 10.4 | | mg/Kg | | 85 | 75 - 125 | 1 | 20 |
| Thallium | ND | | 24.5 | 24.7 | | mg/Kg | | 101 | 75 - 125 | 0 | 20 |
| Vanadium | 22 | B | 24.5 | 45.0 | | mg/Kg | | 94 | 75 - 125 | 1 | 20 |
| Zinc | 34 | | 24.5 | 60.1 | | mg/Kg | | 106 | 75 - 125 | 1 | 20 |

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 570-139187/1-A**
**Matrix: Solid**
**Analysis Batch: 139472**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139187**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.079 | 0.013 | mg/Kg | | 03/27/21 16:00 | 03/29/21 14:42 | 1 |

**Lab Sample ID: LCS 570-139187/2-A**
**Matrix: Solid**
**Analysis Batch: 139472**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 139187**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.847 | 0.818 | | mg/Kg | | 97 | 85 - 121 | | |

**Lab Sample ID: LCSD 570-139187/3-A**
**Matrix: Solid**
**Analysis Batch: 139472**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139187**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 0.806 | 0.782 | | mg/Kg | | 97 | 85 - 121 | 4 | 10 |

**Lab Sample ID: 440-281052-1 MS**
**Matrix: Solid**
**Analysis Batch: 139472**

**Client Sample ID: B-3-5**
**Prep Type: Total/NA**
**Prep Batch: 139187**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.036 | J | 0.806 | 0.822 | | mg/Kg | | 97 | 71 - 137 | | |

**Lab Sample ID: 440-281052-1 MSD**
**Matrix: Solid**
**Analysis Batch: 139472**

**Client Sample ID: B-3-5**
**Prep Type: Total/NA**
**Prep Batch: 139187**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.036 | J | 0.806 | 0.823 | | mg/Kg | | 98 | 71 - 137 | 0 | 14 |

## GC/MS VOA

### Prep Batch: 139406

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 5035 | |
| 440-281052-2 | B-3-110 | Total/NA | Solid | 5035 | |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 5035 | |
| 440-281052-4 | B-4-115 | Total/NA | Solid | 5035 | |

### Analysis Batch: 139465

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 8260B | 139406 |
| 440-281052-2 | B-3-110 | Total/NA | Solid | 8260B | 139406 |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 8260B | 139406 |
| 440-281052-4 | B-4-115 | Total/NA | Solid | 8260B | 139406 |
| MB 570-139465/6 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 570-139465/3 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 570-139465/4 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

## GC VOA

### Prep Batch: 139406

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 5035 | |
| 440-281052-2 | B-3-110 | Total/NA | Solid | 5035 | |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 5035 | |
| 440-281052-4 | B-4-115 | Total/NA | Solid | 5035 | |

### Analysis Batch: 139574

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 8015B | 139406 |
| 440-281052-2 | B-3-110 | Total/NA | Solid | 8015B | 139406 |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 8015B | 139406 |
| 440-281052-4 | B-4-115 | Total/NA | Solid | 8015B | 139406 |
| MB 570-139574/5 | Method Blank | Total/NA | Solid | 8015B | |
| LCS 570-139574/3 | Lab Control Sample | Total/NA | Solid | 8015B | |
| LCSD 570-139574/4 | Lab Control Sample Dup | Total/NA | Solid | 8015B | |

## GC Semi VOA

### Analysis Batch: 139332

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 570-139431/1-A | Method Blank | Total/NA | Solid | 8015B | 139431 |
| LCS 570-139431/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 139431 |
| LCSD 570-139431/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 139431 |
| 440-281110-A-1-J MS | Matrix Spike | Total/NA | Solid | 8015B | 139431 |
| 440-281110-A-1-K MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B | 139431 |

### Prep Batch: 139367

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 3546 | |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 3546 | |
| MB 570-139367/1-A | Method Blank | Total/NA | Solid | 3546 | |
| LCS 570-139367/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 570-139367/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| 440-281052-3 MS | B-4-5 | Total/NA | Solid | 3546 | |

## GC Semi VOA (Continued)

### Prep Batch: 139367 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-3 MSD | B-4-5 | Total/NA | Solid | 3546 | |

### Prep Batch: 139431

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 3550C | |
| 440-281052-2 | B-3-110 | Total/NA | Solid | 3550C | |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 3550C | |
| 440-281052-4 | B-4-115 | Total/NA | Solid | 3550C | |
| MB 570-139431/1-A | Method Blank | Total/NA | Solid | 3550C | |
| LCS 570-139431/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| LCSD 570-139431/3-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| 440-281110-A-1-J MS | Matrix Spike | Total/NA | Solid | 3550C | |
| 440-281110-A-1-K MSD | Matrix Spike Duplicate | Total/NA | Solid | 3550C | |

### Analysis Batch: 139625

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 8015B | 139431 |
| 440-281052-2 | B-3-110 | Total/NA | Solid | 8015B | 139431 |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 8015B | 139431 |
| 440-281052-4 | B-4-115 | Total/NA | Solid | 8015B | 139431 |

### Analysis Batch: 139730

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 8081A | 139367 |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 8081A | 139367 |
| MB 570-139367/1-A | Method Blank | Total/NA | Solid | 8081A | 139367 |
| LCS 570-139367/2-A | Lab Control Sample | Total/NA | Solid | 8081A | 139367 |
| LCSD 570-139367/3-A | Lab Control Sample Dup | Total/NA | Solid | 8081A | 139367 |
| 440-281052-3 MS | B-4-5 | Total/NA | Solid | 8081A | 139367 |
| 440-281052-3 MSD | B-4-5 | Total/NA | Solid | 8081A | 139367 |

### Prep Batch: 139751

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 8151A | |
| 440-281052-2 | B-3-110 | Total/NA | Solid | 8151A | |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 8151A | |
| 440-281052-4 | B-4-115 | Total/NA | Solid | 8151A | |
| MB 570-139751/1-A | Method Blank | Total/NA | Solid | 8151A | |
| LCS 570-139751/2-A | Lab Control Sample | Total/NA | Solid | 8151A | |
| LCSD 570-139751/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | |
| 570-54427-B-6-D MS | Matrix Spike | Total/NA | Solid | 8151A | |
| 570-54427-B-6-E MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | |

### Analysis Batch: 140405

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 8151A | 139751 |
| 440-281052-2 | B-3-110 | Total/NA | Solid | 8151A | 139751 |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 8151A | 139751 |
| 440-281052-4 | B-4-115 | Total/NA | Solid | 8151A | 139751 |
| MB 570-139751/1-A | Method Blank | Total/NA | Solid | 8151A | 139751 |
| LCS 570-139751/2-A | Lab Control Sample | Total/NA | Solid | 8151A | 139751 |

## GC Semi VOA (Continued)

### Analysis Batch: 140405 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCSD 570-139751/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | 139751 |
| 570-54427-B-6-D MS | Matrix Spike | Total/NA | Solid | 8151A | 139751 |
| 570-54427-B-6-E MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | 139751 |

## Metals

### Prep Batch: 139186

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 3050B | |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 3050B | |
| MB 570-139186/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 570-139186/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| LCSD 570-139186/3-A | Lab Control Sample Dup | Total/NA | Solid | 3050B | |
| 440-281052-1 MS | B-3-5 | Total/NA | Solid | 3050B | |
| 440-281052-1 MSD | B-3-5 | Total/NA | Solid | 3050B | |

### Prep Batch: 139187

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 7471A | |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 7471A | |
| MB 570-139187/1-A | Method Blank | Total/NA | Solid | 7471A | |
| LCS 570-139187/2-A | Lab Control Sample | Total/NA | Solid | 7471A | |
| LCSD 570-139187/3-A | Lab Control Sample Dup | Total/NA | Solid | 7471A | |
| 440-281052-1 MS | B-3-5 | Total/NA | Solid | 7471A | |
| 440-281052-1 MSD | B-3-5 | Total/NA | Solid | 7471A | |

### Analysis Batch: 139472

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 7471A | 139187 |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 7471A | 139187 |
| MB 570-139187/1-A | Method Blank | Total/NA | Solid | 7471A | 139187 |
| LCS 570-139187/2-A | Lab Control Sample | Total/NA | Solid | 7471A | 139187 |
| LCSD 570-139187/3-A | Lab Control Sample Dup | Total/NA | Solid | 7471A | 139187 |
| 440-281052-1 MS | B-3-5 | Total/NA | Solid | 7471A | 139187 |
| 440-281052-1 MSD | B-3-5 | Total/NA | Solid | 7471A | 139187 |

### Analysis Batch: 139892

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281052-1 | B-3-5 | Total/NA | Solid | 6010B | 139186 |
| 440-281052-3 | B-4-5 | Total/NA | Solid | 6010B | 139186 |
| MB 570-139186/1-A | Method Blank | Total/NA | Solid | 6010B | 139186 |

### Analysis Batch: 139992

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 570-139186/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 139186 |
| LCSD 570-139186/3-A | Lab Control Sample Dup | Total/NA | Solid | 6010B | 139186 |
| 440-281052-1 MS | B-3-5 | Total/NA | Solid | 6010B | 139186 |
| 440-281052-1 MSD | B-3-5 | Total/NA | Solid | 6010B | 139186 |

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| *- | LCS and/or LCSD is outside acceptance limits, low biased. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| p | The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| L | A negative instrument reading had an absolute value greater than the reporting limit |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
5ro1ectP ite: / roSen Born j addlerw

Job ID: 440-289032-9

## Laboratory: Eurofins Calscience LLC

k nless otUerh ise noted, all analwtes yor tUis laboratorwh ere cof ered under eacU accreditationPertiyication beloh v

| Authority | Program | Identification Number | Expiration Date |
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| Caliyornia | j CLQMD 7L5 | 9. 7L0A9A | 99-g0-29 |

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| N090/ | g030/ | j olid | Cobalt |
| N090/ | g030/ | j olid | Commer |
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| N090/ | g030/ | j olid | Ginc |
| . 4. 9L | . 4. 9L | j olid | Mercurw |
| 8093/ | g330C | j olid | C9g-C22 |
| 8093/ | g330C | j olid | C2g-C40 |
| 8093/ | 30g3 | j olid | Rasoline Oanpe ( rpanics )C4-C92' |
| 8089L | g34N | j olid | 4,4ED DD |
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| 8089L | g34N | j olid | L ldrin |
| 8089L | g34N | j olid | almUa-/ BC |
| 8089L | g34N | j olid | almUa-CUlordane |
| 8089L | g34N | j olid | beta-/ BC |
| 8089L | g34N | j olid | CUlordane |
| 8089L | g34N | j olid | delta-/ BC |
| 8089L | g34N | j olid | Dieldrin |
| 8089L | g34N | j olid | Hndosulyan I |
| 8089L | g34N | j olid | Hndosulyan II |
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| 8939L | 8939L | j olid | 2,4,3-T |
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| 8939L | 8939L | j olid | 2,4-D |

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|---|---|---|---|
| 8939L | 8939L | j olid | 2,4-D/ |
| 8939L | 8939L | j olid | Dalamon |
| 8939L | 8939L | j olid | Dicax ba |
| 8939L | 8939L | j olid | DicUormrom |
| 8939L | 8939L | j olid | Dinoseb |
| 8939L | 8939L | j olid | MC5L |
| 8939L | 8939L | j olid | MC55 |
| 82N0/ | 30g3 | j olid | 9,9,9,2-TetracUoroetUane |
| 82N0/ | 30g3 | j olid | 9,9,9-TricUoroetUane |
| 82N0/ | 30g3 | j olid | 9,9,2,2-TetracUoroetUane |
| 82N0/ | 30g3 | j olid | 9,9,2-TricUoro-9,2,2-triyuoroetUane |
| 82N0/ | 30g3 | j olid | 9,9,2-TricUoroetUane |
| 82N0/ | 30g3 | j olid | 9,9-DicUoroetUane |
| 82N0/ | 30g3 | j olid | 9,9-DicUoroetUene |
| 82N0/ | 30g3 | j olid | 9,9-DicUoromromene |
| 82N0/ | 30g3 | j olid | 9,2,g-TricUorobenzene |
| 82N0/ | 30g3 | j olid | 9,2,g-TricUoromromane |
| 82N0/ | 30g3 | j olid | 9,2,4-TricUorobenzene |
| 82N0/ | 30g3 | j olid | 9,2,4-Trix etUwbenzene |
| 82N0/ | 30g3 | j olid | 9,2-Dibrox o-g-CUoromromane |
| 82N0/ | 30g3 | j olid | 9,2-Dibrox oetUane |
| 82N0/ | 30g3 | j olid | 9,2-DicUorobenzene |
| 82N0/ | 30g3 | j olid | 9,2-DicUoroetUane |
| 82N0/ | 30g3 | j olid | 9,2-DicUoromromane |
| 82N0/ | 30g3 | j olid | 9,g,3-Trix etUwbenzene |
| 82N0/ | 30g3 | j olid | 9,g-DicUorobenzene |
| 82N0/ | 30g3 | j olid | 9,g-DicUoromromane |
| 82N0/ | 30g3 | j olid | 9,4-DicUorobenzene |
| 82N0/ | 30g3 | j olid | 2,2-DicUoromromane |
| 82N0/ | 30g3 | j olid | 2-/ utanone |
| 82N0/ | 30g3 | j olid | 2-CUorotoluene |
| 82N0/ | 30g3 | j olid | 2-Be6anone |
| 82N0/ | 30g3 | j olid | 4-CUorotoluene |
| 82N0/ | 30g3 | j olid | 4-MetUw-2-mentanone |
| 82N0/ | 30g3 | j olid | Lcetone |
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| 82N0/ | 30g3 | j olid | / rox ox etUane |
| 82N0/ | 30g3 | j olid | Carbon disulyide |
| 82N0/ | 30g3 | j olid | Carbon tetracUoride |
| 82N0/ | 30g3 | j olid | CUorobenzene |
| 82N0/ | 30g3 | j olid | CUoroetUane |
| 82N0/ | 30g3 | j olid | CUoroyorx |
| 82N0/ | 30g3 | j olid | CUorox etUane |
| 82N0/ | 30g3 | j olid | cis-9,2-DicUoroetUene |
| 82N0/ | 30g3 | j olid | cis-9,g-DicUoromromene |

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|---|---|---|---|
| 82N0/ | 30g3 | j olid | Dibrox ocUorox etUane |
| 82N0/ | 30g3 | j olid | Dibrox ox etUane |
| 82N0/ | 30g3 | j olid | DicUorodiyuorox etUane |
| 82N0/ | 30g3 | j olid | Di-isomromwl etUer )DI5H' |
| 82N0/ | 30g3 | j olid | HtUanol |
| 82N0/ | 30g3 | j olid | HtUwlbenzene |
| 82N0/ | 30g3 | j olid | HtUwl-t-butwl etUer )HT/ H' |
| 82N0/ | 30g3 | j olid | Be6acUoro-9,g-butadiene |
| 82N0/ | 30g3 | j olid | Isomromwlbenzene |
| 82N0/ | 30g3 | j olid | x ,m-Xwlene |
| 82N0/ | 30g3 | j olid | MetUwlene CUoride |
| 82N0/ | 30g3 | j olid | MetUwl-t-/ utwl HtUer )MT/ H' |
| 82N0/ | 30g3 | j olid | VamUtUalene |
| 82N0/ | 30g3 | j olid | n-/ utwlbenzene |
| 82N0/ | 30g3 | j olid | V-5romwlbenzene |
| 82N0/ | 30g3 | j olid | o-Xwlene |
| 82N0/ | 30g3 | j olid | m-Isomromwltoluene |
| 82N0/ | 30g3 | j olid | sec-/ utwlbenzene |
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| 82N0/ | 30g3 | j olid | tert-/ utwl alcoUol )T/ L' |
| 82N0/ | 30g3 | j olid | tert-/ utwlbenzene |
| 82N0/ | 30g3 | j olid | TetracUoroetUene |
| 82N0/ | 30g3 | j olid | Toluene |
| 82N0/ | 30g3 | j olid | trans-9,2-DicUoroetUene |
| 82N0/ | 30g3 | j olid | trans-9,g-DicUoromromene |
| 82N0/ | 30g3 | j olid | TricUoroetUene |
| 82N0/ | 30g3 | j olid | TricUoroyuorox etUane |
| 82N0/ | 30g3 | j olid | Zinwl acetate |
| 82N0/ | 30g3 | j olid | Zinwl cUoride |
| 82N0/ | 30g3 | j olid | Xwlenes, Total |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: Eurofins
Address:
Phone: Danelle
Contact:
PO/SO #: CB21P020

Office Location: Colton
Project Manager: Todd G McFarland

Sampler's Name: Tom C. Johnson
Sampler's Signature:

Project Number: CB21P020
Project Name: Broken Horn Saddlery

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers: VOA | 8 oz | | | ANALYSIS REQUESTED: TPH | 8015 | VOCs | 8260 | Herbicides | 8151A | OCPs | 8081A | CAM 17 Metals | | | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 3/24 | 14:46 | | X | B-3-5 | | | 5 | 1 | | | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | | | |
| S | 3/24 | 16:15 | | X | B-3-110 | | | 5 | 1 | | | ✓ | | ✓ | | ✓ | | | | | | | |
| S | 3/25 | 12:08 | | X | B-4-5 | | | 5 | 1 | | | ✓ | | ✓ | | ✓ | | ✓ | | ✓ | | | |
| S | 3/25 | 13:47 | | X | B-4-115 | | | 5 | 1 | | | ✓ | | ✓ | | ✓ | | | | | | | |

LAB USE ONLY
DUE DATE
TEMP OF COOLER WHEN RECEIVED (°C)
Page ____ of ____

TURNAROUND TIME ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date: | Time: | Received by (Signature) | Date: | Time: |
|---|---|---|---|---|---|
| | 3/25/21 | 16:01 | William Rivera | 3/25/21 | 1601 |
| BWR | 3/25/21 | 1900 | | | |
| | | | Olga Ornelas | 3/25/21 | 1900 |
| | | | | | |

NOTES: 5-Day TAT

EC IRU

Matrix: WW Wastewater; W Water; S Soil; L -Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml Glass wide mouth; P/O Plastic or other ____



N \Environmental\Forms
*Rev. 6/30/2017*

26/28 #90

440-281052 Chain of Custody

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281052-1

**Login Number: 281052**
**List Number: 1**
**Creator: Skinner, Alma D**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281052-1

**Login Number: 281052**
**List Number: 2**
**Creator: Stratford, Jordan**

**List Source: Eurofins Calscience**
**List Creation: 03/26/21 08:04 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.2 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281213-1
Client Project/Site: Broken Horn Saddlery

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/7/2021 1:34:03 PM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281213-1

| Lab Sample ID | Client Sample ID | Ratric | Cvlledteo | Medeixeo | Asset ID |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Solid | 03/29/21 13:38 | 03/30/21 15:00 | |
| 440-281213-2 | B-5-115 | Solid | 03/29/21 15:45 | 03/30/21 15:00 | |
| 440-281213-3 | B-6-5 | Solid | 03/30/21 13:26 | 03/30/21 15:00 | |

## Job ID: 440-281213-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281213-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/30/2021 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0º C.

**GC/MS VOA**
Method 8260B: The following analyte recovered outside control limits for the LCS associated with analytical batch 570-140088: Hexachlorobutadiene. This is not indicative of a systematic control problem because this was random marginal exceedances. Qualified results have been reported.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-140088.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC VOA**
Method 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 140483.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC Semi VOA**
Method 8081A: The continuing calibration verification (CCV) associated with 570-140376 recovered outside the control limits for Heptachlor on one column. Results are confirmed on both columns and reported from the passing column.

Method 8151A: The matrix spike/matrix spike duplicate (MS/MSD) for preparation batch 570-140431 and analytical batch 570-140830 exceeded control limits for the following analyte(s): Dinoseb, Note that this analyte is a known poor performer when analyzed using this method.

Method 8151A: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 570-140431 and analytical batch 570-140830 recovered outside control limits for the following analyte(s): Dinoseb. Dinoseb has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method 8151A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-140431 and analytical batch 570-140830 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**
Method 6010B: The absolute response for Molybdenum was greater than the method reporting limit (RL) in the following sample: B-6-5 (440-281213-3).
The instrument raw data has been manually reviewed and the result can be reported as ND.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Job ID: 440-281213-1 (Continued)

### Laboratory: Eurofins Calscience Irvine (Continued)

**VOA Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281213-1

## Client Sample ID: B-5-5 — Lab Sample ID: 440-281213-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.014 | J | 0.018 | 0.0086 | mg/Kg | 1 | | 8260B | Total/NA |
| Benzene | 0.00024 | J | 0.00088 | 0.00023 | mg/Kg | 1 | | 8260B | Total/NA |
| C13-C22 | 6.3 | | 5.0 | 3.9 | mg/Kg | 1 | | 8015B | Total/NA |
| C23-C40 | 41 | | 5.0 | 3.9 | mg/Kg | 1 | | 8015B | Total/NA |
| 4,4'-DDT | 0.00060 | J | 0.0050 | 0.00036 | mg/Kg | 1 | | 8081A | Total/NA |
| Barium | 51 | | 0.51 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Beryllium | 0.28 | | 0.26 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Cadmium | 0.28 | J | 0.51 | 0.21 | mg/Kg | 1 | | 6010B | Total/NA |
| Chromium | 8.0 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 4.5 | | 1.0 | 0.23 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 9.5 | | 1.0 | 0.52 | mg/Kg | 1 | | 6010B | Total/NA |
| Lead | 14 | | 5.1 | 0.99 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 8.9 | | 0.51 | 0.44 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 17 | | 1.0 | 0.18 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 30 | | 10 | 5.2 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.032 | J | 0.082 | 0.013 | mg/Kg | 1 | | 7471A | Total/NA |

## Client Sample ID: B-5-115 — Lab Sample ID: 440-281213-2

No Detections.

## Client Sample ID: B-6-5 — Lab Sample ID: 440-281213-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 0.015 | J | 0.023 | 0.011 | mg/Kg | 1 | | 8260B | Total/NA |
| Benzene | 0.00044 | J | 0.0011 | 0.00029 | mg/Kg | 1 | | 8260B | Total/NA |
| Barium | 74 | | 0.48 | 0.21 | mg/Kg | 1 | | 6010B | Total/NA |
| Beryllium | 0.34 | | 0.24 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Cadmium | 0.25 | J | 0.48 | 0.20 | mg/Kg | 1 | | 6010B | Total/NA |
| Chromium | 13 | | 0.97 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Cobalt | 6.7 | | 0.97 | 0.22 | mg/Kg | 1 | | 6010B | Total/NA |
| Copper | 12 | | 0.97 | 0.49 | mg/Kg | 1 | | 6010B | Total/NA |
| Lead | 1.1 | J | 4.8 | 0.93 | mg/Kg | 1 | | 6010B | Total/NA |
| Nickel | 10 | | 0.48 | 0.41 | mg/Kg | 1 | | 6010B | Total/NA |
| Vanadium | 22 | | 0.97 | 0.17 | mg/Kg | 1 | | 6010B | Total/NA |
| Zinc | 31 | | 9.7 | 4.9 | mg/Kg | 1 | | 6010B | Total/NA |
| Mercury | 0.047 | J | 0.081 | 0.013 | mg/Kg | 1 | | 7471A | Total/NA |

This Detection Summary does not include radiochemical test results.

**Client Sample ID: B-5-5**
**Date Collected: 03/29/21 13:38**
**Date Received: 03/30/21 15:00**

**Lab Sample ID: 440-281213-1**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00088 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00088 | 0.00020 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0018 | 0.00048 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0088 | 0.00041 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00088 | 0.00041 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,1-Dichloroethane | ND | | 0.00088 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,1-Dichloroethene | ND | | 0.00088 | 0.00023 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,1-Dichloropropene | ND | | 0.0018 | 0.00034 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0018 | 0.00088 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0018 | 0.00037 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0018 | 0.00036 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0018 | 0.00053 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0088 | 0.0059 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2-Dibromoethane | ND | | 0.00088 | 0.00018 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00088 | 0.00022 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2-Dichloroethane | ND | | 0.00088 | 0.00024 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,2-Dichloropropane | ND | | 0.00088 | 0.00024 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0018 | 0.00053 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00088 | 0.00022 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,3-Dichloropropane | ND | | 0.00088 | 0.00026 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00088 | 0.00027 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 2,2-Dichloropropane | ND | | 0.0044 | 0.00024 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 2-Butanone | ND | | 0.018 | 0.0040 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 2-Chlorotoluene | ND | | 0.00088 | 0.00022 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 2-Hexanone | ND | | 0.018 | 0.0027 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 4-Chlorotoluene | ND | | 0.00088 | 0.00021 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.018 | 0.0026 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| **Acetone** | **0.014** | **J** | 0.018 | 0.0086 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| **Benzene** | **0.00024** | **J** | 0.00088 | 0.00023 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Bromobenzene | ND | | 0.00088 | 0.00018 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Bromochloromethane | ND | | 0.0018 | 0.00039 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Bromodichloromethane | ND | | 0.00088 | 0.00014 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Bromoform | ND | | 0.0044 | 0.0012 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Bromomethane | ND | | 0.018 | 0.0058 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Carbon disulfide | ND | | 0.0088 | 0.00035 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Carbon tetrachloride | ND | | 0.00088 | 0.00026 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Chlorobenzene | ND | | 0.00088 | 0.00023 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Chloroethane | ND | | 0.0018 | 0.0013 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Chloroform | ND | | 0.00088 | 0.00052 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Chloromethane | ND | | 0.018 | 0.0013 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00088 | 0.00030 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00088 | 0.00031 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Dibromochloromethane | ND | | 0.0018 | 0.00024 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Dibromomethane | ND | | 0.00088 | 0.00027 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Dichlorodifluoromethane | ND | | 0.0018 | 0.00040 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00088 | 0.00044 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Ethanol | ND | | 0.22 | 0.058 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Ethylbenzene | ND | | 0.00088 | 0.00018 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00088 | 0.00021 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |

## Client Sample ID: B-5-5
**Date Collected: 03/29/21 13:38**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281213-1
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ND | *+ | 0.0044 | 0.0015 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Isopropylbenzene | ND | | 0.00088 | 0.00053 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| m,p-Xylene | ND | | 0.0018 | 0.00042 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Methylene Chloride | ND | | 0.0088 | 0.0027 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0018 | 0.00016 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Naphthalene | ND | | 0.0088 | 0.0046 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| n-Butylbenzene | ND | | 0.00088 | 0.00018 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| N-Propylbenzene | ND | | 0.0018 | 0.00053 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| o-Xylene | ND | | 0.00088 | 0.00053 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| p-Isopropyltoluene | ND | | 0.00088 | 0.00061 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| sec-Butylbenzene | ND | | 0.00088 | 0.00053 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Styrene | ND | | 0.00088 | 0.00061 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00088 | 0.00017 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.018 | 0.0061 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| tert-Butylbenzene | ND | | 0.00088 | 0.00022 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Tetrachloroethene | ND | | 0.00088 | 0.00020 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Toluene | ND | | 0.00088 | 0.00053 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00088 | 0.00026 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0018 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Trichloroethene | ND | | 0.0018 | 0.00034 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Trichlorofluoromethane | ND | | 0.0088 | 0.00024 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Vinyl acetate | ND | | 0.0088 | 0.0034 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Vinyl chloride | ND | | 0.00088 | 0.00033 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |
| Xylenes, Total | ND | | 0.0018 | 0.00053 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *71 - 155* | *03/31/21 19:12* | *04/01/21 00:18* | *1* |
| *4-6roB orhuorof enbene (Surr)* | *101* | | *80 - 120* | *03/31/21 19:12* | *04/01/21 00:18* | *1* |
| *Dif roB orhuoroB ethane (Surr)* | *9z* | | *79 - 133* | *03/31/21 19:12* | *04/01/21 00:18* | *1* |
| *Toluene-d8 (Surr)* | *9z* | | *80 - 120* | *03/31/21 19:12* | *04/01/21 00:18* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.087 | 0.049 | mg/Kg | | 03/31/21 19:12 | 04/02/21 14:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-6roB orhuorof enbene (Surr)* | *105* | | *42 - 12z* | *03/31/21 19:12* | *04/02/21 14:0z* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C13-C22** | **6.3** | | 5.0 | 3.9 | mg/Kg | | 04/05/21 19:10 | 04/06/21 02:46 | 1 |
| **C23-C40** | **41** | | 5.0 | 3.9 | mg/Kg | | 04/05/21 19:10 | 04/06/21 02:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *105* | | *z0 - 138* | *04/05/21 19:10* | *04/0z/21 02:4z* | *1* |

### Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00098 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| **4,4'-DDT** | **0.00060** | **J** | 0.0050 | 0.00036 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |

## Client Sample ID: B-5-5

**Date Collected: 03/29/21 13:38**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281213-1

**Matrix: Solid**

### Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Endrin | ND | | 0.0050 | 0.00033 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00047 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00088 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC6 Decachlorof iphenyl (Surr)* | *8z* | | *37 - 151* | *04/01/21 08:00* | *04/02/21 12:41* | *1* |
| *Tetrachloro-B -xylene* | *79* | | *38 - 148* | *04/01/21 08:00* | *04/02/21 12:41* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| 2,4-DB | ND | | 0.10 | 0.047 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| Dinoseb | ND | *- | 0.10 | 0.019 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *87* | | *21 - 1z1* | *04/02/21 07:33* | *04/03/21 21:34* | *1* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 3.1 | 1.4 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| Arsenic | ND | | 2.6 | 2.3 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Barium** | **51** | | 0.51 | 0.23 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Beryllium** | **0.28** | | 0.26 | 0.18 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Cadmium** | **0.28** | **J** | 0.51 | 0.21 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Chromium** | **8.0** | | 1.0 | 0.18 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Cobalt** | **4.5** | | 1.0 | 0.23 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Copper** | **9.5** | | 1.0 | 0.52 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |

## Client Sample ID: B-5-5

**Date Collected: 03/29/21 13:38**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281213-1

**Matrix: Solid**

### Method: 6010B - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **14** | | 5.1 | 0.99 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| Molybdenum | ND | | 0.51 | 0.46 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Nickel** | **8.9** | | 0.51 | 0.44 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| Selenium | ND | | 5.1 | 1.9 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| Silver | ND | | 1.0 | 0.23 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| Thallium | ND | | 5.1 | 1.5 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Vanadium** | **17** | | 1.0 | 0.18 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |
| **Zinc** | **30** | | 10 | 5.2 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:41 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.032** | **J** | 0.082 | 0.013 | mg/Kg | | 04/01/21 18:00 | 04/02/21 17:27 | 1 |

## Client Sample ID: B-5-115

**Date Collected: 03/29/21 15:45**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281213-2

**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00092 | 0.00027 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00092 | 0.00021 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0018 | 0.00050 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0092 | 0.00042 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00092 | 0.00043 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,1-Dichloroethane | ND | | 0.00092 | 0.00026 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,1-Dichloroethene | ND | | 0.00092 | 0.00024 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,1-Dichloropropene | ND | | 0.0018 | 0.00036 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0018 | 0.00092 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0018 | 0.00039 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0018 | 0.00038 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0018 | 0.00055 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0092 | 0.0062 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2-Dibromoethane | ND | | 0.00092 | 0.00019 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00092 | 0.00023 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2-Dichloroethane | ND | | 0.00092 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,2-Dichloropropane | ND | | 0.00092 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0018 | 0.00055 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00092 | 0.00023 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,3-Dichloropropane | ND | | 0.00092 | 0.00027 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00092 | 0.00028 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 2,2-Dichloropropane | ND | | 0.0046 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 2-Butanone | ND | | 0.018 | 0.0041 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 2-Chlorotoluene | ND | | 0.00092 | 0.00023 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 2-Hexanone | ND | | 0.018 | 0.0028 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 4-Chlorotoluene | ND | | 0.00092 | 0.00022 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.018 | 0.0027 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Acetone | ND | | 0.018 | 0.0090 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Benzene | ND | | 0.00092 | 0.00024 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Bromobenzene | ND | | 0.00092 | 0.00019 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Bromochloromethane | ND | | 0.0018 | 0.00041 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |

**Client Sample ID: B-5-115**
**Date Collected: 03/29/21 15:45**
**Date Received: 03/30/21 15:00**

**Lab Sample ID: 440-281213-2**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | 0.00092 | 0.00015 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Bromoform | ND | | 0.0046 | 0.0012 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Bromomethane | ND | | 0.018 | 0.0060 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Carbon disulfide | ND | | 0.0092 | 0.00037 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Carbon tetrachloride | ND | | 0.00092 | 0.00027 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Chlorobenzene | ND | | 0.00092 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Chloroethane | ND | | 0.0018 | 0.0014 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Chloroform | ND | | 0.00092 | 0.00054 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Chloromethane | ND | | 0.018 | 0.0014 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00092 | 0.00031 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00092 | 0.00032 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Dibromochloromethane | ND | | 0.0018 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Dibromomethane | ND | | 0.00092 | 0.00028 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Dichlorodifluoromethane | ND | | 0.0018 | 0.00042 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00092 | 0.00046 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Ethanol | ND | | 0.23 | 0.061 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Ethylbenzene | ND | | 0.00092 | 0.00019 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00092 | 0.00022 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Hexachloro-1,3-butadiene | ND | *+ | 0.0046 | 0.0015 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Isopropylbenzene | ND | | 0.00092 | 0.00055 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| m,p-Xylene | ND | | 0.0018 | 0.00044 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Methylene Chloride | ND | | 0.0092 | 0.0029 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0018 | 0.00017 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Naphthalene | ND | | 0.0092 | 0.0048 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| n-Butylbenzene | ND | | 0.00092 | 0.00019 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| N-Propylbenzene | ND | | 0.0018 | 0.00055 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| o-Xylene | ND | | 0.00092 | 0.00055 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| p-Isopropyltoluene | ND | | 0.00092 | 0.00064 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| sec-Butylbenzene | ND | | 0.00092 | 0.00055 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Styrene | ND | | 0.00092 | 0.00064 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00092 | 0.00018 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.018 | 0.0064 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| tert-Butylbenzene | ND | | 0.00092 | 0.00023 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Tetrachloroethene | ND | | 0.00092 | 0.00021 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Toluene | ND | | 0.00092 | 0.00055 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00092 | 0.00028 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0018 | 0.00026 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Trichloroethene | ND | | 0.0018 | 0.00036 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Trichlorofluoromethane | ND | | 0.0092 | 0.00025 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Vinyl acetate | ND | | 0.0092 | 0.0036 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Vinyl chloride | ND | | 0.00092 | 0.00035 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |
| Xylenes, Total | ND | | 0.0018 | 0.00055 | mg/Kg | | 03/31/21 19:12 | 04/01/21 00:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *71 - 155* | *03/31/21 19:12* | *04/01/21 00:43* | *1* |
| *4-6roB orhuorof enbene (Surr)* | *100* | | *80 - 120* | *03/31/21 19:12* | *04/01/21 00:43* | *1* |
| *Dif roB orhuoroB ethane (Surr)* | *95* | | *79 - 133* | *03/31/21 19:12* | *04/01/21 00:43* | *1* |
| *Toluene-d8 (Surr)* | *9z* | | *80 - 120* | *03/31/21 19:12* | *04/01/21 00:43* | *1* |

## Client Sample ID: B-5-115

**Date Collected: 03/29/21 15:45**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281213-2

**Matrix: Solid**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.074 | 0.041 | mg/Kg | | 03/31/21 19:12 | 04/02/21 14:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-6roB ornuorof enbene (Surr)* | *105* | | *42 - 12z* | *03/31/21 19:12* | *04/02/21 14:29* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 04/05/21 19:10 | 04/06/21 03:06 | 1 |
| C23-C40 | ND | | 5.0 | 3.8 | mg/Kg | | 04/05/21 19:10 | 04/06/21 03:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *108* | | *z0 - 138* | *04/05/21 19:10* | *04/0z/21 03:0z* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| 2,4-DB | ND | | 0.10 | 0.047 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| Dinoseb | ND | *- | 0.10 | 0.019 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 04/02/21 07:33 | 04/03/21 21:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *8z* | | *21 - 1z1* | *04/02/21 07:33* | *04/03/21 21:5z* | *1* |

## Client Sample ID: B-6-5

**Date Collected: 03/30/21 13:26**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281213-3

**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0011 | 0.00033 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0011 | 0.00026 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0023 | 0.00061 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.011 | 0.00052 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0011 | 0.00052 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,1-Dichloroethane | ND | | 0.0011 | 0.00032 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,1-Dichloroethene | ND | | 0.0011 | 0.00030 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,1-Dichloropropene | ND | | 0.0023 | 0.00044 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0023 | 0.0011 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0023 | 0.00047 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0023 | 0.00046 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0023 | 0.00068 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.011 | 0.0076 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,2-Dibromoethane | ND | | 0.0011 | 0.00023 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0011 | 0.00028 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,2-Dichloroethane | ND | | 0.0011 | 0.00031 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281213-1

**Client Sample ID: B-6-5**
**Date Collected: 03/30/21 13:26**
**Date Received: 03/30/21 15:00**

**Lab Sample ID: 440-281213-3**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ND | | 0.0011 | 0.00031 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0023 | 0.00068 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0011 | 0.00028 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,3-Dichloropropane | ND | | 0.0011 | 0.00033 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0011 | 0.00035 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 2,2-Dichloropropane | ND | | 0.0056 | 0.00031 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 2-Butanone | ND | | 0.023 | 0.0051 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 2-Chlorotoluene | ND | | 0.0011 | 0.00028 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 2-Hexanone | ND | | 0.023 | 0.0035 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 4-Chlorotoluene | ND | | 0.0011 | 0.00027 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.023 | 0.0033 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| **Acetone** | **0.015** | **J** | 0.023 | 0.011 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| **Benzene** | **0.00044** | **J** | 0.0011 | 0.00029 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Bromobenzene | ND | | 0.0011 | 0.00024 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Bromochloromethane | ND | | 0.0023 | 0.00050 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Bromodichloromethane | ND | | 0.0011 | 0.00018 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Bromoform | ND | | 0.0056 | 0.0015 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Bromomethane | ND | | 0.023 | 0.0074 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Carbon disulfide | ND | | 0.011 | 0.00045 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Carbon tetrachloride | ND | | 0.0011 | 0.00034 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Chlorobenzene | ND | | 0.0011 | 0.00030 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Chloroethane | ND | | 0.0023 | 0.0017 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Chloroform | ND | | 0.0011 | 0.00066 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Chloromethane | ND | | 0.023 | 0.0017 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0011 | 0.00038 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0011 | 0.00039 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Dibromochloromethane | ND | | 0.0023 | 0.00031 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Dibromomethane | ND | | 0.0011 | 0.00034 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Dichlorodifluoromethane | ND | | 0.0023 | 0.00051 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0011 | 0.00056 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Ethanol | ND | | 0.28 | 0.074 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Ethylbenzene | ND | | 0.0011 | 0.00023 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0011 | 0.00027 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Hexachloro-1,3-butadiene | ND | *+ | 0.0056 | 0.0019 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Isopropylbenzene | ND | | 0.0011 | 0.00068 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| m,p-Xylene | ND | | 0.0023 | 0.00053 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Methylene Chloride | ND | | 0.011 | 0.0035 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0023 | 0.00021 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Naphthalene | ND | | 0.011 | 0.0059 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| n-Butylbenzene | ND | | 0.0011 | 0.00024 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| N-Propylbenzene | ND | | 0.0023 | 0.00068 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| o-Xylene | ND | | 0.0011 | 0.00068 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| p-Isopropyltoluene | ND | | 0.0011 | 0.00079 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| sec-Butylbenzene | ND | | 0.0011 | 0.00068 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Styrene | ND | | 0.0011 | 0.00079 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0011 | 0.00022 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.023 | 0.0079 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| tert-Butylbenzene | ND | | 0.0011 | 0.00029 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Tetrachloroethene | ND | | 0.0011 | 0.00025 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |

## Client Sample ID: B-6-5
**Date Collected: 03/30/21 13:26**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281213-3
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 0.0011 | 0.00068 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0011 | 0.00034 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0023 | 0.00032 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Trichloroethene | ND | | 0.0023 | 0.00044 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Trichlorofluoromethane | ND | | 0.011 | 0.00031 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Vinyl acetate | ND | | 0.011 | 0.0044 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Vinyl chloride | ND | | 0.0011 | 0.00043 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |
| Xylenes, Total | ND | | 0.0023 | 0.00068 | mg/Kg | | 03/31/21 19:34 | 04/01/21 01:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *71 - 155* | *03/31/21 19:34* | *04/01/21 01:09* | *1* |
| *4-6roB orhuorof enbene (Surr)* | *100* | | *80 - 120* | *03/31/21 19:34* | *04/01/21 01:09* | *1* |
| *Dif roB orhuoroB ethane (Surr)* | *9z* | | *79 - 133* | *03/31/21 19:34* | *04/01/21 01:09* | *1* |
| *Toluene-d8 (Surr)* | *95* | | *80 - 120* | *03/31/21 19:34* | *04/01/21 01:09* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.11 | 0.062 | mg/Kg | | 03/31/21 19:34 | 04/02/21 14:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-6roB orhuorof enbene (Surr)* | *105* | | *42 - 12z* | *03/31/21 19:34* | *04/02/21 14:53* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 4.9 | 3.8 | mg/Kg | | 04/05/21 19:10 | 04/06/21 03:27 | 1 |
| C23-C40 | ND | | 4.9 | 3.8 | mg/Kg | | 04/05/21 19:10 | 04/06/21 03:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *10z* | | *z0 - 138* | *04/05/21 19:10* | *04/0z/21 03:27* | *1* |

### Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0049 | 0.00097 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| 4,4'-DDE | ND | | 0.0049 | 0.00053 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| 4,4'-DDT | ND | | 0.0049 | 0.00035 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Aldrin | ND | | 0.0049 | 0.00029 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| alpha-BHC | ND | | 0.0049 | 0.0030 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| alpha-Chlordane | ND | | 0.0049 | 0.0013 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| beta-BHC | ND | | 0.0049 | 0.0036 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Chlordane | ND | | 0.025 | 0.0023 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| delta-BHC | ND | | 0.0049 | 0.0033 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Dieldrin | ND | | 0.0049 | 0.00025 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Endosulfan I | ND | | 0.0049 | 0.00043 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Endosulfan II | ND | | 0.0049 | 0.00030 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Endosulfan sulfate | ND | | 0.0049 | 0.00040 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Endrin | ND | | 0.0049 | 0.00033 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Endrin aldehyde | ND | | 0.0049 | 0.00072 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Endrin ketone | ND | | 0.0049 | 0.00047 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| gamma-BHC | ND | | 0.0049 | 0.00061 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| gamma-Chlordane | ND | | 0.0049 | 0.00025 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Heptachlor | ND | | 0.0049 | 0.00087 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |

## Client Sample ID: B-6-5

**Date Collected: 03/30/21 13:26**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281213-3

**Matrix: Solid**

### Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Heptachlor epoxide | ND | | 0.0049 | 0.00066 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Methoxychlor | ND | | 0.0049 | 0.00080 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |
| Toxaphene | ND | | 0.025 | 0.019 | mg/Kg | | 04/01/21 08:00 | 04/02/21 12:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC6 Decachlorof iphenyl (Surr)* | *91* | | *37 - 151* | *04/01/21 08:00* | *04/02/21 12:55* | *1* |
| *Tetrachloro-B -xylene* | *87* | | *38 - 148* | *04/01/21 08:00* | *04/02/21 12:55* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.010 | 0.0037 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.010 | 0.0036 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| 2,4-D | ND | | 0.10 | 0.049 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| 2,4-DB | ND | | 0.10 | 0.047 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| Dalapon | ND | | 0.25 | 0.073 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| Dicamba | ND | | 0.010 | 0.0047 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| Dichlorprop | ND | | 0.10 | 0.049 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| Dinoseb | ND | *- | 0.10 | 0.019 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| MCPA | ND | | 20 | 11 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |
| MCPP | ND | | 10 | 6.6 | mg/Kg | | 04/02/21 07:33 | 04/03/21 22:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *71* | | *21 - 1z1* | *04/02/21 07:33* | *04/03/21 22:19* | *1* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ND | | 2.9 | 1.3 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| Arsenic | ND | | 2.4 | 2.2 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Barium** | **74** | | 0.48 | 0.21 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Beryllium** | **0.34** | | 0.24 | 0.17 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Cadmium** | **0.25** | **J** | 0.48 | 0.20 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Chromium** | **13** | | 0.97 | 0.17 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Cobalt** | **6.7** | | 0.97 | 0.22 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Copper** | **12** | | 0.97 | 0.49 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Lead** | **1.1** | **J** | 4.8 | 0.93 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| Molybdenum | ND | L | 0.48 | 0.44 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Nickel** | **10** | | 0.48 | 0.41 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| Selenium | ND | | 4.8 | 1.8 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| Silver | ND | | 0.97 | 0.22 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| Thallium | ND | | 4.8 | 1.4 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Vanadium** | **22** | | 0.97 | 0.17 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |
| **Zinc** | **31** | | 9.7 | 4.9 | mg/Kg | | 04/01/21 18:00 | 04/02/21 20:43 | 1 |

### Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.047** | **J** | 0.081 | 0.013 | mg/Kg | | 04/01/21 18:00 | 04/02/21 17:28 | 1 |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281213-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Solid** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (71-155) | (80-120) | (79-133) | (80-120) |
| 440-281213-1 | B-5-5 | 114 | 101 | 96 | 96 |
| 440-281213-2 | B-5-115 | 113 | 100 | 95 | 96 |
| 440-281213-3 | B-6-5 | 115 | 100 | 96 | 95 |
| LCS 570-140088/4 | Lab Control Sample | 109 | 106 | 102 | 99 |
| LCSD 570-140088/5 | Lab Control Sample Dup | 107 | 104 | 101 | 99 |
| MB 570-140088/7 | Method Blank | 112 | 100 | 97 | 97 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

**Matrix: Solid** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | BFB1 |
| Lab Sample ID | Client Sample ID | (42-126) |
| 440-281213-1 | B-5-5 | 105 |
| 440-281213-2 | B-5-115 | 105 |
| 440-281213-3 | B-6-5 | 105 |
| LCS 570-140483/3 | Lab Control Sample | 96 |
| LCSD 570-140483/4 | Lab Control Sample Dup | 95 |
| MB 570-140483/5 | Method Blank | 91 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Solid** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | OTCSN1 |
| Lab Sample ID | Client Sample ID | (60-138) |
| 440-281213-1 | B-5-5 | 105 |
| 440-281213-2 | B-5-115 | 108 |
| 440-281213-3 | B-6-5 | 106 |
| 570-55631-F-1-A MS | Matrix Spike | 110 |
| 570-55631-F-1-B MSD | Matrix Spike Duplicate | 104 |
| LCS 570-141144/2-A | Lab Control Sample | 99 |
| LCSD 570-141144/3-A | Lab Control Sample Dup | 107 |
| MB 570-141144/1-A | Method Blank | 107 |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# Surrogate Summary

Client: Terracon Consultants Inc
Job ID: 440-281213-1
Project/Site: Broken Horn Saddlery

## Method: 8081A - Organochlorine Pesticides (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DCB1 (37-151) | TCX1 (38-148) | | | | | | | | |
| 440-281213-1 | B-5-5 | 86 | 79 | | | | | | | | |
| 440-281213-3 | B-6-5 | 91 | 87 | | | | | | | | |
| 570-55269-A-50-C MS | Matrix Spike | 93 | 81 | | | | | | | | |
| 570-55269-A-50-D MSD | Matrix Spike Duplicate | 95 | 81 | | | | | | | | |
| LCS 570-140152/2-A | Lab Control Sample | 103 | 96 | | | | | | | | |
| LCSD 570-140152/3-A | Lab Control Sample Dup | 108 | 99 | | | | | | | | |
| MB 570-140152/1-A | Method Blank | 97 | 74 | | | | | | | | |

**Surrogate Legend**

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

## Method: 8151A - Herbicides (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DCPAA1 (21-161) | | | | | | | | | |
| 440-281213-1 | B-5-5 | 87 | | | | | | | | | |
| 440-281213-2 | B-5-115 | 86 | | | | | | | | | |
| 440-281213-3 | B-6-5 | 71 | | | | | | | | | |
| 570-54549-A-7-R MS | Matrix Spike | 63 | | | | | | | | | |
| 570-54549-A-7-S MSD | Matrix Spike Duplicate | 36 | | | | | | | | | |
| LCS 570-140431/2-A | Lab Control Sample | 38 | | | | | | | | | |
| LCSD 570-140431/3-A | Lab Control Sample Dup | 31 | | | | | | | | | |
| MB 570-140431/1-A | Method Blank | 89 | | | | | | | | | |

**Surrogate Legend**

DCPAA = 2,4-Dichlorophenylacetic acid

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 82W0/ | 6o1TeG VtOTi C 5 og mnoci da p( 5 PGj M | j k 84W | ) 5 E 2 |
| 809L/ | ( Tao1CI RTi Ol VtOTi Cca - p( 5 M | j k 84W | ) 5 E 2 |
| 809L/ | DCal 1RTi Ol VtOTi CapDRVMR/G1RTi Ol VtOTi Cca pVRVM | j k 84W | ) 5 E 9 |
| 8089A | VtOTi orh1btCI sl aeCCDl a p( 5 M | j k 84W | ) 5 E 9 |
| 89L9A | Bl tbCCDl a p( 5 M | j k 84W | ) 5 E 9 |
| W090/ | Gl eT1a pl5 s M | j k 84W | ) 5 E 9 |
| H4H9A | Gl trctwp56AAM | j k 84W | ) 5 E 9 |
| 30L0/ | stl mTtTeGi 7 Gl eT1a | j k 84W | ) 5 E 9 |
| 3L4W | GCCtoy T, l ) veTreGi | j k 84W | ) 5 E 9 |
| 3LL05 | x 1tTaoi C ) veTreGi | j k 84W | ) 5 E 9 |
| L03L | 5 1bal d j wael g sctOl Ti d ntTm | j k 84W | ) 5 E 2 |
| H4H9A | stl mTtTeGi 7Gl trctw | j k 84W | ) 5 E 9 |
| 89L9A | ) veTreGi pBl tbCCDl aM | j k 84W | ) 5 E 9 |

**Protocol References:**

j k 84WU=nl aeGl enoda " ot ) , T1cTeCOj o1Cl k Tae 7shwaCCT15hl g CCT1Gl enoda=7nhCCd ) dGGi 7Fo, l g bl t 9N8WAi d lea x mdTe a.

**Laboratory References:**

) 5 E 9 U ) ctofCa 5 T1arCi rl EE5 ECCro1 7H440 ECCro1 k Tw7( Ttdl i ( to, l 75 A N28497n) Ep-94M8NL-L4N4

) 5 E 2 U ) ctofCa 5 T1arCi rl EE5 ETg maoi 7H44L ETg maoi A, l 7( Ttdl i ( to, l 75 A N28497n) Ep-94M8NL-L4N4

## Client Sample ID: B-1-1

**Date Collected: 493 0/ 308 89:92**
**Date 6 eceiRed: 493 943 08 81:44**

## Lab Sample ID: 554-028089-8

**Matrix: Solid**

| yrep vTpe | Batch vTpe | Batch Method | 6sn | Dil zactor | Initial Pmosnt | zinal Pmosnt | Batch Fsmber | yrepared or PnalTued | PnalTAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5015 | | | 5.702 g | 5 g | 940037 | 01/19/29 93:92 | P4DI | ECL 2 |
| Total/NA | AnalVsis | 82y0B | | 9 | 5 6 L | 5 6 L | 940088 | 04/09/29 00:98 | C5SC | ECL 2 |
| Total/NA | Prep | 5015 | | | 5.729 g | 5 g | 940037 | 01/19/29 93:92 | P4DI | ECL 2 |
| Total/NA | AnalVsis | 8095B | | 9 | 5 g | 5 6 L | 940481 | 04/02/29 94:0y | A3WE | ECL 2 |
| Total/NA | Prep | 1550C | | | 3.3y g | 90 6 L | 949944 | 04/05/29 93:90 | N5m1 | ECL 9 |
| Total/NA | AnalVsis | 8095B | | 9 | | | 940343 | 04/0y/29 02:4y | N5m1 | ECL 9 |
| Total/NA | Prep | 154y | | | 20.08 g | 90 6 L | 940952 | 04/09/29 08:00 | Y7FI | ECL 9 |
| Total/NA | AnalVsis | 8089A | | 9 | | | 94017y | 04/02/29 92:49 | FHHN | ECL 9 |
| Total/NA | Prep | 8959A | | | 50.9 g | 5 6 L | 940419 | 04/02/29 07:11 | PUS9 | ECL 9 |
| Total/NA | AnalVsis | 8959A | | 9 | | | 940810 | 04/01/29 29:14 | FHHN | ECL 9 |
| Total/NA | Prep | 1050B | | | 9.35 g | 900 6 L | 940181 | 04/09/29 98:00 | B4Sm | ECL 9 |
| Total/NA | AnalVsis | y090B | | 9 | | | 940y44 | 04/02/29 20:49 | FLPY | ECL 9 |
| Total/NA | Prep | 7479A | | | 0.y9 g | 900 6 L | 940184 | 04/09/29 98:00 | B4Sm | ECL 9 |
| Total/NA | AnalVsis | 7479A | | 9 | | | 940y78 | 04/02/29 97:27 | WnU5 | ECL 9 |

## Client Sample ID: B-1-881

**Date Collected: 493 0/ 308 81:51**
**Date 6 eceiRed: 493 943 08 81:44**

## Lab Sample ID: 554-028089-0

**Matrix: Solid**

| yrep vTpe | Batch vTpe | Batch Method | 6sn | Dil zactor | Initial Pmosnt | zinal Pmosnt | Batch Fsmber | yrepared or PnalTued | PnalTAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5015 | | | 5.442 g | 5 g | 940037 | 01/19/29 93:92 | P4DI | ECL 2 |
| Total/NA | AnalVsis | 82y0B | | 9 | 5 6 L | 5 6 L | 940088 | 04/09/29 00:41 | C5SC | ECL 2 |
| Total/NA | Prep | 5015 | | | y.759 g | 5 g | 940037 | 01/19/29 93:92 | P4DI | ECL 2 |
| Total/NA | AnalVsis | 8095B | | 9 | 5 g | 5 6 L | 940481 | 04/02/29 94:23 | A3WE | ECL 2 |
| Total/NA | Prep | 1550C | | | 90.05 g | 90 6 L | 949944 | 04/05/29 93:90 | N5m1 | ECL 9 |
| Total/NA | AnalVsis | 8095B | | 9 | | | 940343 | 04/0y/29 01:0y | N5m1 | ECL 9 |
| Total/NA | Prep | 8959A | | | 50.0 g | 5 6 L | 940419 | 04/02/29 07:11 | PUS9 | ECL 9 |
| Total/NA | AnalVsis | 8959A | | 9 | | | 940810 | 04/01/29 29:5y | FHHN | ECL 9 |

## Client Sample ID: B-N-1

**Date Collected: 493 943 08 89:0N**
**Date 6 eceiRed: 493 943 08 81:44**

## Lab Sample ID: 554-028089-9

**Matrix: Solid**

| yrep vTpe | Batch vTpe | Batch Method | 6sn | Dil zactor | Initial Pmosnt | zinal Pmosnt | Batch Fsmber | yrepared or PnalTued | PnalTAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5015 | | | 4.414 g | 5 g | 940037 | 01/19/29 93:14 | P4DI | ECL 2 |
| Total/NA | AnalVsis | 82y0B | | 9 | 5 6 L | 5 6 L | 940088 | 04/09/29 09:03 | C5SC | ECL 2 |
| Total/NA | Prep | 5015 | | | 4.504 g | 5 g | 940037 | 01/19/29 93:14 | P4DI | ECL 2 |
| Total/NA | AnalVsis | 8095B | | 9 | 5 g | 5 6 L | 940481 | 04/02/29 94:51 | A3WE | ECL 2 |
| Total/NA | Prep | 1550C | | | 90.99 g | 90 6 L | 949944 | 04/05/29 93:90 | N5m1 | ECL 9 |
| Total/NA | AnalVsis | 8095B | | 9 | | | 940343 | 04/0y/29 01:27 | N5m1 | ECL 9 |
| Total/NA | Prep | 154y | | | 20.13 g | 90 6 L | 940952 | 04/09/29 08:00 | Y7FI | ECL 9 |
| Total/NA | AnalVsis | 8089A | | 9 | | | 94017y | 04/02/29 92:55 | FHHN | ECL 9 |
| Total/NA | Prep | 8959A | | | 43.3 g | 5 6 L | 940419 | 04/02/29 07:11 | PUS9 | ECL 9 |
| Total/NA | AnalVsis | 8959A | | 9 | | | 940810 | 04/01/29 22:93 | FHHN | ECL 9 |

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Broken Horn SaddlerV

Job ID: 440-289291-9

## Client Sample ID: B-N-1

**Date Collected: 493943308 89:0N**
**Date 6eceiRed: 493943308 81:44**

## Lab Sample ID: 554-028089-9

**Matrix: Solid**

| yrep vTpe | Batch vTpe | Batch Method | 6sn | Dil zactor | Initial Pmosnt | zinal Pmosnt | Batch Fsmber | yrepared or PnalTued | PnalTAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 1050B | | | 2.07 g | 900 6 L | 940181 | 04/09/29 98:00 | B4Sm | ECL 9 |
| Total/NA | AnalVsis | y090B | | 9 | | | 940y44 | 04/02/29 20:41 | FLPY | ECL 9 |
| Total/NA | Prep | 7479A | | | 0.y2 g | 900 6 L | 940184 | 04/09/29 98:00 | B4Sm | ECL 9 |
| Total/NA | AnalVsis | 7479A | | 9 | | | 940y78 | 04/02/29 97:28 | WmU5 | ECL 9 |

**LaboratorT 6eferenceA:**

ECL 9 v EuroQns Calscience LLC Lincoln=7440 Lincoln , aV=Garden Grof e=CA 32849=TEL (794)835-5434
ECL 2 v EuroQns Calscience LLC La6 pson=7445 La6 pson Af e=Garden Grof e=CA 32849=TEL (794)835-5434

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-140088/7**
**Matrix: Solid**
**Analysis Batch: 140088**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 9,9,9,2-Tetrachloroethane | ND | | 0.0090 | 0.0002m | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,9,9-Trichloroethane | ND | | 0.0090 | 0.00021 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,9,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00054 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,9,2-Trichloro-9,2,2-trifluoroethane | ND | | 0.090 | 0.00046 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,9,2-Trichloroethane | ND | | 0.0090 | 0.00046 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,9-Dichloroethane | ND | | 0.0090 | 0.00028 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,9-Dichloroethene | ND | | 0.0090 | 0.00027 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,9-Dichloropropene | ND | | 0.0020 | 0.0001m | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2,1-Trichlorobenzene | ND | | 0.0020 | 0.0090 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2,1-Trichloropropane | ND | | 0.0020 | 0.00042 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00049 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2,4-Trig ethVbenzene | ND | | 0.0020 | 0.00060 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2-Dibrog o-1-Chloropropane | ND | | 0.090 | 0.0068 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2-Dibrog oethane | ND | | 0.0090 | 0.00029 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2-Dichlorobenzene | ND | | 0.0090 | 0.00025 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2-Dichloroethane | ND | | 0.0090 | 0.00028 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,2-Dichloropropane | ND | | 0.0090 | 0.00028 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,1,5-Trig ethVbenzene | ND | | 0.0020 | 0.00060 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,1-Dichlorobenzene | ND | | 0.0090 | 0.00025 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,1-Dichloropropane | ND | | 0.0090 | 0.00010 | g K/3K | | | 01/19/29 22:99 | 9 |
| 9,4-Dichlorobenzene | ND | | 0.0090 | 0.00019 | g K/3K | | | 01/19/29 22:99 | 9 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | g K/3K | | | 01/19/29 22:99 | 9 |
| 2-Butanone | ND | | 0.020 | 0.0045 | g K/3K | | | 01/19/29 22:99 | 9 |
| 2-Chlorotoluene | ND | | 0.0090 | 0.00025 | g K/3K | | | 01/19/29 22:99 | 9 |
| 2-Heyanone | ND | | 0.020 | 0.0019 | g K/3K | | | 01/19/29 22:99 | 9 |
| 4-Chlorotoluene | ND | | 0.0090 | 0.00024 | g K/3K | | | 01/19/29 22:99 | 9 |
| 4-x ethV-2-pentanone | ND | | 0.020 | 0.002m | g K/3K | | | 01/19/29 22:99 | 9 |
| Mcetone | ND | | 0.020 | 0.00m8 | g K/3K | | | 01/19/29 22:99 | 9 |
| Benzene | ND | | 0.0090 | 0.00026 | g K/3K | | | 01/19/29 22:99 | 9 |
| Brog obenzene | ND | | 0.0090 | 0.00029 | g K/3K | | | 01/19/29 22:99 | 9 |
| Brog ochlorog ethane | ND | | 0.0020 | 0.00044 | g K/3K | | | 01/19/29 22:99 | 9 |
| Brog odichlorog ethane | ND | | 0.0090 | 0.00096 | g K/3K | | | 01/19/29 22:99 | 9 |
| Brog oforg | ND | | 0.0050 | 0.0091 | g K/3K | | | 01/19/29 22:99 | 9 |
| Brog og ethane | ND | | 0.020 | 0.0066 | g K/3K | | | 01/19/29 22:99 | 9 |
| Carbon disulfide | ND | | 0.090 | 0.00040 | g K/3K | | | 01/19/29 22:99 | 9 |
| Carbon tetrachloride | ND | | 0.0090 | 0.00010 | g K/3K | | | 01/19/29 22:99 | 9 |
| Chlorobenzene | ND | | 0.0090 | 0.00027 | g K/3K | | | 01/19/29 22:99 | 9 |
| Chloroethane | ND | | 0.0020 | 0.0095 | g K/3K | | | 01/19/29 22:99 | 9 |
| Chloroforg | ND | | 0.0090 | 0.0005m | g K/3K | | | 01/19/29 22:99 | 9 |
| Chlorog ethane | ND | | 0.020 | 0.0095 | g K/3K | | | 01/19/29 22:99 | 9 |
| cis-9,2-Dichloroethene | ND | | 0.0090 | 0.00014 | g K/3K | | | 01/19/29 22:99 | 9 |
| cis-9,1-Dichloropropene | ND | | 0.0090 | 0.00015 | g K/3K | | | 01/19/29 22:99 | 9 |
| Dibrog ochlorog ethane | ND | | 0.0020 | 0.00027 | g K/3K | | | 01/19/29 22:99 | 9 |
| Dibrog og ethane | ND | | 0.0090 | 0.00019 | g K/3K | | | 01/19/29 22:99 | 9 |
| Dichlorodifluorog ethane | ND | | 0.0020 | 0.00045 | g K/3K | | | 01/19/29 22:99 | 9 |
| Di-isopropV ether ADIP( E | ND | | 0.0090 | 0.00050 | g K/3K | | | 01/19/29 22:99 | 9 |
| ( thanol | ND | | 0.25 | 0.066 | g K/3K | | | 01/19/29 22:99 | 9 |
| ( thVbenzene | ND | | 0.0090 | 0.00029 | g K/3K | | | 01/19/29 22:99 | 9 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-140088/7**
**Matrix: Solid**
**Analysis Batch: 140088**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| ( thVl-t-butVl ether A( TB( E | ND | | 0.0090 | 0.00024 | g K/3K | | | 01/19/29 22:99 | 9 |
| Heyachloro-9,1-butadiene | ND | | 0.0050 | 0.0097 | g K/3K | | | 01/19/29 22:99 | 9 |
| IsopropVlbenzene | ND | | 0.0090 | 0.00060 | g K/3K | | | 01/19/29 22:99 | 9 |
| g ,p-v Vlene | ND | | 0.0020 | 0.00047 | g K/3K | | | 01/19/29 22:99 | 9 |
| x ethVlene Chloride | ND | | 0.090 | 0.0019 | g K/3K | | | 01/19/29 22:99 | 9 |
| x ethVl-t-ButVl ( ther Ax TB( E | ND | | 0.0020 | 0.0009m | g K/3K | | | 01/19/29 22:99 | 9 |
| Naphthalene | ND | | 0.090 | 0.0052 | g K/3K | | | 01/19/29 22:99 | 9 |
| n-ButVlbenzene | ND | | 0.0090 | 0.00029 | g K/3K | | | 01/19/29 22:99 | 9 |
| N-PropVlbenzene | ND | | 0.0020 | 0.00060 | g K/3K | | | 01/19/29 22:99 | 9 |
| o-v Vlene | ND | | 0.0090 | 0.00060 | g K/3K | | | 01/19/29 22:99 | 9 |
| p-IsopropVltoluene | ND | | 0.0090 | 0.00070 | g K/3K | | | 01/19/29 22:99 | 9 |
| sec-ButVlbenzene | ND | | 0.0090 | 0.00060 | g K/3K | | | 01/19/29 22:99 | 9 |
| StVrene | ND | | 0.0090 | 0.00070 | g K/3K | | | 01/19/29 22:99 | 9 |
| Tert-ag Vl-g ethVl ether ATMx ( E | ND | | 0.0090 | 0.0009m | g K/3K | | | 01/19/29 22:99 | 9 |
| tert-ButVl alcohol ATBME | ND | | 0.020 | 0.0070 | g K/3K | | | 01/19/29 22:99 | 9 |
| tert-ButVlbenzene | ND | | 0.0090 | 0.00025 | g K/3K | | | 01/19/29 22:99 | 9 |
| Tetrachloroethene | ND | | 0.0090 | 0.00022 | g K/3K | | | 01/19/29 22:99 | 9 |
| Toluene | ND | | 0.0090 | 0.00060 | g K/3K | | | 01/19/29 22:99 | 9 |
| trans-9,2-Dichloroethene | ND | | 0.0090 | 0.00010 | g K/3K | | | 01/19/29 22:99 | 9 |
| trans-9,1-Dichloropropene | ND | | 0.0020 | 0.00028 | g K/3K | | | 01/19/29 22:99 | 9 |
| Trichloroethene | ND | | 0.0020 | 0.0001m | g K/3K | | | 01/19/29 22:99 | 9 |
| Trichlorofluorog ethane | ND | | 0.090 | 0.00027 | g K/3K | | | 01/19/29 22:99 | 9 |
| XinVl acetate | ND | | 0.090 | 0.001m | g K/3K | | | 01/19/29 22:99 | 9 |
| XinVl chloride | ND | | 0.0090 | 0.00018 | g K/3K | | | 01/19/29 22:99 | 9 |
| v Vlenes, Total | ND | | 0.0020 | 0.00060 | g K/3K | | | 01/19/29 22:99 | 9 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *112* | | *71 - 155* | | *03/31/21 229l1* | *1* |
| *4-: ro8 o6uoroBenmene (Surr)* | *100* | | *f 0 - 120* | | *03/31/21 229l1* | *1* |
| *DiBro8 o6uoro8 ethane (Surr)* | *b7* | | *7b - 133* | | *03/31/21 229l1* | *1* |
| *zoluene-df (Surr)* | *b7* | | *f 0 - 120* | | *03/31/21 229l1* | *1* |

**Lab Sample ID: LCS 570-140088/4**
**Matrix: Solid**
**Analysis Batch: 140088**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 9,9,9,2-Tetrachloroethane | 0.0500 | 0.0579 | | g K/3K | | 994 | 71 - 911 |
| 9,9,9-Trichloroethane | 0.0500 | 0.0524 | | g K/3K | | 905 | 79 - 919 |
| 9,9,2,2-Tetrachloroethane | 0.0500 | 0.050m | | g K/3K | | 902 | 77 - 920 |
| 9,9,2-Trichloroethane | 0.0500 | 0.0515 | | g K/3K | | 907 | 80 - 920 |
| 9,9-Dichloroethane | 0.0500 | 0.0452 | | g K/3K | | m0 | 74 - 920 |
| 9,9-Dichloroethene | 0.0500 | 0.0466 | | g K/3K | | m1 | 79 - 925 |
| 9,9-Dichloropropene | 0.0500 | 0.0478 | | g K/3K | | m6 | 6m- 920 |
| 9,2,1-Trichlorobenzene | 0.0500 | 0.0576 | | g K/3K | | 995 | 71 - 927 |
| 9,2,1-Trichloropropane | 0.0500 | 0.0556 | | g K/3K | | 999 | 60 - 920 |
| 9,2,4-Trichlorobenzene | 0.0500 | 0.0545 | | g K/3K | | 90m | 74 - 928 |
| 9,2,4-Trig ethVlbenzene | 0.0500 | 0.0524 | | g K/3K | | 905 | 75 - 921 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-140088/4**
**Matrix: Solid**
**Analysis Batch: 140088**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 9,2-Dibrog o-1-Chloropropane | 0.0500 | 0.0599 | | g K/3K | | 902 | 54 - 912 |
| 9,2-Dibrog oethane | 0.0500 | 0.0579 | | g K/3K | | 994 | 80 - 920 |
| 9,2-Dichlorobenzene | 0.0500 | 0.0516 | | g K/3K | | 907 | 80 - 920 |
| 9,2-Dichloroethane | 0.0500 | 0.0600 | | g K/3K | | 920 | 7m- 929 |
| 9,2-Dichloropropane | 0.0500 | 0.0481 | | g K/3K | | m7 | 77 - 921 |
| 9,1,5-Trig ethVbenzene | 0.0500 | 0.0560 | | g K/3K | | 992 | 80 - 921 |
| 9,1-Dichlorobenzene | 0.0500 | 0.0527 | | g K/3K | | 905 | 80 - 920 |
| 9,1-Dichloropropane | 0.0500 | 0.0516 | | g K/3K | | 907 | 80 - 920 |
| 9,4-Dichlorobenzene | 0.0500 | 0.0528 | | g K/3K | | 906 | 80 - 920 |
| 2,2-Dichloropropane | 0.0500 | 0.04m4 | | g K/3K | | mm | 58 - 942 |
| 2-Chlorotoluene | 0.0500 | 0.0552 | | g K/3K | | 990 | 56 - 976 |
| 4-Chlorotoluene | 0.0500 | 0.0598 | | g K/3K | | 904 | 67 - 959 |
| Benzene | 0.0500 | 0.0466 | | g K/3K | | m1 | 7m- 920 |
| Brog obenzene | 0.0500 | 0.0570 | | g K/3K | | 994 | 80 - 920 |
| Brog ochlorog ethane | 0.0500 | 0.0489 | | g K/3K | | m6 | 80 - 920 |
| Brog odichlorog ethane | 0.0500 | 0.057m | | g K/3K | | 996 | 71 - 927 |
| Brog oforg | 0.0500 | 0.0519 | | g K/3K | | 906 | 55 - 911 |
| Brog og ethane | 0.0500 | 0.0544 | | g K/3K | | 90m | 16 - 944 |
| Carbon tetrachloride | 0.0500 | 0.0581 | | g K/3K | | 997 | 58 - 942 |
| Chlorobenzene | 0.0500 | 0.0529 | | g K/3K | | 904 | 80 - 920 |
| Chloroethane | 0.0500 | 0.0527 | | g K/3K | | 905 | 60 - 920 |
| Chloroforg | 0.0500 | 0.0517 | | g K/3K | | 907 | 80 - 920 |
| Chlorog ethane | 0.0500 | 0.04m2 | | g K/3K | | m8 | 50 - 922 |
| cis-9,2-Dichloroethene | 0.0500 | 0.04m1 | | g K/3K | | mm | 80 - 921 |
| cis-9,1-Dichloropropene | 0.0500 | 0.0508 | | g K/3K | | 902 | 74 - 928 |
| Dibrog ochlorog ethane | 0.0500 | 0.0602 | | g K/3K | | 920 | 50 - 922 |
| Dibrog og ethane | 0.0500 | 0.0572 | | g K/3K | | 994 | 70 - 910 |
| Dichlorodifluorog ethane | 0.0500 | 0.0599 | | g K/3K | | 902 | 12 - 958 |
| Di-isopropV ether ADIP( E | 0.0500 | 0.0445 | | g K/3K | | 8m | 65 - 919 |
| ( thanol | 0.500 | 0.452 | | g K/3K | | m0 | 12 - 958 |
| ( thVbenzene | 0.0500 | 0.0510 | | g K/3K | | 906 | 57 - 951 |
| ( thV-t-butV ether A( TB( E | 0.0500 | 0.0444 | | g K/3K | | 8m | 58 - 916 |
| Heyachloro-9,1-butadiene | 0.0500 | 0.0601 | GR | g K/3K | | 929 | 80 - 920 |
| IsopropVbenzene | 0.0500 | 0.0546 | | g K/3K | | 90m | 80 - 92m |
| g ,p-v Vene | 0.900 | 0.907 | | g K/3K | | 907 | 80 - 922 |
| x ethVene Chloride | 0.0500 | 0.0452 | | g K/3K | | m0 | 72 - 920 |
| x ethV-t-ButV ( ther Ax TB( E | 0.0500 | 0.0457 | | g K/3K | | m9 | 64 - 924 |
| Naphthalene | 0.0500 | 0.0512 | | g K/3K | | 906 | 64 - 924 |
| n-ButVbenzene | 0.0500 | 0.0598 | | g K/3K | | 904 | 78 - 926 |
| N-PropVbenzene | 0.0500 | 0.0545 | | g K/3K | | 90m | 80 - 922 |
| o-v Vene | 0.0500 | 0.0548 | | g K/3K | | 990 | 7m- 927 |
| p-IsopropVtoluene | 0.0500 | 0.059m | | g K/3K | | 904 | 80 - 922 |
| sec-ButVbenzene | 0.0500 | 0.0501 | | g K/3K | | 909 | 7m- 927 |
| StVrene | 0.0500 | 0.0549 | | g K/3K | | 908 | 80 - 921 |
| Tert-ag V-g ethV ether ATMx ( E | 0.0500 | 0.04m8 | | g K/3K | | 900 | 61 - 92m |
| tert-ButV alcohol ATBME | 0.250 | 0.252 | | g K/3K | | 909 | 7m- 929 |
| tert-ButVbenzene | 0.0500 | 0.04m9 | | g K/3K | | m8 | 80 - 928 |
| Tetrachloroethene | 0.0500 | 0.055m | | g K/3K | | 992 | 75 - 921 |
| Toluene | 0.0500 | 0.0504 | | g K/3K | | 909 | 80 - 920 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-140088/4**
**Matrix: Solid**
**Analysis Batch: 140088**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| trans-9,2-Dichloroethene | 0.0500 | 0.0452 | | g K/3K | | m0 | 80 - 920 |
| trans-9,1-Dichloropropene | 0.0500 | 0.0551 | | g K/3K | | 999 | 66 - 920 |
| Trichloroethene | 0.0500 | 0.0519 | | g K/3K | | 906 | 80 - 920 |
| Trichlorofluorog ethane | 0.0500 | 0.0614 | | g K/3K | | 927 | 70 - 916 |
| XinM chloride | 0.0500 | 0.0522 | | g K/3K | | 904 | 68 - 920 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *10b* | | *71 - 155* |
| *4-: ro8 o6uoroBenmene (Surr)* | *10T* | | *f 0 - 120* |
| *DiBro8 o6uoro8 ethane (Surr)* | *102* | | *7b - 133* |
| *zoluene-df (Surr)* | *bb* | | *f 0 - 120* |

**Lab Sample ID: LCSD 570-140088/5**
**Matrix: Solid**
**Analysis Batch: 140088**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 9,9,9,2-Tetrachloroethane | 0.0500 | 0.0552 | | g K/3K | | 990 | 71 - 911 | 1 | 20 |
| 9,9,9-Trichloroethane | 0.0500 | 0.0507 | | g K/3K | | 909 | 79 - 919 | 1 | 20 |
| 9,9,2,2-Tetrachloroethane | 0.0500 | 0.04m4 | | g K/3K | | mm | 77 - 920 | 1 | 20 |
| 9,9,2-Trichloroethane | 0.0500 | 0.0596 | | g K/3K | | 901 | 80 - 920 | 4 | 20 |
| 9,9-Dichloroethane | 0.0500 | 0.0417 | | g K/3K | | 87 | 74 - 920 | 1 | 20 |
| 9,9-Dichloroethene | 0.0500 | 0.0444 | | g K/3K | | 8m | 79 - 925 | 5 | 20 |
| 9,9-Dichloropropene | 0.0500 | 0.0451 | | g K/3K | | m9 | 6m- 920 | 5 | 20 |
| 9,2,1-Trichlorobenzene | 0.0500 | 0.0558 | | g K/3K | | 992 | 71 - 927 | 1 | 20 |
| 9,2,1-Trichloropropane | 0.0500 | 0.0517 | | g K/3K | | 907 | 60 - 920 | 1 | 20 |
| 9,2,4-Trichlorobenzene | 0.0500 | 0.0524 | | g K/3K | | 905 | 74 - 928 | 4 | 20 |
| 9,2,4-Trig ethVbenzene | 0.0500 | 0.0590 | | g K/3K | | 902 | 75 - 921 | 1 | 20 |
| 9,2-Dibrog o-1-Chloropropane | 0.0500 | 0.04mm | | g K/3K | | 900 | 54 - 912 | 2 | 20 |
| 9,2-Dibrog oethane | 0.0500 | 0.0557 | | g K/3K | | 999 | 80 - 920 | 1 | 20 |
| 9,2-Dichlorobenzene | 0.0500 | 0.0522 | | g K/3K | | 904 | 80 - 920 | 1 | 20 |
| 9,2-Dichloroethane | 0.0500 | 0.0587 | | g K/3K | | 997 | 7m- 929 | 2 | 20 |
| 9,2-Dichloropropane | 0.0500 | 0.046m | | g K/3K | | m4 | 77 - 921 | 1 | 25 |
| 9,1,5-Trig ethVbenzene | 0.0500 | 0.0518 | | g K/3K | | 908 | 80 - 921 | 4 | 20 |
| 9,1-Dichlorobenzene | 0.0500 | 0.0594 | | g K/3K | | 901 | 80 - 920 | 2 | 20 |
| 9,1-Dichloropropane | 0.0500 | 0.0520 | | g K/3K | | 904 | 80 - 920 | 1 | 20 |
| 9,4-Dichlorobenzene | 0.0500 | 0.0594 | | g K/3K | | 901 | 80 - 920 | 1 | 20 |
| 2,2-Dichloropropane | 0.0500 | 0.0475 | | g K/3K | | m5 | 58 - 942 | 4 | 20 |
| 2-Chlorotoluene | 0.0500 | 0.0510 | | g K/3K | | 906 | 56 - 976 | 4 | 20 |
| 4-Chlorotoluene | 0.0500 | 0.0501 | | g K/3K | | 909 | 67 - 959 | 1 | 20 |
| Benzene | 0.0500 | 0.0451 | | g K/3K | | m9 | 7m- 920 | 1 | 20 |
| Brog obenzene | 0.0500 | 0.0558 | | g K/3K | | 992 | 80 - 920 | 2 | 20 |
| Brog ochlorog ethane | 0.0500 | 0.0468 | | g K/3K | | m4 | 80 - 920 | 1 | 20 |
| Brog odichlorog ethane | 0.0500 | 0.0558 | | g K/3K | | 992 | 71 - 927 | 4 | 20 |
| Brog oforg | 0.0500 | 0.0527 | | g K/3K | | 905 | 55 - 911 | 9 | 20 |
| Brog og ethane | 0.0500 | 0.0546 | | g K/3K | | 90m | 16 - 944 | 0 | 20 |
| Carbon tetrachloride | 0.0500 | 0.0560 | | g K/3K | | 992 | 58 - 942 | 4 | 20 |
| Chlorobenzene | 0.0500 | 0.0501 | | g K/3K | | 909 | 80 - 920 | 1 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-140088/5**
**Matrix: Solid**
**Analysis Batch: 140088**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | 0.0500 | 0.0511 | | g K/3K | | 907 | 60 - 920 | 9 | 20 |
| Chloroforg | 0.0500 | 0.0520 | | g K/3K | | 904 | 80 - 920 | 1 | 20 |
| Chlorog ethane | 0.0500 | 0.0507 | | g K/3K | | 909 | 50 - 922 | 1 | 20 |
| cis-9,2-Dichloroethene | 0.0500 | 0.0472 | | g K/3K | | m4 | 80 - 921 | 5 | 20 |
| cis-9,1-Dichloropropene | 0.0500 | 0.04m9 | | g K/3K | | m8 | 74 - 928 | 1 | 20 |
| Dibrog ochlorog ethane | 0.0500 | 0.0585 | | g K/3K | | 997 | 50 - 922 | 1 | 20 |
| Dibrog og ethane | 0.0500 | 0.0554 | | g K/3K | | 999 | 70 - 910 | 1 | 20 |
| Dichlorodifluorog ethane | 0.0500 | 0.0597 | | g K/3K | | 901 | 12 - 958 | 9 | 20 |
| Di-isopropV ether ADIP( E | 0.0500 | 0.0412 | | g K/3K | | 86 | 65 - 919 | 1 | 20 |
| ( thanol | 0.500 | 0.456 | | g K/3K | | m9 | 12 - 958 | 9 | 27 |
| ( thVbenzene | 0.0500 | 0.0590 | | g K/3K | | 902 | 57 - 951 | 4 | 20 |
| ( thV-t-butV ether A( TB( E | 0.0500 | 0.0410 | | g K/3K | | 86 | 58 - 916 | 1 | 20 |
| Heyachloro-9,1-butadiene | 0.0500 | 0.0584 | | g K/3K | | 997 | 80 - 920 | 1 | 20 |
| IsopropVbenzene | 0.0500 | 0.0524 | | g K/3K | | 905 | 80 - 92m | 4 | 20 |
| g ,p-v Vene | 0.900 | 0.901 | | g K/3K | | 901 | 80 - 922 | 4 | 20 |
| x ethVene Chloride | 0.0500 | 0.0417 | | g K/3K | | 87 | 72 - 920 | 1 | 20 |
| x ethV-t-ButV ( ther Ax TB( E | 0.0500 | 0.0447 | | g K/3K | | 8m | 64 - 924 | 2 | 20 |
| Naphthalene | 0.0500 | 0.0595 | | g K/3K | | 901 | 64 - 924 | 1 | 20 |
| n-ButVbenzene | 0.0500 | 0.04mm | | g K/3K | | 900 | 78 - 926 | 4 | 25 |
| N-PropVbenzene | 0.0500 | 0.0598 | | g K/3K | | 904 | 80 - 922 | 5 | 20 |
| o-v Vene | 0.0500 | 0.0525 | | g K/3K | | 905 | 7m- 927 | 4 | 20 |
| p-IsopropVtoluene | 0.0500 | 0.0500 | | g K/3K | | 900 | 80 - 922 | 4 | 20 |
| sec-ButVbenzene | 0.0500 | 0.0487 | | g K/3K | | m7 | 7m- 927 | 1 | 20 |
| StVrene | 0.0500 | 0.0529 | | g K/3K | | 904 | 80 - 921 | 4 | 20 |
| Tert-ag V-g ethV ether ATMx ( E | 0.0500 | 0.0482 | | g K/3K | | m6 | 61 - 92m | 1 | 20 |
| tert-ButV alcohol ATBME | 0.250 | 0.24m | | g K/3K | | mm | 7m- 929 | 9 | 20 |
| tert-ButVbenzene | 0.0500 | 0.0480 | | g K/3K | | m6 | 80 - 928 | 2 | 20 |
| Tetrachloroethene | 0.0500 | 0.0549 | | g K/3K | | 908 | 75 - 921 | 1 | 20 |
| Toluene | 0.0500 | 0.0487 | | g K/3K | | m7 | 80 - 920 | 1 | 20 |
| trans-9,2-Dichloroethene | 0.0500 | 0.041m | | g K/3K | | 88 | 80 - 920 | 1 | 20 |
| trans-9,1-Dichloropropene | 0.0500 | 0.0511 | | g K/3K | | 907 | 66 - 920 | 4 | 20 |
| Trichloroethene | 0.0500 | 0.0522 | | g K/3K | | 904 | 80 - 920 | 2 | 20 |
| Trichlorofluorog ethane | 0.0500 | 0.061m | | g K/3K | | 928 | 70 - 916 | 9 | 20 |
| XinV chloride | 0.0500 | 0.052m | | g K/3K | | 906 | 68 - 920 | 9 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *71 - 155* |
| *4-: ro8 o6uoroBenrene (Surr)* | *104* | | *f 0 - 120* |
| *DiBro8 o6uoro8 ethane (Surr)* | *101* | | *7b - 133* |
| *zoluene-df (Surr)* | *bb* | | *f 0 - 120* |

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-140483/5**
**Matrix: Solid**
**Analysis Batch: 140483**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oasoline [ anKe ] rKanics AC4-C92E | ND | | 0.90 | 0.055 | g K/3K | | | 04/02/29 99:42 | 9 |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-: ro8 o6uoroBenmene (Surr) | b1 | | 42 - 12T | | 04/02/21 1194 2 | 1 |

**Lab Sample ID: LCS 570-140483/3**
**Matrix: Solid**
**Analysis Batch: 140483**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Oasoline [ anKe ] rKanics AC4-C91E | 9.m7 | 9.m8 | | g K/3K | | 909 | 70 - 924 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-: ro8 o6uoroBenmene (Surr) | bT | | 42 - 12T |

**Lab Sample ID: LCSD 570-140483/4**
**Matrix: Solid**
**Analysis Batch: 140483**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Oasoline [ anKe ] rKanics AC4-C91E | 9.m7 | 2.9m | | g K/3K | | 999 | 70 - 924 | 90 | 98 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 4-: ro8 o6uoroBenmene (Surr) | b5 | | 42 - 12T |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Lab Sample ID: MB 570-141144/1-A**
**Matrix: Solid**
**Analysis Batch: 140949**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 141144**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C91-C22 | ND | | 5.0 | 1.8 | g K/3K | | 04/05/29 9m90 | 04/05/29 22:5m | 9 |
| C21-C40 | ND | | 5.0 | 1.8 | g K/3K | | 04/05/29 9m90 | 04/05/29 22:5m | 9 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 107 | | T0 - 13f | 04/05/21 1b910 | 04/05/21 2295b | 1 |

**Lab Sample ID: LCS 570-141144/2-A**
**Matrix: Solid**
**Analysis Batch: 140949**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 141144**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel [ anKe ] rKanics 'C90-C28* | 400 | 412 | | g K/3K | | 908 | 80 - 910 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | bb | | T0 - 13f |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Lab Sample ID: LCSD 570-141144/3-A**
**Matrix: Solid**
**Analysis Batch: 140949**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 141144**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel [ anKe ] rKanics 'C90-C28* | | | 400 | 425 | | g K/3K | | 906 | 80 - 910 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *107* | | *T0 - 13f* |

**Lab Sample ID: 570-55631-F-1-A MS**
**Matrix: Solid**
**Analysis Batch: 140949**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 141144**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel [ anKe ] rKanics 'C90-C28* | ND | | 429 | 480 | | g K/3K | | 994 | 41 - 965 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *110* | | *T0 - 13f* |

**Lab Sample ID: 570-55631-F-1-B MSD**
**Matrix: Solid**
**Analysis Batch: 140949**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 141144**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel [ anKe ] rKanics 'C90-C28* | ND | | 1m1 | 418 | | g K/3K | | 992 | 41 - 965 | m | 15 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *104* | | *T0 - 13f* |

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 570-140152/1-A**
**Matrix: Solid**
**Analysis Batch: 140376**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 140152**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4+DDD | ND | | 0.0050 | 0.000mm | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| 4,4+DD( | ND | | 0.0050 | 0.00054 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| 4,4+DDT | ND | | 0.0050 | 0.00016 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| Mdrin | ND | | 0.0050 | 0.00010 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| alpha-BHC | ND | | 0.0050 | 0.0010 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| alpha-Chlordane | ND | | 0.0050 | 0.0091 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| beta-BHC | ND | | 0.0050 | 0.0017 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| Chlordane | ND | | 0.025 | 0.0024 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| delta-BHC | ND | | 0.0050 | 0.0011 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| Dieldrin | ND | | 0.0050 | 0.00025 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| ( ndosulfan I | ND | | 0.0050 | 0.00044 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| ( ndosulfan II | ND | | 0.0050 | 0.00019 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| ( ndosulfan sulfate | ND | | 0.0050 | 0.00040 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| ( ndrin | ND | | 0.0050 | 0.00011 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 570-140152/1-A**
**Matrix: Solid**
**Analysis Batch: 140376**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 140152**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| ( ndrin aldehVde | ND | | 0.0050 | 0.00071 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| ( ndrin ketone | ND | | 0.0050 | 0.00048 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| Kag g a-BHC | ND | | 0.0050 | 0.00062 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| Kag g a-Chlordane | ND | | 0.0050 | 0.00026 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| Heptachlor | ND | | 0.0050 | 0.0008m | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| Heptachlor epoyide | ND | | 0.0050 | 0.00067 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| x ethoyVchlor | ND | | 0.0050 | 0.00089 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |
| Toyaphene | ND | | 0.025 | 0.020 | g K/3K | | 04/09/29 08:00 | 04/02/29 99:44 | 9 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC: DecachloroBiphenyl (Surr)* | *b7* | | *37 - 151* | *04/01/21 0f 900* | *04/02/21 1194* | *1* |
| *zetrachloro-8 -xylene* | *74* | | *3f - 14f* | *04/01/21 0f 900* | *04/02/21 1194* | *1* |

**Lab Sample ID: LCS 570-140152/2-A**
**Matrix: Solid**
**Analysis Batch: 140376**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 140152**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 4,4+DDD | 0.0250 | 0.0248 | | g K/3K | | mm | 54 - 954 |
| 4,4+DD( | 0.0250 | 0.0249 | | g K/3K | | m6 | 59 - 94m |
| 4,4+DDT | 0.0250 | 0.0244 | | g K/3K | | m8 | 1m- 952 |
| Mdrin | 0.0250 | 0.0224 | | g K/3K | | m0 | 52 - 918 |
| alpha-BHC | 0.0250 | 0.0240 | | g K/3K | | m6 | 59 - 940 |
| alpha-Chlordane | 0.0250 | 0.0215 | | g K/3K | | m4 | 51 - 949 |
| beta-BHC | 0.0250 | 0.0228 | | g K/3K | | m9 | 51 - 949 |
| delta-BHC | 0.0250 | 0.0212 | | g K/3K | | m1 | 20 - 912 |
| Dieldrin | 0.0250 | 0.0211 | | g K/3K | | m1 | 52 - 944 |
| ( ndosulfan I | 0.0250 | 0.0210 | | g K/3K | | m2 | 4m- 91m |
| ( ndosulfan II | 0.0250 | 0.0216 | | g K/3K | | m4 | 59 - 950 |
| ( ndosulfan sulfate | 0.0250 | 0.0247 | | g K/3K | | mm | 45 - 91m |
| ( ndrin | 0.0250 | 0.0259 | | g K/3K | | 900 | 51 - 959 |
| ( ndrin aldehVde | 0.0250 | 0.0226 | | g K/3K | | m0 | 19 - 946 |
| Kag g a-BHC | 0.0250 | 0.0246 | | g K/3K | | m8 | 51 - 949 |
| Kag g a-Chlordane | 0.0250 | 0.0217 | | g K/3K | | m5 | 46 - 956 |
| Heptachlor | 0.0250 | 0.021m | | g K/3K | | m6 | 52 - 944 |
| Heptachlor epoyide | 0.0250 | 0.0218 | | g K/3K | | m5 | 54 - 949 |
| x ethoyVchlor | 0.0250 | 0.0254 | | g K/3K | | 902 | 47 - 948 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DC: DecachloroBiphenyl (Surr)* | *103* | | *37 - 151* |
| *zetrachloro-8 -xylene* | *bT* | | *3f - 14f* |

**Lab Sample ID: LCSD 570-140152/3-A**
**Matrix: Solid**
**Analysis Batch: 140376**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 140152**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 4,4+DDD | 0.0250 | 0.0270 | | g K/3K | | 908 | 54 - 954 | 8 | 10 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 570-140152/3-A**
**Matrix: Solid**
**Analysis Batch: 140376**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 140152**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4+DD( | | | 0.0250 | 0.025m | | g K/3K | | 904 | 59 - 94m | 7 | 28 |
| 4,4+DDT | | | 0.0250 | 0.0261 | | g K/3K | | 905 | 1m- 952 | 7 | 19 |
| Mdrin | | | 0.0250 | 0.0218 | | g K/3K | | m5 | 52 - 918 | 6 | 10 |
| alpha-BHC | | | 0.0250 | 0.0256 | | g K/3K | | 902 | 59 - 940 | 6 | 2m |
| alpha-Chlordane | | | 0.0250 | 0.0252 | | g K/3K | | 909 | 51 - 949 | 7 | 28 |
| beta-BHC | | | 0.0250 | 0.0245 | | g K/3K | | m8 | 51 - 949 | 7 | 2m |
| delta-BHC | | | 0.0250 | 0.0241 | | g K/3K | | m7 | 20 - 912 | 5 | 40 |
| Dieldrin | | | 0.0250 | 0.0259 | | g K/3K | | 900 | 52 - 944 | 7 | 28 |
| ( ndosulfan I | | | 0.0250 | 0.024m | | g K/3K | | 900 | 4m- 91m | 8 | 28 |
| ( ndosulfan II | | | 0.0250 | 0.0256 | | g K/3K | | 902 | 59 - 950 | 8 | 2m |
| ( ndosulfan sulfate | | | 0.0250 | 0.0268 | | g K/3K | | 907 | 45 - 91m | 8 | 10 |
| ( ndrin | | | 0.0250 | 0.0268 | | g K/3K | | 907 | 51 - 959 | 7 | 2m |
| ( ndrin aldehVde | | | 0.0250 | 0.0249 | | g K/3K | | m6 | 19 - 946 | 6 | 40 |
| Kag g a-BHC | | | 0.0250 | 0.0264 | | g K/3K | | 906 | 51 - 949 | 7 | 2m |
| Kag g a-Chlordane | | | 0.0250 | 0.0254 | | g K/3K | | 909 | 46 - 956 | 7 | 1m |
| Heptachlor | | | 0.0250 | 0.0254 | | g K/3K | | 902 | 52 - 944 | 6 | 2m |
| Heptachlor epoyide | | | 0.0250 | 0.0255 | | g K/3K | | 902 | 54 - 949 | 7 | 2m |
| x ethoyVchlor | | | 0.0250 | 0.0275 | | g K/3K | | 990 | 47 - 948 | 8 | 2m |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *DC: DecachloroBiphenyl (Surr)* | *10f* | | *37 - 151* |
| *zetrachloro-8 -xylene* | *bb* | | *3f - 14f* |

**Lab Sample ID: 570-55269-A-50-C MS**
**Matrix: Solid**
**Analysis Batch: 140376**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 140152**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 4,4+DDD | ND | | 0.0250 | 0.09m9 | | g K/3K | | 77 | 27 - 944 |
| 4,4+DD( | ND | | 0.0250 | 0.09m2 | | g K/3K | | 77 | 28 - 949 |
| 4,4+DDT | ND | | 0.0250 | 0.0298 | | g K/3K | | 87 | 90 - 954 |
| Mdrin | ND | | 0.0250 | 0.0970 | | g K/3K | | 68 | 26 - 925 |
| alpha-BHC | ND | | 0.0250 | 0.0988 | | g K/3K | | 75 | 24 - 925 |
| alpha-Chlordane | ND | | 0.0250 | 0.0981 | | g K/3K | | 74 | 97 - 944 |
| beta-BHC | ND | | 0.0250 | 0.0961 | | g K/3K | | 65 | 28 - 925 |
| delta-BHC | ND | | 0.0250 | 0.0978 | | g K/3K | | 79 | 90 - 925 |
| Dieldrin | ND | | 0.0250 | 0.0982 | | g K/3K | | 71 | 9m- 945 |
| ( ndosulfan I | ND | | 0.0250 | 0.0989 | | g K/3K | | 71 | 25 - 925 |
| ( ndosulfan II | ND | | 0.0250 | 0.0985 | | g K/3K | | 74 | 91 - 942 |
| ( ndosulfan sulfate | ND | | 0.0250 | 0.0986 | | g K/3K | | 74 | 94 - 926 |
| ( ndrin | ND | | 0.0250 | 0.09m4 | | g K/3K | | 78 | 28 - 91m |
| ( ndrin aldehVde | ND | | 0.0250 | 0.0986 | | g K/3K | | 75 | 92 - 925 |
| Kag g a-BHC | ND | | 0.0250 | 0.0977 | | g K/3K | | 79 | 24 - 925 |
| Kag g a-Chlordane | ND | | 0.0250 | 0.09m2 | | g K/3K | | 77 | 90 - 960 |
| Heptachlor | ND | | 0.0250 | 0.0984 | | g K/3K | | 74 | 9m- 927 |
| Heptachlor epoyide | ND | | 0.0250 | 0.0984 | | g K/3K | | 74 | 11 - 921 |
| x ethoyVchlor | ND | | 0.0250 | 0.0216 | | g K/3K | | m5 | 9m- 928 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 570-55269-A-50-C MS**
**Matrix: Solid**
**Analysis Batch: 140376**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 140152**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| DC: DecachloroBiphenyl (Surr) | b3 | | 37 - 151 |
| zetrachloro-8 -xylene | f 1 | | 3f - 14f |

**Lab Sample ID: 570-55269-A-50-D MSD**
**Matrix: Solid**
**Analysis Batch: 140376**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 140152**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4+DDD | ND | | 0.024m | 0.09m4 | | g K/3K | | 78 | 27 - 944 | 9 | 40 |
| 4,4+DD( | ND | | 0.024m | 0.09m9 | | g K/3K | | 77 | 28 - 949 | 9 | 12 |
| 4,4+DDT | ND | | 0.024m | 0.029m | | g K/3K | | 88 | 90 - 954 | 9 | 40 |
| Mdrin | ND | | 0.024m | 0.0979 | | g K/3K | | 6m | 26 - 925 | 0 | 40 |
| alpha-BHC | ND | | 0.024m | 0.0988 | | g K/3K | | 76 | 24 - 925 | 0 | 40 |
| alpha-Chlordane | ND | | 0.024m | 0.0982 | | g K/3K | | 71 | 97 - 944 | 9 | 40 |
| beta-BHC | ND | | 0.024m | 0.0967 | | g K/3K | | 67 | 28 - 925 | 1 | 1m |
| delta-BHC | ND | | 0.024m | 0.0984 | | g K/3K | | 74 | 90 - 925 | 1 | 40 |
| Dieldrin | ND | | 0.024m | 0.0978 | | g K/3K | | 72 | 9m- 945 | 2 | 1m |
| ( ndosulfan I | ND | | 0.024m | 0.0982 | | g K/3K | | 71 | 25 - 925 | 0 | 1m |
| ( ndosulfan II | ND | | 0.024m | 0.0987 | | g K/3K | | 75 | 91 - 942 | 9 | 40 |
| ( ndosulfan sulfate | ND | | 0.024m | 0.09m1 | | g K/3K | | 78 | 94 - 926 | 4 | 18 |
| ( ndrin | ND | | 0.024m | 0.09m1 | | g K/3K | | 78 | 28 - 91m | 9 | 40 |
| ( ndrin aldehVde | ND | | 0.024m | 0.0987 | | g K/3K | | 75 | 92 - 925 | 0 | 40 |
| Kag g a-BHC | ND | | 0.024m | 0.0989 | | g K/3K | | 71 | 24 - 925 | 2 | 40 |
| Kag g a-Chlordane | ND | | 0.024m | 0.0982 | | g K/3K | | 71 | 90 - 960 | 5 | 40 |
| Heptachlor | ND | | 0.024m | 0.0984 | | g K/3K | | 74 | 9m- 927 | 0 | 40 |
| Heptachlor epoyide | ND | | 0.024m | 0.0982 | | g K/3K | | 71 | 11 - 921 | 9 | 14 |
| x ethoyVchlor | ND | | 0.024m | 0.0227 | | g K/3K | | m9 | 9m- 928 | 4 | 40 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| DC: DecachloroBiphenyl (Surr) | b5 | | 37 - 151 |
| zetrachloro-8 -xylene | f 1 | | 3f - 14f |

## Method: 8151A - Herbicides (GC)

**Lab Sample ID: MB 570-140431/1-A**
**Matrix: Solid**
**Analysis Batch: 140830**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 140431**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.090 | 0.0017 | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |
| 2,4,5-TP ASil) eyE | ND | | 0.090 | 0.0016 | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |
| 2,4-D | ND | | 0.90 | 0.04m | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |
| 2,4-DB | ND | | 0.90 | 0.047 | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |
| Dalapon | ND | | 0.25 | 0.072 | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |
| Dicag ba | ND | | 0.090 | 0.0047 | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |
| Dichlorprop | ND | | 0.90 | 0.04m | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |
| Dinoseb | ND | | 0.90 | 0.09m | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |
| x CPM | ND | | 20 | 99 | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |

## Method: 8151A - Herbicides (GC) (Continued)

### Lab Sample ID: MB 570-140431/1-A
Matrix: Solid
Analysis Batch: 140830

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140431

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| x CPP | ND | | 90 | 6.6 | g K/3K | | 04/02/29 07:12 | 04/01/29 96:50 | 9 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *f b* | | *21 - 1T1* | *04/02/21 07932* | *04/03/21 1T950* | *1* |

### Lab Sample ID: LCS 570-140431/2-A
Matrix: Solid
Analysis Batch: 140830

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 140431

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | | | 0.0400 | 0.0448 | | g K/3K | | 992 | 20 - 951 | | |
| 2,4,5-TP ASil) eyE | | | 0.0400 | 0.0165 | | g K/3K | | m9 | 20 - 947 | | |
| 2,4-D | | | 0.400 | 0.192 | | g K/3K | | 78 | 20 - 951 | | |
| 2,4-DB | | | 0.400 | 0.945 | | g K/3K | | 16 | 20 - 980 | | |
| Dalapon | | | 9.00 | 0.798 | | g K/3K | | 72 | 20 - 946 | | |
| Dicag ba | | | 0.0400 | 0.01m6 | | g K/3K | | mm | 20 - 951 | | |
| Dichlorprop | | | 0.400 | 0.191 | | g K/3K | | 78 | 20 - 946 | | |
| Dinoseb | | | 0.200 | ND | G | g K/3K | | 4 | 90 - 76 | | |
| x CPM | | | 40.0 | 27.5 | | g K/3K | | 6m | 20 - 942 | | |
| x CPP | | | 40.0 | 2m9 | | g K/3K | | 71 | 21 - 942 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *3f* | | *21 - 1T1* |

### Lab Sample ID: LCSD 570-140431/3-A
Matrix: Solid
Analysis Batch: 140830

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 140431

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | | | 0.0400 | 0.0466 | | g K/3K | | 997 | 20 - 951 | 4 | 10 |
| 2,4,5-TP ASil) eyE | | | 0.0400 | 0.0167 | | g K/3K | | m2 | 20 - 947 | 0 | 10 |
| 2,4-D | | | 0.400 | 0.102 | | g K/3K | | 75 | 20 - 951 | 1 | 10 |
| 2,4-DB | | | 0.400 | 0.951 | | g K/3K | | 18 | 20 - 980 | 6 | 10 |
| Dalapon | | | 9.00 | 0.721 | | g K/3K | | 72 | 20 - 946 | 9 | 10 |
| Dicag ba | | | 0.0400 | 0.0400 | | g K/3K | | 900 | 20 - 951 | 9 | 10 |
| Dichlorprop | | | 0.400 | 0.194 | | g K/3K | | 7m | 20 - 946 | 0 | 10 |
| Dinoseb | | | 0.200 | ND | G | g K/3K | | 4 | 90 - 76 | 7 | 10 |
| x CPM | | | 40.0 | 19.0 | | g K/3K | | 78 | 20 - 942 | 92 | 10 |
| x CPP | | | 40.0 | 11.0 | | g K/3K | | 81 | 21 - 942 | 91 | 28 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *31* | | *21 - 1T1* |

## Method: 8151A - Herbicides (GC) (Continued)

**Lab Sample ID: 570-54549-A-7-R MS**
**Matrix: Solid**
**Analysis Batch: 140830**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 140431**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0400 | 0.0278 | | g K/3K | | 6m | 20 - 968 |
| 2,4,5-TP ASil) eyE | ND | | 0.0400 | 0.0172 | | g K/3K | | m1 | 20 - 94m |
| 2,4-D | ND | | 0.400 | 0.247 | | g K/3K | | 62 | 20 - 94m |
| 2,4-DB | ND | F2 | 0.400 | 0.269 | | g K/3K | | 65 | 20 - 980 |
| Dalapon | ND | | 9.00 | 0.658 | | g K/3K | | 66 | 20 - 916 |
| Dicag ba | ND | | 0.0400 | 0.0185 | | g K/3K | | m6 | 20 - 940 |
| Dichlorprop | ND | | 0.400 | 0.195 | | g K/3K | | 7m | 20 - 942 |
| Dinoseb | ND | F9 G | 0.200 | ND | F9 | g K/3K | | 0 | 90 - 90m |
| x CPM | ND | | 40.0 | 2m2 | | g K/3K | | 71 | 20 - 917 |
| x CPP | ND | | 40.0 | 40.1 | | g K/3K | | 909 | 20 - 918 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *T3* | | *21 - 1T1* |

**Lab Sample ID: 570-54549-A-7-S MSD**
**Matrix: Solid**
**Analysis Batch: 140830**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 140431**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0409 | 0.0268 | | g K/3K | | 67 | 20 - 968 | 1 | 40 |
| 2,4,5-TP ASil) eyE | ND | | 0.0409 | 0.0126 | | g K/3K | | 89 | 20 - 94m | 91 | 10 |
| 2,4-D | ND | | 0.409 | 0.275 | | g K/3K | | 6m | 20 - 94m | 99 | 18 |
| 2,4-DB | ND | F2 | 0.409 | 0.0847 | J F2 | g K/3K | | 29 | 20 - 980 | 902 | 40 |
| Dalapon | ND | | 9.00 | 0.660 | | g K/3K | | 66 | 20 - 916 | 0 | 40 |
| Dicag ba | ND | | 0.0409 | 0.0165 | | g K/3K | | m9 | 20 - 940 | 5 | 17 |
| Dichlorprop | ND | | 0.409 | 0.2m0 | | g K/3K | | 72 | 20 - 942 | 8 | 27 |
| Dinoseb | ND | F9 G | 0.200 | ND | F9 | g K/3K | | 0 | 90 - 90m | NC | 40 |
| x CPM | ND | | 40.9 | 2m2 | | g K/3K | | 71 | 20 - 917 | 0 | 40 |
| x CPP | ND | | 40.9 | 28.5 | | g K/3K | | 79 | 20 - 918 | 14 | 16 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *3T* | | *21 - 1T1* |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-140383/1-A**
**Matrix: Solid**
**Analysis Batch: 140644**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 140383**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mntig onV | ND | | 1.9 | 9.4 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Mrsenic | ND | | 2.6 | 2.1 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Bariug | ND | | 0.59 | 0.21 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| BerVliug | ND | | 0.26 | 0.98 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Cadg iug | ND | | 0.59 | 0.29 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Chrog iug | ND | | 9.0 | 0.98 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Cobalt | ND | | 9.0 | 0.21 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Copper | ND | | 9.0 | 0.52 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 570-140383/1-A**
**Matrix: Solid**
**Analysis Batch: 140644**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 140383**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | | 5.9 | 0.mm | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| x olVbdenug | ND | | 0.59 | 0.46 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Nickel | ND | | 0.59 | 0.44 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Seleniug | ND | | 5.9 | 9.m | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Sil) er | ND | | 9.0 | 0.21 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Thalliug | ND | | 5.9 | 9.5 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Xanadiug | ND | | 9.0 | 0.98 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |
| Zinc | ND | | 90 | 5.2 | g K/3K | | 04/09/29 98:00 | 04/02/29 9m41 | 9 |

**Lab Sample ID: LCS 570-140383/2-A**
**Matrix: Solid**
**Analysis Batch: 140644**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 140383**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mntig onV | 24.0 | 24.5 | | g K/3K | | 902 | 80 - 920 |
| Mrsenic | 24.0 | 22.m | | g K/3K | | m5 | 80 - 920 |
| Bariug | 24.0 | 25.6 | | g K/3K | | 906 | 80 - 920 |
| BerVliug | 24.0 | 24.9 | | g K/3K | | 900 | 80 - 920 |
| Cadg iug | 24.0 | 24.5 | | g K/3K | | 902 | 80 - 920 |
| Chrog iug | 24.0 | 25.4 | | g K/3K | | 906 | 80 - 920 |
| Cobalt | 24.0 | 24.9 | | g K/3K | | 900 | 80 - 920 |
| Copper | 24.0 | 25.9 | | g K/3K | | 904 | 80 - 920 |
| Lead | 24.0 | 25.9 | | g K/3K | | 905 | 80 - 920 |
| x olVbdenug | 24.0 | 21.m | | g K/3K | | mm | 80 - 920 |
| Nickel | 24.0 | 26.0 | | g K/3K | | 908 | 80 - 920 |
| Seleniug | 24.0 | 22.7 | | g K/3K | | m5 | 80 - 920 |
| Sil) er | 92.0 | 92.4 | | g K/3K | | 904 | 80 - 920 |
| Thalliug | 24.0 | 24.7 | | g K/3K | | 901 | 80 - 920 |
| Xanadiug | 24.0 | 21.m | | g K/3K | | 900 | 80 - 920 |
| Zinc | 24.0 | 25.6 | | g K/3K | | 906 | 80 - 920 |

**Lab Sample ID: LCSD 570-140383/3-A**
**Matrix: Solid**
**Analysis Batch: 140644**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 140383**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mntig onV | 26.0 | 26.4 | | g K/3K | | 909 | 80 - 920 | 7 | 20 |
| Mrsenic | 26.0 | 24.m | | g K/3K | | m6 | 80 - 920 | m | 20 |
| Bariug | 26.0 | 27.m | | g K/3K | | 907 | 80 - 920 | 8 | 20 |
| BerVliug | 26.0 | 25.m | | g K/3K | | mm | 80 - 920 | 7 | 20 |
| Cadg iug | 26.0 | 26.5 | | g K/3K | | 902 | 80 - 920 | 8 | 20 |
| Chrog iug | 26.0 | 27.6 | | g K/3K | | 906 | 80 - 920 | 8 | 20 |
| Cobalt | 26.0 | 26.9 | | g K/3K | | 900 | 80 - 920 | 8 | 20 |
| Copper | 26.0 | 27.2 | | g K/3K | | 904 | 80 - 920 | 8 | 20 |
| Lead | 26.0 | 27.0 | | g K/3K | | 904 | 80 - 920 | 7 | 20 |
| x olVbdenug | 26.0 | 26.9 | | g K/3K | | 900 | 80 - 920 | m | 20 |
| Nickel | 26.0 | 28.2 | | g K/3K | | 908 | 80 - 920 | 8 | 20 |
| Seleniug | 26.0 | 25.0 | | g K/3K | | m6 | 80 - 920 | 90 | 20 |
| Sil) er | 91.0 | 91.5 | | g K/3K | | 904 | 80 - 920 | 8 | 20 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 570-140383/3-A**
**Matrix: Solid**
**Analysis Batch: 140644**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 140383**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Thalliug | 26.0 | 26.5 | | g K/3K | | 902 | 80 - 920 | 7 | 20 |
| Xanadiug | 26.0 | 26.0 | | g K/3K | | 900 | 80 - 920 | 8 | 20 |
| Zinc | 26.0 | 27.7 | | g K/3K | | 906 | 80 - 920 | 8 | 20 |

**Lab Sample ID: 570-54669-B-3-L MS**
**Matrix: Solid**
**Analysis Batch: 140644**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 140383**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mntig onV | ND | F9 | 24.0 | ND | F9 | g K/3K | | 0 | 50 - 995 |
| Mrsenic | 4.0 | | 24.0 | 21.4 | | g K/3K | | 89 | 75 - 925 |
| Bariug | 910 | | 24.0 | 968 | 4 | g K/3K | | 946 | 75 - 925 |
| BerVliug | 0.1m | | 24.0 | 24.8 | | g K/3K | | 909 | 75 - 925 |
| Cadg iug | 2.9 | | 24.0 | 26.2 | | g K/3K | | 900 | 75 - 925 |
| Chrog iug | 22 | F9 | 24.0 | 2000 | F9 | g K/3K | | 8291 | 75 - 925 |
| Cobalt | 5.8 | | 24.0 | 11.6 | | g K/3K | | 996 | 75 - 925 |
| Copper | 74 | F9 | 24.0 | 948 | F9 | g K/3K | | 107 | 75 - 925 |
| Lead | 720 | | 24.0 | 975 | 4 | g K/3K | | -2278 | 75 - 925 |
| x olVbdenug | 9.9 | F9 | 24.0 | 59.1 | F9 | g K/3K | | 20m | 75 - 925 |
| Nickel | 92 | F9 | 24.0 | 88.0 | F9 | g K/3K | | 198 | 75 - 925 |
| Seleniug | ND | F9 | 24.0 | 97.m | F9 | g K/3K | | 74 | 75 - 925 |
| Sil) er | ND | | 92.0 | 91.0 | | g K/3K | | 908 | 75 - 925 |
| Thalliug | ND | | 24.0 | 29.1 | | g K/3K | | 8m | 75 - 925 |
| Xanadiug | 22 | | 24.0 | 44.2 | | g K/3K | | m4 | 75 - 925 |
| Zinc | 950 | | 24.0 | 294 | 4 | g K/3K | | 267 | 75 - 925 |

**Lab Sample ID: 570-54669-B-3-M MSD**
**Matrix: Solid**
**Analysis Batch: 140644**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 140383**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mntig onV | ND | F9 | 24.8 | 2.25 | J F9 | g K/3K | | m | 50 - 995 | NC | 20 |
| Mrsenic | 4.0 | | 24.8 | 26.2 | | g K/3K | | m0 | 75 - 925 | 99 | 20 |
| Bariug | 910 | | 24.8 | 975 | 4 | g K/3K | | 96m | 75 - 925 | 4 | 20 |
| BerVliug | 0.1m | | 24.8 | 25.8 | | g K/3K | | 901 | 75 - 925 | 4 | 20 |
| Cadg iug | 2.9 | | 24.8 | 27.4 | | g K/3K | | 902 | 75 - 925 | 4 | 20 |
| Chrog iug | 22 | F9 | 24.8 | 2080 | F9 | g K/3K | | 8121 | 75 - 925 | 4 | 20 |
| Cobalt | 5.8 | | 24.8 | 15.2 | | g K/3K | | 998 | 75 - 925 | 4 | 20 |
| Copper | 74 | F9 | 24.8 | 954 | F9 | g K/3K | | 121 | 75 - 925 | 4 | 20 |
| Lead | 720 | | 24.8 | 982 | 4 | g K/3K | | -2982 | 75 - 925 | 4 | 20 |
| x olVbdenug | 9.9 | F9 | 24.8 | 51.6 | F9 | g K/3K | | 292 | 75 - 925 | 4 | 20 |
| Nickel | 92 | F9 | 24.8 | m2.2 | F9 | g K/3K | | 126 | 75 - 925 | 5 | 20 |
| Seleniug | ND | F9 | 24.8 | 9m5 | | g K/3K | | 7m | 75 - 925 | m | 20 |
| Sil) er | ND | | 92.4 | 91.6 | | g K/3K | | 990 | 75 - 925 | 5 | 20 |
| Thalliug | ND | | 24.8 | 22.7 | | g K/3K | | m2 | 75 - 925 | 6 | 20 |
| Xanadiug | 22 | | 24.8 | 46.2 | | g K/3K | | 900 | 75 - 925 | 4 | 20 |
| Zinc | 950 | | 24.8 | 221 | 4 | g K/3K | | 2m4 | 75 - 925 | 4 | 20 |

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 570-140384/1-A**
**Matrix: Solid**
**Analysis Batch: 140678**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 140384**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| x ercurV | ND | | 0.086 | 0.094 | g K/3K | | 04/09/29 98:00 | 04/02/29 96:47 | 9 |

**Lab Sample ID: LCS 570-140384/2-A**
**Matrix: Solid**
**Analysis Batch: 140678**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 140384**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| x ercurV | | | 0.7m4 | 0.761 | | g K/3K | | m6 | 85 - 929 | | |

**Lab Sample ID: LCSD 570-140384/3-A**
**Matrix: Solid**
**Analysis Batch: 140678**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 140384**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| x ercurV | | | 0.820 | 0.786 | | g K/3K | | m6 | 85 - 929 | 1 | 90 |

**Lab Sample ID: 570-54669-B-3-N MS**
**Matrix: Solid**
**Analysis Batch: 140678**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 140384**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| x ercurV | 0.17 | | 0.7m4 | 0.m76 | | g K/3K | | 76 | 79 - 917 | | |

**Lab Sample ID: 570-54669-B-3-O MSD**
**Matrix: Solid**
**Analysis Batch: 140678**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 140384**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| x ercurV | 0.17 | | 0.806 | 0.mm6 | | g K/3K | | 77 | 79 - 917 | 2 | 94 |

# QC Association Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281213-1

## GC/MS VOA

### AnaRysis e atcpBh: 1133

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 8260B | 140097 |
| 440-281213-2 | B-5-115 | Total/NA | Solid | 8260B | 140097 |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 8260B | 140097 |
| MB 570-140088/7 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 570-140088/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 570-140088/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

### I rL7 e atcpBh: 11d6

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 5035 | |
| 440-281213-2 | B-5-115 | Total/NA | Solid | 5035 | |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 5035 | |

## GC VOA

### I rL7 e atcpBh: 11d6

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 5035 | |
| 440-281213-2 | B-5-115 | Total/NA | Solid | 5035 | |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 5035 | |

### AnaRysis e atcpBh: 1: 39

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 8015B | 140097 |
| 440-281213-2 | B-5-115 | Total/NA | Solid | 8015B | 140097 |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 8015B | 140097 |
| MB 570-140483/5 | Method Blank | Total/NA | Solid | 8015B | |
| LCS 570-140483/3 | Lab Control Sample | Total/NA | Solid | 8015B | |
| LCSD 570-140483/4 | Lab Control Sample Dup | Total/NA | Solid | 8015B | |

## GC SLmi VOA

### I rL7 e atcpBh: 1h20

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 3546 | |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 3546 | |
| MB 570-140152/1-A | Method Blank | Total/NA | Solid | 3546 | |
| LCS 570-140152/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 570-140152/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| 570-55269-A-50-C MS | Matrix Spike | Total/NA | Solid | 3546 | |
| 570-55269-A-50-D MSD | Matrix Spike Duplicate | Total/NA | Solid | 3546 | |

### AnaRysis e atcpBh: 1965

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 8081A | 140152 |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 8081A | 140152 |
| MB 570-140152/1-A | Method Blank | Total/NA | Solid | 8081A | 140152 |
| LCS 570-140152/2-A | Lab Control Sample | Total/NA | Solid | 8081A | 140152 |
| LCSD 570-140152/3-A | Lab Control Sample Dup | Total/NA | Solid | 8081A | 140152 |
| 570-55269-A-50-C MS | Matrix Spike | Total/NA | Solid | 8081A | 140152 |
| 570-55269-A-50-D MSD | Matrix Spike Duplicate | Total/NA | Solid | 8081A | 140152 |

## GC SLmi VOA

### I rL7 e atcpBh: 1: 9h

| 8a4 Sam7R. b | CRLnt Sam7R. b | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 8151A | |
| 440-281213-2 | B-5-115 | Total/NA | Solid | 8151A | |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 8151A | |
| MB 570-140431/1-A | Method Blank | Total/NA | Solid | 8151A | |
| LCS 570-140431/2-A | Lab Control Sample | Total/NA | Solid | 8151A | |
| LCSD 570-140431/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | |
| 570-54549-A-7-R MS | Matrix Spike | Total/NA | Solid | 8151A | |
| 570-54549-A-7-S MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | |

### AnaRysis e atcpBh: 1391

| 8a4 Sam7R. b | CRLnt Sam7R. b | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 8151A | 140431 |
| 440-281213-2 | B-5-115 | Total/NA | Solid | 8151A | 140431 |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 8151A | 140431 |
| MB 570-140431/1-A | Method Blank | Total/NA | Solid | 8151A | 140431 |
| LCS 570-140431/2-A | Lab Control Sample | Total/NA | Solid | 8151A | 140431 |
| LCSD 570-140431/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | 140431 |
| 570-54549-A-7-R MS | Matrix Spike | Total/NA | Solid | 8151A | 140431 |
| 570-54549-A-7-S MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | 140431 |

### AnaRysis e atcpBh: 1d: d

| 8a4 Sam7R. b | CRLnt Sam7R. b | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 8015B | 141144 |
| 440-281213-2 | B-5-115 | Total/NA | Solid | 8015B | 141144 |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 8015B | 141144 |
| MB 570-141144/1-A | Method Blank | Total/NA | Solid | 8015B | 141144 |
| LCS 570-141144/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 141144 |
| LCSD 570-141144/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 141144 |
| 570-55631-F-1-A MS | Matrix Spike | Total/NA | Solid | 8015B | 141144 |
| 570-55631-F-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B | 141144 |

### I rL7 e atcpBh: hh: :

| 8a4 Sam7R. b | CRLnt Sam7R. b | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 3550C | |
| 440-281213-2 | B-5-115 | Total/NA | Solid | 3550C | |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 3550C | |
| MB 570-141144/1-A | Method Blank | Total/NA | Solid | 3550C | |
| LCS 570-141144/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| LCSD 570-141144/3-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| 570-55631-F-1-A MS | Matrix Spike | Total/NA | Solid | 3550C | |
| 570-55631-F-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 3550C | |

## MLtaPs

### I rL7 e atcpBh: 1939

| 8a4 Sam7R. b | CRLnt Sam7R. b | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 3050B | |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 3050B | |
| MB 570-140383/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 570-140383/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| LCSD 570-140383/3-A | Lab Control Sample Dup | Total/NA | Solid | 3050B | |

## MLtaPs (ContinuLx)

### I rL7 e atcpBh: 1939 (ContinuLx)

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 570-54669-B-3-L MS | Matrix Spike | Total/NA | Solid | 3050B | |
| 570-54669-B-3-M MSD | Matrix Spike Duplicate | Total/NA | Solid | 3050B | |

### I rL7 e atcpBh: 193:

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 7471A | |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 7471A | |
| MB 570-140384/1-A | Method Blank | Total/NA | Solid | 7471A | |
| LCS 570-140384/2-A | Lab Control Sample | Total/NA | Solid | 7471A | |
| LCSD 570-140384/3-A | Lab Control Sample Dup | Total/NA | Solid | 7471A | |
| 570-54669-B-3-N MS | Matrix Spike | Total/NA | Solid | 7471A | |
| 570-54669-B-3-O MSD | Matrix Spike Duplicate | Total/NA | Solid | 7471A | |

### AnaRysis e atcpBh: 15: :

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 6010B | 140383 |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 6010B | 140383 |
| MB 570-140383/1-A | Method Blank | Total/NA | Solid | 6010B | 140383 |
| LCS 570-140383/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 140383 |
| LCSD 570-140383/3-A | Lab Control Sample Dup | Total/NA | Solid | 6010B | 140383 |
| 570-54669-B-3-L MS | Matrix Spike | Total/NA | Solid | 6010B | 140383 |
| 570-54669-B-3-M MSD | Matrix Spike Duplicate | Total/NA | Solid | 6010B | 140383 |

### AnaRysis e atcpBh: 1563

| 8a4 Sam7RLb | CRLnt Sam7RLb | I rL7 Dy7L | MatriT | MLtpox | I rL7 e atcp |
|---|---|---|---|---|---|
| 440-281213-1 | B-5-5 | Total/NA | Solid | 7471A | 140384 |
| 440-281213-3 | B-6-5 | Total/NA | Solid | 7471A | 140384 |
| MB 570-140384/1-A | Method Blank | Total/NA | Solid | 7471A | 140384 |
| LCS 570-140384/2-A | Lab Control Sample | Total/NA | Solid | 7471A | 140384 |
| LCSD 570-140384/3-A | Lab Control Sample Dup | Total/NA | Solid | 7471A | 140384 |
| 570-54669-B-3-N MS | Matrix Spike | Total/NA | Solid | 7471A | 140384 |
| 570-54669-B-3-O MSD | Matrix Spike Duplicate | Total/NA | Solid | 7471A | 140384 |

# Definitions/Glossary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281213-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| *+ | LCS and/or LCSD is outside acceptance limits, high biased. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| *- | LCS and/or LCSD is outside acceptance limits, low biased. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| F2 | MS/MSD RPD exceeds control limits |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| L | A negative instrument reading had an absolute value greater than the reporting limit |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
5ro1ectP ite: / roSen Born j addlerw

Job ID: 440-289293-9

## Laboratory: Eurofins Calscience LLC

k nless otUerh ise noted, all analwtes yor tUis laboratorwh ere cof ered under eacU accreditationPertiyication beloh v

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Caliyornia | j CLQMD 7L5 | 9. 7L0A9A | 99-30-29 |

TUe yolloh ing analwtes are included in tUis report, but tUe laboratorwis not certiyied bwtUe gof erning autUoritw TUis list mawinclude analwtes yor h UicU tUe agencwdoes not oyyer certiyicationv

| Lnalwsis MetUod | 5rep MetUod | Matrix | Lnalwte |
|---|---|---|---|
| 6090/ | 30N0/ | j olid | Lntimonw |
| 6090/ | 30N0/ | j olid | Lrsenic |
| 6090/ | 30N0/ | j olid | / arium |
| 6090/ | 30N0/ | j olid | / erwllium |
| 6090/ | 30N0/ | j olid | Cadmium |
| 6090/ | 30N0/ | j olid | CUromium |
| 6090/ | 30N0/ | j olid | Cobalt |
| 6090/ | 30N0/ | j olid | Copper |
| 6090/ | 30N0/ | j olid | 7ead |
| 6090/ | 30N0/ | j olid | Molwbdenum |
| 6090/ | 30N0/ | j olid | VicSel |
| 6090/ | 30N0/ | j olid | j elenium |
| 6090/ | 30N0/ | j olid | j ilf er |
| 6090/ | 30N0/ | j olid | TUallium |
| 6090/ | 30N0/ | j olid | Zanadium |
| 6090/ | 30N0/ | j olid | Ginc |
| . 4. 9L | . 4. 9L | j olid | Mercurw |
| 809N/ | 3NN0C | j olid | C93-C22 |
| 809N/ | 3NN0C | j olid | C23-C40 |
| 809N/ | N03N | j olid | Rasoline Oange ( rganics )C4-C92' |
| 8089L | 3N46 | j olid | 4,4ED DD |
| 8089L | 3N46 | j olid | 4,4ED DH |
| 8089L | 3N46 | j olid | 4,4ED DT |
| 8089L | 3N46 | j olid | L ldrin |
| 8089L | 3N46 | j olid | alpUa-/ BC |
| 8089L | 3N46 | j olid | alpUa-CUlordane |
| 8089L | 3N46 | j olid | beta-/ BC |
| 8089L | 3N46 | j olid | CUlordane |
| 8089L | 3N46 | j olid | delta-/ BC |
| 8089L | 3N46 | j olid | Dieldrin |
| 8089L | 3N46 | j olid | Hndosulyan I |
| 8089L | 3N46 | j olid | Hndosulyan II |
| 8089L | 3N46 | j olid | Hndosulyan sulyate |
| 8089L | 3N46 | j olid | Hndrin |
| 8089L | 3N46 | j olid | Hndrin aldeUwde |
| 8089L | 3N46 | j olid | Hndrin Setone |
| 8089L | 3N46 | j olid | gamma-/ BC |
| 8089L | 3N46 | j olid | gamma-CUlordane |
| 8089L | 3N46 | j olid | BeptacUlor |
| 8089L | 3N46 | j olid | BeptacUlor epoxide |
| 8089L | 3N46 | j olid | MetUoxwcUlor |
| 8089L | 3N46 | j olid | ToxapUene |
| 89N9L | 89N9L | j olid | 2,4,N-T |
| 89N9L | 89N9L | j olid | 2,4,N-T5 )j ilf ex' |
| 89N9L | 89N9L | j olid | 2,4-D |

## Laboratory: Eurofins Calscience LLC (Continued)

k nless otUerh ise noted, all analwtes yor tUis laboratorwh ere cof ered under eacU accreditationPertiyication beloh v

| Authority | | Program | Identification Number | Expiration Date |
|---|---|---|---|---|
| Caliyornia | | j CLQMD 7L5 | 9. 7L0A9A | 99-30-29 |
| 89N9L | 89N9L | j olid | 2,4-D/ | |
| 89N9L | 89N9L | j olid | Dalapon | |
| 89N9L | 89N9L | j olid | Dicamba | |
| 89N9L | 89N9L | j olid | DicUorprop | |
| 89N9L | 89N9L | j olid | Dinoseb | |
| 89N9L | 89N9L | j olid | MC5L | |
| 89N9L | 89N9L | j olid | MC55 | |
| 8260/ | N03N | j olid | 9,9,9,2-TetracUoroetUane | |
| 8260/ | N03N | j olid | 9,9,9-TricUoroetUane | |
| 8260/ | N03N | j olid | 9,9,2,2-TetracUoroetUane | |
| 8260/ | N03N | j olid | 9,9,2-TricUoro-9,2,2-triyuoroetUane | |
| 8260/ | N03N | j olid | 9,9,2-TricUoroetUane | |
| 8260/ | N03N | j olid | 9,9-DicUoroetUane | |
| 8260/ | N03N | j olid | 9,9-DicUoroetUene | |
| 8260/ | N03N | j olid | 9,9-DicUoropropene | |
| 8260/ | N03N | j olid | 9,2,3-TricUorobenzene | |
| 8260/ | N03N | j olid | 9,2,3-TricUoropropane | |
| 8260/ | N03N | j olid | 9,2,4-TricUorobenzene | |
| 8260/ | N03N | j olid | 9,2,4-TrimetUwlbenzene | |
| 8260/ | N03N | j olid | 9,2-Dibromo-3-CUoropropane | |
| 8260/ | N03N | j olid | 9,2-DibromoetUane | |
| 8260/ | N03N | j olid | 9,2-DicUorobenzene | |
| 8260/ | N03N | j olid | 9,2-DicUoroetUane | |
| 8260/ | N03N | j olid | 9,2-DicUoropropane | |
| 8260/ | N03N | j olid | 9,3,N-TrimetUwlbenzene | |
| 8260/ | N03N | j olid | 9,3-DicUorobenzene | |
| 8260/ | N03N | j olid | 9,3-DicUoropropane | |
| 8260/ | N03N | j olid | 9,4-DicUorobenzene | |
| 8260/ | N03N | j olid | 2,2-DicUoropropane | |
| 8260/ | N03N | j olid | 2-/ utanone | |
| 8260/ | N03N | j olid | 2-CUorotoluene | |
| 8260/ | N03N | j olid | 2-Bexanone | |
| 8260/ | N03N | j olid | 4-CUorotoluene | |
| 8260/ | N03N | j olid | 4-MetUw-2-pentanone | |
| 8260/ | N03N | j olid | Lcetone | |
| 8260/ | N03N | j olid | / enzene | |
| 8260/ | N03N | j olid | / romobenzene | |
| 8260/ | N03N | j olid | / romocUoromet Uane | |
| 8260/ | N03N | j olid | / romodicUoromet Uane | |
| 8260/ | N03N | j olid | / romoyorm | |
| 8260/ | N03N | j olid | / romomet Uane | |
| 8260/ | N03N | j olid | Carbon disulyide | |
| 8260/ | N03N | j olid | Carbon tetracUoride | |
| 8260/ | N03N | j olid | CUorobenzene | |
| 8260/ | N03N | j olid | CUoroetUane | |
| 8260/ | N03N | j olid | CUoroyorm | |
| 8260/ | N03N | j olid | CUoromet Uane | |
| 8260/ | N03N | j olid | cis-9,2-DicUoroetUene | |
| 8260/ | N03N | j olid | cis-9,3-DicUoropropene | |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
5ro1ectP ite: / roSen Born j addlerw

Job ID: 440-289293-9

## Laboratory: Eurofins Calscience LLC (Continued)

k nless otUerh ise noted, all analwtes yor tUis laboratorwh ere cof ered under eacU accreditationPertiyication beloh v

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Caliyornia | j CLQMD 7L5 | 9. 7L0A9A | 99-30-29 |

| | | | |
|---|---|---|---|
| 8260/ | N03N | j olid | DibromocUoromet Uane |
| 8260/ | N03N | j olid | DibromometUane |
| 8260/ | N03N | j olid | DicUorodiyuoromet Uane |
| 8260/ | N03N | j olid | Di-isopropwl etUer )DI5H' |
| 8260/ | N03N | j olid | HtUanol |
| 8260/ | N03N | j olid | HtUwlbenzene |
| 8260/ | N03N | j olid | HtUwl-t-butwl etUer )HT/ H' |
| 8260/ | N03N | j olid | BexacUoro-9,3-butadiene |
| 8260/ | N03N | j olid | Isopropwlbenzene |
| 8260/ | N03N | j olid | m,p-Xwlene |
| 8260/ | N03N | j olid | MetUwlene CUoride |
| 8260/ | N03N | j olid | MetUwl-t-/ utwl HtUer )MT/ H' |
| 8260/ | N03N | j olid | VapUtUalene |
| 8260/ | N03N | j olid | n-/ utwlbenzene |
| 8260/ | N03N | j olid | V-5ropwlbenzene |
| 8260/ | N03N | j olid | o-Xwlene |
| 8260/ | N03N | j olid | p-Isopropwltoluene |
| 8260/ | N03N | j olid | sec-/ utwlbenzene |
| 8260/ | N03N | j olid | j twrene |
| 8260/ | N03N | j olid | Tert-amwl-metUwl etUer )TLMH' |
| 8260/ | N03N | j olid | tert-/ utwl alcoUol )T/ L' |
| 8260/ | N03N | j olid | tert-/ utwlbenzene |
| 8260/ | N03N | j olid | TetracUoroetUene |
| 8260/ | N03N | j olid | Toluene |
| 8260/ | N03N | j olid | trans-9,2-DicUoroetUene |
| 8260/ | N03N | j olid | trans-9,3-DicUoropropene |
| 8260/ | N03N | j olid | TricUoroetUene |
| 8260/ | N03N | j olid | TricUoroyuoromet Uane |
| 8260/ | N03N | j olid | Zinwl acetate |
| 8260/ | N03N | j olid | Zinwl cUoride |
| 8260/ | N03N | j olid | Xwlenes, Total |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: Eurofins
Address:
Phone:
Office Location: Colton
Contact: Danielle
Project Manager: Todd G. McFarland
PO/SO #: CB21P020

Sampler's Name: Tom C. Johnsen
Sampler's Signature:

Project Number: CB21P020
Project Name: Broken Horn Saddlery

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers VOA | P/O | TPH 8015 | VOCs 8260 | Herbicides 8151A | OCPs 8081A | CAM 17 Metals | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 3/29 | 13:38 | | X | B-5-5 | | | 5 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | 21 |
| S | 3/29 | 15:45 | | X | B-5-115 | | | 5 | 1 | ✓ | ✓ | ✓ | | | 21 |
| S | 3/30 | 13:26 | | X | B-6-5 | | | 5 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | 21 |

00 3/30/21

440-281213 Chain of Custody

TURNAROUND TIME ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 3/30 | 13:54 | William Rivera | 3/30/21 | 1354 |
| William Rivera | 3/30/21 | 1500 | | | |
| | | | Olga Cinelcs | 3/30/21 | 1500 |
| | | | | | |

NOTES: 5-DAY TAT

Matrix: WW Wastewater; W Water; S Soil; L -Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml = Glass wide mouth; P/O Plastic or other



10/13; 23/20 #89

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167380 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle.Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281213-1 |
| Address: 7440 Lincoln Way, , | Due Date Requested: 4/5/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes.**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B/5035FM_Calc (MOD) Routine + Oxy's | 8260B/5035FP_Calc (MOD) Routine + Oxy's | 8015B_GRO/5035FM_Calc Gasoline Range Organics C4-C12 | 8015B_GRO/5035FP_Calc Gasoline Range Organics C4-C12 | 8151A/8151A_SP Routine Herbicides List (full spike list | 8081A/3546 Routine Pesticides List | 6010B/3050B California Administrative Manual List | 7471A/7471A_Prep Mercury | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | | | | |
| B-5-5 (440-281213-1) | 3/29/21 | 13:38 Pacific | | Solid | | | X | X | X | X | X | X | X | X | 6 | |
| B-5-115 (440-281213-2) | 3/29/21 | 15.45 Pacific | | Solid | | | X | X | X | X | X | | | | 6 | |
| B-6-5 (440-281213-3) | 3/30/21 | 13:26 Pacific | | Solid | | | X | X | X | X | X | X | X | X | 6 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements. |

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| | | 3-31-21 9:30 | | | 3/31/21 0930 | |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.. | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|
| | | 3.6/2.5 SG |

Ver: 11/01/2020

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167380 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone | E-Mail: Danielle Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281213-1 |
| Address: 7440 Lincoln Way, | Due Date Requested: 4/5/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B/5035FM_Calc (MOD) Routine + Oxy's | 8260B/5035FP_Calc (MOD) Routine + Oxy's | 8015B_GRO/5035FM_Calc Gasoline Range Organics C4-C12 | 8015B_GRO/5035FP_Calc Gasoline Range Organics C4-C12 | 8151A/8151A_SP Routine Herbicides List (full spike list | 8081A/3546 Routine Pesticides List | 6010B/3050B California Administrative Manual List | 7471A/7471A_Prep Mercury | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | | | | |
| B-5-5 (440-281213-1) | 3/29/21 | 13.38 Pacific | | Solid | | | X | X | X | X | X | X | X | X | 6 | |
| B-5-115 (440-281213-2) | 3/29/21 | 15.45 Pacific | | Solid | | | X | X | X | X | X | | | | 6 | |
| B-6-5 (440-281213-3) | 3/30/21 | 13:26 Pacific | | Solid | | | X | X | X | X | X | X | X | X | 6 | |

Note: Since laboratory accreditations are subject to change Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| *Possible Hazard Identification* | *Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)* |
|---|---|
| *Unconfirmed* | ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months* |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements: |

| Empty Kit Relinquished by: | Date: | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 3-31-21 9:30 | | | 3/31/21 0930 | |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. N/A | Cooler Temperature(s) °C and Other Remarks: 2.6/2.5 5C6 |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-289291-9

**Login Number: 281213**
**List Number: 1**
**Creator: Skinner, Alma D**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (9/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-289291-9

**Login Number: 281213**
**List Number: 2**
**Creator: Ortiz-Luis, Michael**

**List Source: Eurofins Calscience**
**List Creation: 03/31/21 03:20 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.3 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (9/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281259-1
Client Project/Site: Broken Horn Saddlery

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/13/2021 1:19:07 PM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary



| Lab Sample ID | Client Sample ID | Ratric | Cvlledteo | Medeixeo | Asset ID |
|---|---|---|---|---|---|
| 440-28125C-1 | k-6-115 | Boiey | 09S90S21 15:17 | 09S91S21 18:00 | |

## Job ID: 440-281259-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281259-1**

**Comments**
mo aVVitional co. . entsh

**Receipt**
Tpe sa. wle v as recei3eV on 6S69S2029 M00 j Uh , nless otperv ise noteV belov gtpe sa. wle arri3eV in qooV conVitionganV v pere reyuireVgwrowerlNwreser3eV anV on icehTpe te. werature of tpe cooler at receiwt v as 9h2º Ch

**GC/MS VOA**
UetpoV 82M0k : Insufficient sa. wle 3olu. e v as a3ailable to werfor. a . atrix swiHeS atrix swiHe Vuwlicate (UBSUBD) associateV v itp analNtical batcp 150-940462h

UetpoV 82M0k : Tpe initial calibration cur3e analN7eV in batcp 150-940462 v as outsiVe . etpoV criteria for tpe follov inq analNte(s): k ro. o. etpanehz s inVicateV in tpe reference . etpoVgsa. wle analNsis . aNwroceeVApov e3erganNVetection or non-Vetection for tpe affecteV analNte(s) is consiVereV an esti. ateV concentrationh

mo aVVitional analNtical or yualitNissues v ere noteVgotper tpan tpose VescribeV abo3e or in tpe DefinitionsS lossarNwaqeh

**GC VOA**
UetpoV 8091k : Insufficient sa. wle 3olu. e v as a3ailable to werfor. a . atrix swiHeS atrix swiHe Vuwlicate (UBSUBD) associateV v itp analNtical batcp 150-9404M8h

mo aVVitional analNtical or yualitNissues v ere noteVgotper tpan tpose VescribeV abo3e or in tpe DefinitionsS lossarNwaqeh

**GC Semi VOA**
UetpoV 8091k : Tpe . atrix swiHe S. atrix swiHe Vuwlicate (UBSUBD) reco3eries anV wrecision for wrewaration batcp 150-949699 anV analNtical batcp 150-94964P v ere outsiVe control li. itshBa. wle . atrix interference anVSor non-po. oqeneitNare suswecteV because tpe associateV laboratorNcontrol sa. wle SlaboratorNsa. wle control Vuwlicate (GCBSSGCBD) wrecision v as v itpin accewtance li. itsh

UetpoV 8919z : Tpe continuinq calibration 3erification (CCL ) associateV v itp 150-949891 reco3ereV outsiVe tpe control li. its for 2g4-DicplorowpenNacetic aciV on one colu. nhResults are confir. eV on botp colu. ns anV reworteV fro. tpe wassinq colu. nh

UetpoV 8919z : Tpe laboratorNcontrol sa. wle anVSor tpe laboratorNcontrol sa. wle Vuwlicate (GCBSSGCBD) for wrewaration batcp 150-949060 anV analNtical batcp 150-949891 reco3ereV outsiVe control li. its for tpe follov inq analNte(s): DinosebhDinoseb pas been iVentifieV as a woor werfor. inq analNte v pen analN7eV usinq tpis . etpoVAtpereforegre-extractionSe-analNsis v as not werfor. eVh k atcp wrecision also exceeVeV control li. its for tpese analNte(s)hTpese results pa3e been reworteV anV yualifieVh

UetpoV 8919z : Tpe . atrix swiHeS atrix swiHe Vuwlicate (UBSUBD) for wrewaration batcp 150-949060 anV analNtical batcp 150-949891 exceeVeV control li. its for tpe follov inq analNte(s): Dinosebgmote tpat tpis analNte is a Hhov n woor werfor. er v pen analN7eV usinq tpis . etpoVh

mo aVVitional analNtical or yualitNissues v ere noteVgotper tpan tpose VescribeV abo3e or in tpe DefinitionsS lossarNwaqeh

**Organic Prep**
mo analNtical or yualitNissues v ere noteVgotper tpan tpose VescribeV in tpe DefinitionsS lossarNwaqeh

**VOA Prep**
mo analNtical or yualitNissues v ere noteVgotper tpan tpose VescribeV in tpe DefinitionsS lossarNwaqeh

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281259-1

## Client Sample ID: B-6-115

## Lab Sample ID: 440-281259-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C23-C40 | 8.6 | | 5.0 | 3.8 | mg/Kg | 1 | | 8015B | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281259-1

**Client Sample ID: B-6-115**
**Date Collected: 03/30/21 15:17**
**Date Received: 03/31/21 18:00**

**Lab Sample ID: 440-281259-1**
**Matrix: Solid**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.00082 | 0.00024 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.00082 | 0.00019 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0016 | 0.00045 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.0082 | 0.00038 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.00082 | 0.00038 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,1-Dichloroethane | ND | | 0.00082 | 0.00023 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,1-Dichloroethene | ND | | 0.00082 | 0.00022 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,1-Dichloropropene | ND | | 0.0016 | 0.00032 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0016 | 0.00082 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0016 | 0.00035 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0016 | 0.00034 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0016 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.0082 | 0.0056 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2-Dibromoethane | ND | | 0.00082 | 0.00017 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.00082 | 0.00021 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2-Dichloroethane | ND | | 0.00082 | 0.00023 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,2-Dichloropropane | ND | | 0.00082 | 0.00023 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0016 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.00082 | 0.00021 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,3-Dichloropropane | ND | | 0.00082 | 0.00024 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.00082 | 0.00025 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 2,2-Dichloropropane | ND | | 0.0041 | 0.00022 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 2-Butanone | ND | | 0.016 | 0.0037 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 2-Chlorotoluene | ND | | 0.00082 | 0.00021 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 2-Hexanone | ND | | 0.016 | 0.0025 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 4-Chlorotoluene | ND | | 0.00082 | 0.00020 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.016 | 0.0024 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Acetone | ND | | 0.016 | 0.0081 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Benzene | ND | | 0.00082 | 0.00021 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Bromobenzene | ND | | 0.00082 | 0.00017 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Bromochloromethane | ND | | 0.0016 | 0.00037 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Bromodichloromethane | ND | | 0.00082 | 0.00013 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Bromoform | ND | | 0.0041 | 0.0011 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Bromomethane | ND | | 0.016 | 0.0054 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Carbon disulfide | ND | | 0.0082 | 0.00033 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Carbon tetrachloride | ND | | 0.00082 | 0.00025 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Chlorobenzene | ND | | 0.00082 | 0.00022 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Chloroethane | ND | | 0.0016 | 0.0012 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Chloroform | ND | | 0.00082 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Chloromethane | ND | | 0.016 | 0.0013 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.00082 | 0.00028 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.00082 | 0.00029 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Dibromochloromethane | ND | | 0.0016 | 0.00022 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Dibromomethane | ND | | 0.00082 | 0.00025 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Dichlorodifluoromethane | ND | | 0.0016 | 0.00037 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.00082 | 0.00041 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Ethanol | ND | | 0.21 | 0.054 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Ethylbenzene | ND | | 0.00082 | 0.00017 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | | 0.00082 | 0.00019 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |

**Client Sample ID: B-6-115**
**Date Collected: 03/30/21 15:17**
**Date Received: 03/31/21 18:00**

**Lab Sample ID: 440-281259-1**
**Matrix: Solid**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ND | | 0.0041 | 0.0014 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Isopropylbenzene | ND | | 0.00082 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| m,p-Xylene | ND | | 0.0016 | 0.00039 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Methylene Chloride | ND | | 0.0082 | 0.0026 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0016 | 0.00015 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Naphthalene | ND | | 0.0082 | 0.0043 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| n-Butylbenzene | ND | | 0.00082 | 0.00017 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| N-Propylbenzene | ND | | 0.0016 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| o-Xylene | ND | | 0.00082 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| p-Isopropyltoluene | ND | | 0.00082 | 0.00058 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| sec-Butylbenzene | ND | | 0.00082 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Styrene | ND | | 0.00082 | 0.00058 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.00082 | 0.00016 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.016 | 0.0058 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| tert-Butylbenzene | ND | | 0.00082 | 0.00021 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Tetrachloroethene | ND | | 0.00082 | 0.00018 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Toluene | ND | | 0.00082 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.00082 | 0.00025 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0016 | 0.00023 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Trichloroethene | ND | | 0.0016 | 0.00032 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Trichlorofluoromethane | ND | | 0.0082 | 0.00022 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Vinyl acetate | ND | | 0.0082 | 0.0032 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Vinyl chloride | ND | | 0.00082 | 0.00031 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |
| Xylenes, Total | ND | | 0.0016 | 0.00049 | mg/Kg | | 04/01/21 19:43 | 04/02/21 13:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *57 - 142* | *740710 21 13/49* | *740720 21 19/4:* | *1* |
| *4-8ro6 oBuoromenf ene (Surr)* | *34* | | *57 - 127* | *740710 21 13/49* | *740720 21 19/4:* | *1* |
| *Dimro6 oBuoro6 ethane (Surr)* | *179* | | *57 - 129* | *740710 21 13/49* | *740720 21 19/4:* | *1* |
| *boluene-d5 (Surr)* | *33* | | *57 - 127* | *740710 21 13/49* | *740720 21 19/4:* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.080 | 0.044 | mg/Kg | | 04/01/21 19:43 | 04/02/21 12:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-8ro6 oBuoromenf ene (Surr)* | *52* | | *42 - 12z* | *740710 21 13/49* | *740720 21 12/7:* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 04/06/21 15:01 | 04/06/21 19:33 | 1 |
| **C23-C40** | **8.6** | | 5.0 | 3.8 | mg/Kg | | 04/06/21 15:01 | 04/06/21 19:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-T ctacoane (Surr)* | *17s* | | *z7 - 195* | *740720 21 1s/71* | *740720 21 13/99* | *1* |

### Method: 8081A - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00098 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| 4,4'-DDT | ND | | 0.0050 | 0.00036 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |

**Client Sample ID: B-6-115**
**Date Collected: 03/30/21 15:17**
**Date Received: 03/31/21 18:00**

**Lab Sample ID: 440-281259-1**
**Matrix: Solid**

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Endrin | ND | | 0.0050 | 0.00033 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00047 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00088 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 04/08/21 09:38 | 04/10/21 07:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *37* | | *9: - 1s1* | *740750 21 73/95* | *740170 21 7: /14* | *1* |
| *betrachloro-6 -xylene* | *37* | | *95 - 145* | *740750 21 73/95* | *740170 21 7: /14* | *1* |

## Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0099 | 0.0037 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.0099 | 0.0036 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| 2,4-D | ND | | 0.099 | 0.048 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| 2,4-DB | ND | | 0.099 | 0.046 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| Dalapon | ND | | 0.25 | 0.072 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| Dicamba | ND | | 0.0099 | 0.0047 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| Dichlorprop | ND | | 0.099 | 0.049 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| Dinoseb | ND | *- *1 | 0.099 | 0.019 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| MCPA | ND | | 20 | 10 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |
| MCPP | ND | | 9.9 | 6.6 | mg/Kg | | 04/05/21 13:23 | 04/08/21 13:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *: :* | | *21 - 1z1* | *740750 21 19/29* | *740750 21 19/92* | *1* |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281259-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Solid** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (80-142) | (80-120) | (80-123) | (80-120) |
| 440-281259-1 | B-6-115 | 110 | 94 | 103 | 99 |
| LCS 570-140432/4 | Lab Control Sample | 99 | 102 | 98 | 101 |
| LCSD 570-140432/5 | Lab Control Sample Dup | 99 | 102 | 100 | 101 |
| MB 570-140432/7 | Method Blank | 99 | 93 | 98 | 101 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

**Matrix: Solid** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | BFB1 |
| Lab Sample ID | Client Sample ID | (42-126) |
| 440-281259-1 | B-6-115 | 82 |
| LCS 570-140468/3 | Lab Control Sample | 90 |
| LCSD 570-140468/4 | Lab Control Sample Dup | 89 |
| MB 570-140468/5 | Method Blank | 75 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Solid** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | OTCSN1 |
| Lab Sample ID | Client Sample ID | (60-138) |
| 440-281259-1 | B-6-115 | 105 |
| 440-281440-B-3-A MS | Matrix Spike | 109 |
| 440-281440-B-3-B MSD | Matrix Spike Duplicate | 114 |
| LCS 570-141311/2-A | Lab Control Sample | 107 |
| LCSD 570-141311/3-A | Lab Control Sample Dup | 109 |
| MB 570-141311/1-A | Method Blank | 106 |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

## Method: 8081A - Organochlorine Pesticides (GC)

**Matrix: Solid** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | DCB1 | TCX1 |
| Lab Sample ID | Client Sample ID | (37-151) | (38-148) |
| 440-281259-1 | B-6-115 | 90 | 90 |
| 570-55746-A-1-B MS | Matrix Spike | 87 | 79 |
| 570-55746-A-1-C MSD | Matrix Spike Duplicate | 87 | 77 p |
| LCS 570-141818/2-A | Lab Control Sample | 107 | 97 |
| LCSD 570-141818/3-A | Lab Control Sample Dup | 114 | 104 |

# Surrogate Summary

Client: Terracon Consultants Inc
Job ID: 440-281259-1
Project/Site: Broken Horn Saddlery

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DCB1 (37-151) | TCX1 (38-148) | | | | | | | |
| MB 570-141818/1-A | Method Blank | 112 | 102 | | | | | | | |

**Surrogate Legend**

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8151A - Herbicides (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DCPAA1 (21-161) | | | | | | | | |
| 440-281259-1 | B-6-115 | 77 | | | | | | | | |
| 570-54791-A-5-E MS | Matrix Spike | 38 | | | | | | | | |
| 570-54791-B-5-N MSD | Matrix Spike Duplicate | 38 | | | | | | | | |
| LCS 570-141030/2-A | Lab Control Sample | 70 | | | | | | | | |
| LCSD 570-141030/3-A | Lab Control Sample Dup | 72 | | | | | | | | |
| MB 570-141030/1-A | Method Blank | 67 | | | | | | | | |

**Surrogate Legend**

DCPAA = 2,4-Dichlorophenylacetic acid

# Method Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281259-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | ECL 2 |
| 8015B | Gasoline Range Organics - (GC) | SW846 | ECL 2 |
| 8015B | Diesel Range Organics(DRO)/Oil Range Organics (ORO) | SW846 | ECL 1 |
| 8081A | Organochlorine Pesticides (GC) | SW846 | ECL 1 |
| 8151A | Herbicides (GC) | SW846 | ECL 1 |
| 3546 | Microwave Extraction | SW846 | ECL 1 |
| 3550C | Ultrasonic Extraction | SW846 | ECL 1 |
| 5035 | Closed System Purge and Trap | SW846 | ECL 2 |
| 8151A | Extraction (Herbicides) | SW846 | ECL 1 |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC  Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC  Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281259-1

**Client Sample ID: B-3-554**
**Date Collecte/ : 26R62R35 54:5v**
**Date 9eceiTe/ : 26R65R35 51:22**

**Lab Sample ID: 002-81584M-5**
**x atrid: Soli/**

| Arep yPpe | Batch yPpe | Batch x etho/ | 9zn | Dil Nactor | Initial smoznt | Ninal smoznt | Batch 7zmber | Arepare/ or s nalPFe/ | s nalPut | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 6.064 g | 5 g | 140299 | 04/01/21 19:43 | P4DI | ECL 2 |
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 140432 | 04/02/21 13:47 | U4JL | ECL 2 |
| Total/NA | Prep | 5035 | | | 6.285 g | 5 g | 140299 | 04/01/21 19:43 | P4DI | ECL 2 |
| Total/NA | Analysis | 8015B | | 1 | 5 g | 5 mL | 140468 | 04/02/21 12:07 | A9VE | ECL 2 |
| Total/NA | Prep | 3550C | | | 9.99 g | 10 mL | 141311 | 04/06/21 15:01 | EM5C | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 141349 | 04/06/21 19:33 | N5Y3 | ECL 1 |
| Total/NA | Prep | 3546 | | | 20.08 g | 10 mL | 141818 | 04/08/21 09:38 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 142304 | 04/10/21 07:14 | UHHN | ECL 1 |
| Total/NA | Prep | 8151A | | | 50.38 g | 5 mL | 141030 | 04/05/21 13:23 | J7WE | ECL 1 |
| Total/NA | Analysis | 8151A | | 1 | | | 141815 | 04/08/21 13:32 | J7WE | ECL 1 |

**LaboratorP 9eferenceu:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-140432/7**
**Matrix: Solid**
**Analysis Batch: 140432**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.0010 | 0.00029 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,1,1-Trichloroethane | ND | | 0.0010 | 0.00023 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.0020 | 0.00054 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.010 | 0.00046 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.0010 | 0.00046 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,1-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,1-Dichloroethene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,1-Dichloropropene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 0.0020 | 0.0010 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2,3-Trichloropropane | ND | | 0.0020 | 0.00042 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 0.0020 | 0.00041 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 0.010 | 0.0068 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2-Dibromoethane | ND | | 0.0010 | 0.00021 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2-Dichloroethane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,2-Dichloropropane | ND | | 0.0010 | 0.00028 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,3-Dichlorobenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,3-Dichloropropane | ND | | 0.0010 | 0.00030 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 1,4-Dichlorobenzene | ND | | 0.0010 | 0.00031 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 2,2-Dichloropropane | ND | | 0.0050 | 0.00027 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 2-Butanone | ND | | 0.020 | 0.0045 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 2-Chlorotoluene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 2-Hexanone | ND | | 0.020 | 0.0031 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 4-Chlorotoluene | ND | | 0.0010 | 0.00024 | mg/Kg | | | 04/02/21 11:27 | 1 |
| 4-Methyl-2-pentanone | ND | | 0.020 | 0.0029 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Acetone | ND | | 0.020 | 0.0098 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Benzene | ND | | 0.0010 | 0.00026 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Bromobenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Bromochloromethane | ND | | 0.0020 | 0.00044 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Bromodichloromethane | ND | | 0.0010 | 0.00016 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Bromoform | ND | | 0.0050 | 0.0013 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Bromomethane | ND | | 0.020 | 0.0066 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Carbon disulfide | ND | | 0.010 | 0.00040 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Carbon tetrachloride | ND | | 0.0010 | 0.00030 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Chlorobenzene | ND | | 0.0010 | 0.00027 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Chloroethane | ND | | 0.0020 | 0.0015 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Chloroform | ND | | 0.0010 | 0.00059 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Chloromethane | ND | | 0.020 | 0.0015 | mg/Kg | | | 04/02/21 11:27 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.0010 | 0.00034 | mg/Kg | | | 04/02/21 11:27 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.0010 | 0.00035 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Dibromochloromethane | ND | | 0.0020 | 0.00027 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Dibromomethane | ND | | 0.0010 | 0.00031 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Dichlorodifluoromethane | ND | | 0.0020 | 0.00045 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Di-isopropyl ether (DIPE) | ND | | 0.0010 | 0.00050 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Ethanol | ND | | 0.25 | 0.066 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Ethylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 04/02/21 11:27 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-140432/7**
**Matrix: Solid**
**Analysis Batch: 140432**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethyl-t-butyl ether (ETBE) | ND | | 0.0010 | 0.00024 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Hexachloro-1,3-butadiene | ND | | 0.0050 | 0.0017 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Isopropylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 04/02/21 11:27 | 1 |
| m,p-Xylene | ND | | 0.0020 | 0.00047 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Methylene Chloride | ND | | 0.010 | 0.0031 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.0020 | 0.00019 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Naphthalene | ND | | 0.010 | 0.0052 | mg/Kg | | | 04/02/21 11:27 | 1 |
| n-Butylbenzene | ND | | 0.0010 | 0.00021 | mg/Kg | | | 04/02/21 11:27 | 1 |
| N-Propylbenzene | ND | | 0.0020 | 0.00060 | mg/Kg | | | 04/02/21 11:27 | 1 |
| o-Xylene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 04/02/21 11:27 | 1 |
| p-Isopropyltoluene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 04/02/21 11:27 | 1 |
| sec-Butylbenzene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Styrene | ND | | 0.0010 | 0.00070 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Tert-amyl-methyl ether (TAME) | ND | | 0.0010 | 0.00019 | mg/Kg | | | 04/02/21 11:27 | 1 |
| tert-Butyl alcohol (TBA) | ND | | 0.020 | 0.0070 | mg/Kg | | | 04/02/21 11:27 | 1 |
| tert-Butylbenzene | ND | | 0.0010 | 0.00025 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Tetrachloroethene | ND | | 0.0010 | 0.00022 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Toluene | ND | | 0.0010 | 0.00060 | mg/Kg | | | 04/02/21 11:27 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.0010 | 0.00030 | mg/Kg | | | 04/02/21 11:27 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.0020 | 0.00028 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Trichloroethene | ND | | 0.0020 | 0.00039 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Trichlorofluoromethane | ND | | 0.010 | 0.00027 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Vinyl acetate | ND | | 0.010 | 0.0039 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Vinyl chloride | ND | | 0.0010 | 0.00038 | mg/Kg | | | 04/02/21 11:27 | 1 |
| Xylenes, Total | ND | | 0.0020 | 0.00060 | mg/Kg | | | 04/02/21 11:27 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *77* | | *50 - 142* | | *04/02/21 11:29* | *1* |
| *4-Bromofluorobenzene (Surr)* | *75* | | *50 - 120* | | *04/02/21 11:29* | *1* |
| *Dibromofluoromethane (Surr)* | *75* | | *50 - 125* | | *04/02/21 11:29* | *1* |
| *Toluene-d8 (Surr)* | *101* | | *50 - 120* | | *04/02/21 11:29* | *1* |

**Lab Sample ID: LCS 570-140432/4**
**Matrix: Solid**
**Analysis Batch: 140432**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0436 | | mg/Kg | | 87 | 80 - 122 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0468 | | mg/Kg | | 94 | 73 - 122 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0480 | | mg/Kg | | 96 | 80 - 120 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 80 - 120 |
| 1,1-Dichloroethane | 0.0500 | 0.0483 | | mg/Kg | | 97 | 71 - 120 |
| 1,1-Dichloroethene | 0.0500 | 0.0486 | | mg/Kg | | 97 | 67 - 122 |
| 1,1-Dichloropropene | 0.0500 | 0.0493 | | mg/Kg | | 99 | 74 - 125 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0466 | | mg/Kg | | 93 | 80 - 126 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0466 | | mg/Kg | | 93 | 74 - 122 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0470 | | mg/Kg | | 94 | 80 - 135 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0468 | | mg/Kg | | 94 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-140432/4**
**Matrix: Solid**
**Analysis Batch: 140432**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0399 | | mg/Kg | | 80 | 70 - 120 |
| 1,2-Dibromoethane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 80 - 123 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0470 | | mg/Kg | | 94 | 80 - 120 |
| 1,2-Dichloroethane | 0.0500 | 0.0479 | | mg/Kg | | 96 | 80 - 125 |
| 1,2-Dichloropropane | 0.0500 | 0.0496 | | mg/Kg | | 99 | 80 - 121 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0490 | | mg/Kg | | 98 | 80 - 120 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0465 | | mg/Kg | | 93 | 80 - 120 |
| 1,3-Dichloropropane | 0.0500 | 0.0463 | | mg/Kg | | 93 | 80 - 120 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0464 | | mg/Kg | | 93 | 80 - 120 |
| 2,2-Dichloropropane | 0.0500 | 0.0498 | | mg/Kg | | 100 | 67 - 131 |
| 2-Chlorotoluene | 0.0500 | 0.0477 | | mg/Kg | | 95 | 80 - 120 |
| 4-Chlorotoluene | 0.0500 | 0.0467 | | mg/Kg | | 93 | 80 - 120 |
| Benzene | 0.0500 | 0.0501 | | mg/Kg | | 100 | 79 - 120 |
| Bromobenzene | 0.0500 | 0.0486 | | mg/Kg | | 97 | 80 - 122 |
| Bromochloromethane | 0.0500 | 0.0473 | | mg/Kg | | 95 | 80 - 120 |
| Bromodichloromethane | 0.0500 | 0.0485 | | mg/Kg | | 97 | 80 - 126 |
| Bromoform | 0.0500 | 0.0411 | | mg/Kg | | 82 | 71 - 128 |
| Bromomethane | 0.0500 | 0.0401 | | mg/Kg | | 80 | 45 - 136 |
| Carbon tetrachloride | 0.0500 | 0.0476 | | mg/Kg | | 95 | 69 - 132 |
| Chlorobenzene | 0.0500 | 0.0482 | | mg/Kg | | 96 | 80 - 120 |
| Chloroethane | 0.0500 | 0.0490 | | mg/Kg | | 98 | 63 - 132 |
| Chloroform | 0.0500 | 0.0495 | | mg/Kg | | 99 | 78 - 121 |
| Chloromethane | 0.0500 | 0.0459 | | mg/Kg | | 92 | 46 - 130 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 120 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0498 | | mg/Kg | | 100 | 80 - 120 |
| Dibromochloromethane | 0.0500 | 0.0429 | | mg/Kg | | 86 | 77 - 125 |
| Dibromomethane | 0.0500 | 0.0494 | | mg/Kg | | 99 | 80 - 123 |
| Dichlorodifluoromethane | 0.0500 | 0.0423 | | mg/Kg | | 85 | 59 - 127 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0485 | | mg/Kg | | 97 | 62 - 128 |
| Ethanol | 0.500 | 0.401 | | mg/Kg | | 80 | 48 - 151 |
| Ethylbenzene | 0.0500 | 0.0488 | | mg/Kg | | 98 | 80 - 120 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0461 | | mg/Kg | | 92 | 66 - 123 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0457 | | mg/Kg | | 91 | 80 - 130 |
| Isopropylbenzene | 0.0500 | 0.0478 | | mg/Kg | | 96 | 80 - 120 |
| m,p-Xylene | 0.100 | 0.0978 | | mg/Kg | | 98 | 79 - 120 |
| Methylene Chloride | 0.0500 | 0.0466 | | mg/Kg | | 93 | 74 - 120 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0466 | | mg/Kg | | 93 | 68 - 120 |
| Naphthalene | 0.0500 | 0.0440 | | mg/Kg | | 88 | 78 - 121 |
| n-Butylbenzene | 0.0500 | 0.0477 | | mg/Kg | | 95 | 79 - 125 |
| N-Propylbenzene | 0.0500 | 0.0486 | | mg/Kg | | 97 | 80 - 120 |
| o-Xylene | 0.0500 | 0.0493 | | mg/Kg | | 99 | 79 - 120 |
| p-Isopropyltoluene | 0.0500 | 0.0478 | | mg/Kg | | 96 | 80 - 121 |
| sec-Butylbenzene | 0.0500 | 0.0475 | | mg/Kg | | 95 | 80 - 120 |
| Styrene | 0.0500 | 0.0483 | | mg/Kg | | 97 | 80 - 120 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0485 | | mg/Kg | | 97 | 76 - 123 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.218 | | mg/Kg | | 87 | 74 - 127 |
| tert-Butylbenzene | 0.0500 | 0.0460 | | mg/Kg | | 92 | 80 - 120 |
| Tetrachloroethene | 0.0500 | 0.0496 | | mg/Kg | | 99 | 80 - 123 |
| Toluene | 0.0500 | 0.0492 | | mg/Kg | | 98 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-140432/4**
**Matrix: Solid**
**Analysis Batch: 140432**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 0.0500 | 0.0471 | | mg/Kg | | 94 | 72 - 120 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0465 | | mg/Kg | | 93 | 80 - 126 |
| Trichloroethene | 0.0500 | 0.0503 | | mg/Kg | | 101 | 80 - 121 |
| Trichlorofluoromethane | 0.0500 | 0.0501 | | mg/Kg | | 100 | 72 - 135 |
| Vinyl chloride | 0.0500 | 0.0541 | | mg/Kg | | 108 | 66 - 128 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *77* | | *50 - 142* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *50 - 120* |
| *Dibromofluoromethane (Surr)* | *75* | | *50 - 12:* |
| *Toluene-d5 (Surr)* | *101* | | *50 - 120* |

**Lab Sample ID: LCSD 570-140432/5**
**Matrix: Solid**
**Analysis Batch: 140432**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.0500 | 0.0426 | | mg/Kg | | 85 | 80 - 122 | 2 | 20 |
| 1,1,1-Trichloroethane | 0.0500 | 0.0457 | | mg/Kg | | 91 | 73 - 122 | 2 | 20 |
| 1,1,2,2-Tetrachloroethane | 0.0500 | 0.0439 | | mg/Kg | | 88 | 80 - 120 | 9 | 20 |
| 1,1,2-Trichloroethane | 0.0500 | 0.0460 | | mg/Kg | | 92 | 80 - 120 | 5 | 20 |
| 1,1-Dichloroethane | 0.0500 | 0.0472 | | mg/Kg | | 94 | 71 - 120 | 2 | 20 |
| 1,1-Dichloroethene | 0.0500 | 0.0465 | | mg/Kg | | 93 | 67 - 122 | 4 | 20 |
| 1,1-Dichloropropene | 0.0500 | 0.0475 | | mg/Kg | | 95 | 74 - 125 | 4 | 20 |
| 1,2,3-Trichlorobenzene | 0.0500 | 0.0446 | | mg/Kg | | 89 | 80 - 126 | 4 | 20 |
| 1,2,3-Trichloropropane | 0.0500 | 0.0457 | | mg/Kg | | 91 | 74 - 122 | 2 | 20 |
| 1,2,4-Trichlorobenzene | 0.0500 | 0.0437 | | mg/Kg | | 87 | 80 - 135 | 7 | 20 |
| 1,2,4-Trimethylbenzene | 0.0500 | 0.0444 | | mg/Kg | | 89 | 80 - 120 | 5 | 20 |
| 1,2-Dibromo-3-Chloropropane | 0.0500 | 0.0394 | | mg/Kg | | 79 | 70 - 120 | 1 | 20 |
| 1,2-Dibromoethane | 0.0500 | 0.0473 | | mg/Kg | | 95 | 80 - 123 | 3 | 20 |
| 1,2-Dichlorobenzene | 0.0500 | 0.0448 | | mg/Kg | | 90 | 80 - 120 | 5 | 20 |
| 1,2-Dichloroethane | 0.0500 | 0.0467 | | mg/Kg | | 93 | 80 - 125 | 3 | 20 |
| 1,2-Dichloropropane | 0.0500 | 0.0484 | | mg/Kg | | 97 | 80 - 121 | 2 | 20 |
| 1,3,5-Trimethylbenzene | 0.0500 | 0.0463 | | mg/Kg | | 93 | 80 - 120 | 6 | 20 |
| 1,3-Dichlorobenzene | 0.0500 | 0.0438 | | mg/Kg | | 88 | 80 - 120 | 6 | 20 |
| 1,3-Dichloropropane | 0.0500 | 0.0457 | | mg/Kg | | 91 | 80 - 120 | 1 | 20 |
| 1,4-Dichlorobenzene | 0.0500 | 0.0434 | | mg/Kg | | 87 | 80 - 120 | 7 | 20 |
| 2,2-Dichloropropane | 0.0500 | 0.0486 | | mg/Kg | | 97 | 67 - 131 | 2 | 20 |
| 2-Chlorotoluene | 0.0500 | 0.0458 | | mg/Kg | | 92 | 80 - 120 | 4 | 20 |
| 4-Chlorotoluene | 0.0500 | 0.0440 | | mg/Kg | | 88 | 80 - 120 | 6 | 20 |
| Benzene | 0.0500 | 0.0483 | | mg/Kg | | 97 | 79 - 120 | 4 | 20 |
| Bromobenzene | 0.0500 | 0.0468 | | mg/Kg | | 94 | 80 - 122 | 4 | 20 |
| Bromochloromethane | 0.0500 | 0.0461 | | mg/Kg | | 92 | 80 - 120 | 3 | 20 |
| Bromodichloromethane | 0.0500 | 0.0471 | | mg/Kg | | 94 | 80 - 126 | 3 | 20 |
| Bromoform | 0.0500 | 0.0399 | | mg/Kg | | 80 | 71 - 128 | 3 | 20 |
| Bromomethane | 0.0500 | 0.0373 | | mg/Kg | | 75 | 45 - 136 | 7 | 20 |
| Carbon tetrachloride | 0.0500 | 0.0470 | | mg/Kg | | 94 | 69 - 132 | 1 | 20 |
| Chlorobenzene | 0.0500 | 0.0464 | | mg/Kg | | 93 | 80 - 120 | 4 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-140432/5**
**Matrix: Solid**
**Analysis Batch: 140432**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | 0.0500 | 0.0478 | | mg/Kg | | 96 | 63 - 132 | 2 | 20 |
| Chloroform | 0.0500 | 0.0480 | | mg/Kg | | 96 | 78 - 121 | 3 | 20 |
| Chloromethane | 0.0500 | 0.0464 | | mg/Kg | | 93 | 46 - 130 | 1 | 20 |
| cis-1,2-Dichloroethene | 0.0500 | 0.0491 | | mg/Kg | | 98 | 80 - 120 | 2 | 20 |
| cis-1,3-Dichloropropene | 0.0500 | 0.0484 | | mg/Kg | | 97 | 80 - 120 | 3 | 20 |
| Dibromochloromethane | 0.0500 | 0.0423 | | mg/Kg | | 85 | 77 - 125 | 1 | 20 |
| Dibromomethane | 0.0500 | 0.0486 | | mg/Kg | | 97 | 80 - 123 | 2 | 20 |
| Dichlorodifluoromethane | 0.0500 | 0.0423 | | mg/Kg | | 85 | 59 - 127 | 0 | 20 |
| Di-isopropyl ether (DIPE) | 0.0500 | 0.0473 | | mg/Kg | | 95 | 62 - 128 | 3 | 20 |
| Ethanol | 0.500 | 0.475 | | mg/Kg | | 95 | 48 - 151 | 17 | 29 |
| Ethylbenzene | 0.0500 | 0.0470 | | mg/Kg | | 94 | 80 - 120 | 4 | 20 |
| Ethyl-t-butyl ether (ETBE) | 0.0500 | 0.0458 | | mg/Kg | | 92 | 66 - 123 | 1 | 20 |
| Hexachloro-1,3-butadiene | 0.0500 | 0.0434 | | mg/Kg | | 87 | 80 - 130 | 5 | 20 |
| Isopropylbenzene | 0.0500 | 0.0453 | | mg/Kg | | 91 | 80 - 120 | 5 | 20 |
| m,p-Xylene | 0.100 | 0.0945 | | mg/Kg | | 94 | 79 - 120 | 3 | 20 |
| Methylene Chloride | 0.0500 | 0.0463 | | mg/Kg | | 93 | 74 - 120 | 1 | 20 |
| Methyl-t-Butyl Ether (MTBE) | 0.0500 | 0.0462 | | mg/Kg | | 92 | 68 - 120 | 1 | 20 |
| Naphthalene | 0.0500 | 0.0420 | | mg/Kg | | 84 | 78 - 121 | 5 | 20 |
| n-Butylbenzene | 0.0500 | 0.0451 | | mg/Kg | | 90 | 79 - 125 | 6 | 20 |
| N-Propylbenzene | 0.0500 | 0.0462 | | mg/Kg | | 92 | 80 - 120 | 5 | 20 |
| o-Xylene | 0.0500 | 0.0473 | | mg/Kg | | 95 | 79 - 120 | 4 | 20 |
| p-Isopropyltoluene | 0.0500 | 0.0446 | | mg/Kg | | 89 | 80 - 121 | 7 | 20 |
| sec-Butylbenzene | 0.0500 | 0.0443 | | mg/Kg | | 89 | 80 - 120 | 7 | 20 |
| Styrene | 0.0500 | 0.0461 | | mg/Kg | | 92 | 80 - 120 | 5 | 20 |
| Tert-amyl-methyl ether (TAME) | 0.0500 | 0.0475 | | mg/Kg | | 95 | 76 - 123 | 2 | 20 |
| tert-Butyl alcohol (TBA) | 0.250 | 0.216 | | mg/Kg | | 86 | 74 - 127 | 1 | 20 |
| tert-Butylbenzene | 0.0500 | 0.0435 | | mg/Kg | | 87 | 80 - 120 | 6 | 20 |
| Tetrachloroethene | 0.0500 | 0.0474 | | mg/Kg | | 95 | 80 - 123 | 5 | 20 |
| Toluene | 0.0500 | 0.0476 | | mg/Kg | | 95 | 80 - 120 | 3 | 20 |
| trans-1,2-Dichloroethene | 0.0500 | 0.0464 | | mg/Kg | | 93 | 72 - 120 | 1 | 20 |
| trans-1,3-Dichloropropene | 0.0500 | 0.0454 | | mg/Kg | | 91 | 80 - 126 | 2 | 20 |
| Trichloroethene | 0.0500 | 0.0500 | | mg/Kg | | 100 | 80 - 121 | 1 | 20 |
| Trichlorofluoromethane | 0.0500 | 0.0494 | | mg/Kg | | 99 | 72 - 135 | 1 | 20 |
| Vinyl chloride | 0.0500 | 0.0523 | | mg/Kg | | 105 | 66 - 128 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *77* | | *50 - 142* |
| *4-8ro6 oB uoromenf ene (Surr)* | *102* | | *50 - 120* |
| *Dimro6 oB uoro6 ethane (Surr)* | *100* | | *50 - 12:* |
| *boluene-d5 (Surr)* | *101* | | *50 - 120* |

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-140468/5**
**Matrix: Solid**
**Analysis Batch: 140468**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 0.099 | 0.055 | mg/Kg | | | 04/02/21 10:55 | 1 |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 92 | | 42 - 127 | | 04/23/21 10:22 | 1 |

**Lab Sample ID: LCS 570-140468/3**
**Matrix: Solid**
**Analysis Batch: 140468**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | 1.98 | 1.87 | | mg/Kg | | 94 | 70 - 124 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 70 | | 42 - 127 |

**Lab Sample ID: LCSD 570-140468/4**
**Matrix: Solid**
**Analysis Batch: 140468**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | 1.99 | 1.91 | | mg/Kg | | 96 | 70 - 124 | 2 | 18 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 57 | | 42 - 127 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Lab Sample ID: MB 570-141311/1-A**
**Matrix: Solid**
**Analysis Batch: 141349**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 141311**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 5.0 | 3.8 | mg/Kg | | 04/06/21 12:34 | 04/06/21 18:10 | 1 |
| C23-C40 | ND | | 5.0 | 3.8 | mg/Kg | | 04/06/21 12:34 | 04/06/21 18:10 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 107 | | 70 - 150 | 04/07/21 12:45 | 04/07/21 15:10 | 1 |

**Lab Sample ID: LCS 570-141311/2-A**
**Matrix: Solid**
**Analysis Batch: 141349**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 141311**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 400 | 469 | | mg/Kg | | 117 | 80 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 109 | | 70 - 150 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Lab Sample ID: LCSD 570-141311/3-A**
**Matrix: Solid**
**Analysis Batch: 141349**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 141311**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 400 | 488 | | mg/Kg | | 122 | 80 - 130 | 4 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *107* | | *T0 - 1: 5* |

**Lab Sample ID: 440-281440-B-3-A MS**
**Matrix: Solid**
**Analysis Batch: 141349**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 141311**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 1200 | F1 F2 | 400 | 1460 | | mg/Kg | | 61 | 43 - 165 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *107* | | *T0 - 1: 5* |

**Lab Sample ID: 440-281440-B-3-B MSD**
**Matrix: Solid**
**Analysis Batch: 141349**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 141311**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 1200 | F1 F2 | 400 | 2110 | F1 F2 | mg/Kg | | 225 | 43 - 165 | 37 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *114* | | *T0 - 1: 5* |

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 570-141818/1-A**
**Matrix: Solid**
**Analysis Batch: 142304**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 141818**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | ND | | 0.0050 | 0.00099 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| 4,4'-DDE | ND | | 0.0050 | 0.00054 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| 4,4'-DDT | ND | | 0.0050 | 0.00036 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Aldrin | ND | | 0.0050 | 0.00030 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| alpha-BHC | ND | | 0.0050 | 0.0030 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| alpha-Chlordane | ND | | 0.0050 | 0.0013 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| beta-BHC | ND | | 0.0050 | 0.0037 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Chlordane | ND | | 0.025 | 0.0024 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| delta-BHC | ND | | 0.0050 | 0.0033 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Dieldrin | ND | | 0.0050 | 0.00025 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Endosulfan I | ND | | 0.0050 | 0.00044 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Endosulfan II | ND | | 0.0050 | 0.00031 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Endosulfan sulfate | ND | | 0.0050 | 0.00040 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Endrin | ND | | 0.0050 | 0.00033 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 570-141818/1-A**
**Matrix: Solid**
**Analysis Batch: 142304**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 141818**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endrin aldehyde | ND | | 0.0050 | 0.00073 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Endrin ketone | ND | | 0.0050 | 0.00048 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| gamma-BHC | ND | | 0.0050 | 0.00062 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| gamma-Chlordane | ND | | 0.0050 | 0.00026 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Heptachlor | ND | | 0.0050 | 0.00089 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Heptachlor epoxide | ND | | 0.0050 | 0.00067 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Methoxychlor | ND | | 0.0050 | 0.00081 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |
| Toxaphene | ND | | 0.025 | 0.020 | mg/Kg | | 04/08/21 09:38 | 04/10/21 04:09 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *112* | | *: 9 - 1z1* | *043053 21 07/: 5* | *043103 21 04/07* | *1* |
| *betrachloro-6 -xylene* | *102* | | *: 5 - 145* | *043053 21 07/: 5* | *043103 21 04/07* | *1* |

**Lab Sample ID: LCS 570-141818/2-A**
**Matrix: Solid**
**Analysis Batch: 142304**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 141818**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0250 | 0.0250 | | mg/Kg | | 100 | 54 - 154 |
| 4,4'-DDE | 0.0250 | 0.0239 | | mg/Kg | | 96 | 51 - 149 |
| 4,4'-DDT | 0.0250 | 0.0244 | | mg/Kg | | 97 | 39 - 152 |
| Aldrin | 0.0250 | 0.0225 | | mg/Kg | | 90 | 52 - 138 |
| alpha-BHC | 0.0250 | 0.0244 | | mg/Kg | | 98 | 51 - 140 |
| alpha-Chlordane | 0.0250 | 0.0232 | | mg/Kg | | 93 | 53 - 141 |
| beta-BHC | 0.0250 | 0.0226 | | mg/Kg | | 90 | 53 - 141 |
| delta-BHC | 0.0250 | 0.0234 | | mg/Kg | | 94 | 20 - 132 |
| Dieldrin | 0.0250 | 0.0233 | | mg/Kg | | 93 | 52 - 144 |
| Endosulfan I | 0.0250 | 0.0215 | | mg/Kg | | 86 | 49 - 139 |
| Endosulfan II | 0.0250 | 0.0233 | | mg/Kg | | 93 | 51 - 150 |
| Endosulfan sulfate | 0.0250 | 0.0247 | | mg/Kg | | 99 | 45 - 139 |
| Endrin | 0.0250 | 0.0244 | | mg/Kg | | 98 | 53 - 151 |
| Endrin aldehyde | 0.0250 | 0.0237 | | mg/Kg | | 95 | 31 - 146 |
| gamma-BHC | 0.0250 | 0.0240 | | mg/Kg | | 96 | 53 - 141 |
| gamma-Chlordane | 0.0250 | 0.0258 | | mg/Kg | | 103 | 46 - 156 |
| Heptachlor | 0.0250 | 0.0229 | | mg/Kg | | 92 | 52 - 144 |
| Heptachlor epoxide | 0.0250 | 0.0232 | | mg/Kg | | 93 | 54 - 141 |
| Methoxychlor | 0.0250 | 0.0247 | | mg/Kg | | 99 | 47 - 148 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *109* | | *: 9 - 1z1* |
| *betrachloro-6 -xylene* | *79* | | *: 5 - 145* |

**Lab Sample ID: LCSD 570-141818/3-A**
**Matrix: Solid**
**Analysis Batch: 142304**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 141818**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0250 | 0.0270 | | mg/Kg | | 108 | 54 - 154 | 8 | 30 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 570-141818/3-A**
**Matrix: Solid**
**Analysis Batch: 142304**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 141818**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDE | | | 0.0250 | 0.0260 | | mg/Kg | | 104 | 51 - 149 | 8 | 28 |
| 4,4'-DDT | | | 0.0250 | 0.0260 | | mg/Kg | | 104 | 39 - 152 | 7 | 31 |
| Aldrin | | | 0.0250 | 0.0249 | | mg/Kg | | 100 | 52 - 138 | 10 | 30 |
| alpha-BHC | | | 0.0250 | 0.0267 | | mg/Kg | | 107 | 51 - 140 | 9 | 29 |
| alpha-Chlordane | | | 0.0250 | 0.0253 | | mg/Kg | | 101 | 53 - 141 | 9 | 28 |
| beta-BHC | | | 0.0250 | 0.0247 | | mg/Kg | | 99 | 53 - 141 | 9 | 29 |
| delta-BHC | | | 0.0250 | 0.0264 | | mg/Kg | | 106 | 20 - 132 | 12 | 40 |
| Dieldrin | | | 0.0250 | 0.0256 | | mg/Kg | | 102 | 52 - 144 | 9 | 28 |
| Endosulfan I | | | 0.0250 | 0.0235 | | mg/Kg | | 94 | 49 - 139 | 9 | 28 |
| Endosulfan II | | | 0.0250 | 0.0254 | | mg/Kg | | 102 | 51 - 150 | 9 | 29 |
| Endosulfan sulfate | | | 0.0250 | 0.0270 | | mg/Kg | | 108 | 45 - 139 | 9 | 30 |
| Endrin | | | 0.0250 | 0.0266 | | mg/Kg | | 106 | 53 - 151 | 9 | 29 |
| Endrin aldehyde | | | 0.0250 | 0.0255 | | mg/Kg | | 102 | 31 - 146 | 7 | 40 |
| gamma-BHC | | | 0.0250 | 0.0262 | | mg/Kg | | 105 | 53 - 141 | 9 | 29 |
| gamma-Chlordane | | | 0.0250 | 0.0282 | | mg/Kg | | 113 | 46 - 156 | 9 | 39 |
| Heptachlor | | | 0.0250 | 0.0257 | | mg/Kg | | 103 | 52 - 144 | 12 | 29 |
| Heptachlor epoxide | | | 0.0250 | 0.0254 | | mg/Kg | | 102 | 54 - 141 | 9 | 29 |
| Methoxychlor | | | 0.0250 | 0.0266 | | mg/Kg | | 107 | 47 - 148 | 8 | 29 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *DC8 Decachloromiphenyl (Surr)* | *114* | | *: 9 - 1z1* |
| *betrachloro-6 -xylene* | *104* | | *: 5 - 145* |

**Lab Sample ID: 570-55746-A-1-B MS**
**Matrix: Solid**
**Analysis Batch: 142304**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 141818**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0051 | | 0.0249 | 0.0269 | | mg/Kg | | 87 | 27 - 144 |
| 4,4'-DDE | 0.016 | F1 | 0.0249 | 0.0421 | E | mg/Kg | | 103 | 28 - 141 |
| 4,4'-DDT | 0.017 | | 0.0249 | 0.0429 | E | mg/Kg | | 103 | 10 - 154 |
| Aldrin | ND | | 0.0249 | 0.0204 | | mg/Kg | | 82 | 26 - 125 |
| alpha-BHC | ND | | 0.0249 | 0.0205 | | mg/Kg | | 82 | 24 - 125 |
| alpha-Chlordane | ND | | 0.0249 | 0.0238 | | mg/Kg | | 96 | 17 - 144 |
| beta-BHC | ND | | 0.0249 | 0.0183 | | mg/Kg | | 73 | 28 - 125 |
| delta-BHC | ND | | 0.0249 | 0.0190 | | mg/Kg | | 76 | 10 - 125 |
| Dieldrin | ND | | 0.0249 | 0.0250 | | mg/Kg | | 100 | 19 - 145 |
| Endosulfan I | ND | | 0.0249 | 0.0213 | | mg/Kg | | 85 | 25 - 125 |
| Endosulfan II | ND | | 0.0249 | 0.0232 | | mg/Kg | | 93 | 13 - 142 |
| Endosulfan sulfate | ND | | 0.0249 | 0.0221 | | mg/Kg | | 89 | 14 - 126 |
| Endrin | ND | | 0.0249 | 0.0248 | | mg/Kg | | 100 | 28 - 139 |
| Endrin aldehyde | ND | | 0.0249 | 0.0222 | | mg/Kg | | 89 | 12 - 125 |
| gamma-BHC | ND | | 0.0249 | 0.0204 | | mg/Kg | | 82 | 24 - 125 |
| gamma-Chlordane | 0.0020 | J p | 0.0249 | 0.0206 | p | mg/Kg | | 74 | 10 - 160 |
| Heptachlor | ND | | 0.0249 | 0.0205 | | mg/Kg | | 82 | 19 - 127 |
| Heptachlor epoxide | ND | | 0.0249 | 0.0217 | | mg/Kg | | 87 | 33 - 123 |
| Methoxychlor | ND | | 0.0249 | 0.0262 | | mg/Kg | | 105 | 19 - 128 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 570-55746-A-1-B MS**
**Matrix: Solid**
**Analysis Batch: 142304**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 141818**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| DC8 Decachloromiphenyl (Surr) | 59 | | : 9 - 1z1 |
| betrachloro-6 -xylene | 97 | | : 5 - 145 |

**Lab Sample ID: 570-55746-A-1-C MSD**
**Matrix: Solid**
**Analysis Batch: 142304**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 141818**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 0.0051 | | 0.0249 | 0.0317 | | mg/Kg | | 107 | 27 - 144 | 17 | 40 |
| 4,4'-DDE | 0.016 | F1 | 0.0249 | 0.0543 | E F1 | mg/Kg | | 152 | 28 - 141 | 25 | 32 |
| 4,4'-DDT | 0.017 | | 0.0249 | 0.0488 | E | mg/Kg | | 126 | 10 - 154 | 13 | 40 |
| Aldrin | ND | | 0.0249 | 0.0215 | | mg/Kg | | 86 | 26 - 125 | 5 | 40 |
| alpha-BHC | ND | | 0.0249 | 0.0218 | | mg/Kg | | 87 | 24 - 125 | 6 | 40 |
| alpha-Chlordane | ND | | 0.0249 | 0.0240 | | mg/Kg | | 96 | 17 - 144 | 1 | 40 |
| beta-BHC | ND | | 0.0249 | 0.0202 | | mg/Kg | | 81 | 28 - 125 | 10 | 39 |
| delta-BHC | ND | | 0.0249 | 0.0198 | | mg/Kg | | 79 | 10 - 125 | 4 | 40 |
| Dieldrin | ND | | 0.0249 | 0.0279 | | mg/Kg | | 112 | 19 - 145 | 11 | 39 |
| Endosulfan I | ND | | 0.0249 | 0.0205 | | mg/Kg | | 82 | 25 - 125 | 4 | 39 |
| Endosulfan II | ND | | 0.0249 | 0.0233 | | mg/Kg | | 93 | 13 - 142 | 0 | 40 |
| Endosulfan sulfate | ND | | 0.0249 | 0.0199 | | mg/Kg | | 80 | 14 - 126 | 10 | 38 |
| Endrin | ND | | 0.0249 | 0.0271 | | mg/Kg | | 109 | 28 - 139 | 9 | 40 |
| Endrin aldehyde | ND | | 0.0249 | 0.0243 | | mg/Kg | | 98 | 12 - 125 | 9 | 40 |
| gamma-BHC | ND | | 0.0249 | 0.0218 | | mg/Kg | | 87 | 24 - 125 | 7 | 40 |
| gamma-Chlordane | 0.0020 | J p | 0.0249 | 0.0218 | p | mg/Kg | | 80 | 10 - 160 | 6 | 40 |
| Heptachlor | ND | | 0.0249 | 0.0208 | | mg/Kg | | 83 | 19 - 127 | 1 | 40 |
| Heptachlor epoxide | ND | | 0.0249 | 0.0227 | | mg/Kg | | 91 | 33 - 123 | 5 | 34 |
| Methoxychlor | ND | | 0.0249 | 0.0270 | | mg/Kg | | 108 | 19 - 128 | 3 | 40 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| DC8 Decachloromiphenyl (Surr) | 59 | | : 9 - 1z1 |
| betrachloro-6 -xylene | 99 | p | : 5 - 145 |

## Method: 8151A - Herbicides (GC)

**Lab Sample ID: MB 570-141030/1-A**
**Matrix: Solid**
**Analysis Batch: 141815**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 141030**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0098 | 0.0036 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |
| 2,4,5-TP (Silvex) | ND | | 0.0098 | 0.0035 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |
| 2,4-D | ND | | 0.098 | 0.047 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |
| 2,4-DB | ND | | 0.098 | 0.045 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |
| Dalapon | ND | | 0.24 | 0.071 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |
| Dicamba | ND | | 0.0098 | 0.0046 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |
| Dichlorprop | ND | | 0.098 | 0.048 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |
| Dinoseb | ND | | 0.098 | 0.019 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |
| MCPA | ND | | 20 | 10 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |

## Method: 8151A - Herbicides (GC) (Continued)

### Lab Sample ID: MB 570-141030/1-A
### Matrix: Solid
### Analysis Batch: 141815

### Client Sample ID: Method Blank
### Prep Type: Total/NA
### Prep Batch: 141030

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | ND | | 9.8 | 6.4 | mg/Kg | | 04/05/21 13:23 | 04/08/21 10:31 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *T9* | | *21 - 1T1* | *043 0z3 21 1: /2:* | *043 053 21 10/: 1* | *1* |

### Lab Sample ID: LCS 570-141030/2-A
### Matrix: Solid
### Analysis Batch: 141815

### Client Sample ID: Lab Control Sample
### Prep Type: Total/NA
### Prep Batch: 141030

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.0400 | 0.0360 | | mg/Kg | | 90 | 20 - 153 |
| 2,4,5-TP (Silvex) | 0.0400 | 0.0344 | | mg/Kg | | 86 | 20 - 147 |
| 2,4-D | 0.400 | 0.319 | | mg/Kg | | 80 | 20 - 153 |
| 2,4-DB | 0.400 | 0.118 | p | mg/Kg | | 29 | 20 - 180 |
| Dalapon | 1.00 | 0.766 | | mg/Kg | | 77 | 20 - 146 |
| Dicamba | 0.0400 | 0.0407 | | mg/Kg | | 102 | 20 - 153 |
| Dichlorprop | 0.400 | 0.326 | | mg/Kg | | 82 | 20 - 146 |
| Dinoseb | 0.200 | ND | *- | mg/Kg | | 3 | 10 - 76 |
| MCPA | 40.0 | 33.9 | | mg/Kg | | 85 | 20 - 142 |
| MCPP | 40.0 | 34.9 | | mg/Kg | | 87 | 23 - 142 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *90* | | *21 - 1T1* |

### Lab Sample ID: LCSD 570-141030/3-A
### Matrix: Solid
### Analysis Batch: 141815

### Client Sample ID: Lab Control Sample Dup
### Prep Type: Total/NA
### Prep Batch: 141030

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | 0.0402 | 0.0370 | | mg/Kg | | 92 | 20 - 153 | 3 | 30 |
| 2,4,5-TP (Silvex) | 0.0402 | 0.0350 | | mg/Kg | | 87 | 20 - 147 | 2 | 30 |
| 2,4-D | 0.402 | 0.321 | | mg/Kg | | 80 | 20 - 153 | 1 | 30 |
| 2,4-DB | 0.402 | 0.126 | p | mg/Kg | | 31 | 20 - 180 | 7 | 30 |
| Dalapon | 1.01 | 0.781 | | mg/Kg | | 78 | 20 - 146 | 2 | 30 |
| Dicamba | 0.0402 | 0.0396 | | mg/Kg | | 99 | 20 - 153 | 3 | 30 |
| Dichlorprop | 0.402 | 0.335 | | mg/Kg | | 83 | 20 - 146 | 3 | 30 |
| Dinoseb | 0.201 | ND | *- *1 | mg/Kg | | 4 | 10 - 76 | 48 | 30 |
| MCPA | 40.2 | 35.4 | | mg/Kg | | 88 | 20 - 142 | 4 | 30 |
| MCPP | 40.2 | 37.2 | | mg/Kg | | 93 | 23 - 142 | 4 | 28 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *92* | | *21 - 1T1* |

## Method: 8151A - Herbicides (GC) (Continued)

**Lab Sample ID: 570-54791-A-5-E MS**
**Matrix: Solid**
**Analysis Batch: 141815**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 141030**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0400 | 0.0280 | | mg/Kg | | 70 | 20 - 168 |
| 2,4,5-TP (Silvex) | ND | | 0.0400 | 0.0300 | | mg/Kg | | 75 | 20 - 149 |
| 2,4-D | ND | | 0.400 | 0.288 | | mg/Kg | | 72 | 20 - 149 |
| 2,4-DB | ND | F1 | 0.400 | 0.0624 | J F1 p | mg/Kg | | 16 | 20 - 180 |
| Dalapon | ND | | 0.999 | 0.712 | | mg/Kg | | 71 | 20 - 136 |
| Dicamba | ND | | 0.0400 | 0.0335 | | mg/Kg | | 84 | 20 - 140 |
| Dichlorprop | ND | | 0.400 | 0.280 | | mg/Kg | | 70 | 20 - 142 |
| Dinoseb | ND | *- F1 *1 | 0.200 | ND | F1 | mg/Kg | | 0 | 10 - 109 |
| MCPA | ND | | 40.0 | 28.9 | | mg/Kg | | 72 | 20 - 137 |
| MCPP | ND | | 40.0 | 31.9 | | mg/Kg | | 80 | 20 - 138 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *: 5* | | *21 - 1T1* |

**Lab Sample ID: 570-54791-B-5-N MSD**
**Matrix: Solid**
**Analysis Batch: 141815**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 141030**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | | 0.0405 | 0.0279 | | mg/Kg | | 69 | 20 - 168 | 0 | 40 |
| 2,4,5-TP (Silvex) | ND | | 0.0405 | 0.0305 | | mg/Kg | | 75 | 20 - 149 | 2 | 30 |
| 2,4-D | ND | | 0.405 | 0.287 | | mg/Kg | | 71 | 20 - 149 | 0 | 38 |
| 2,4-DB | ND | F1 | 0.405 | 0.0636 | J p F1 | mg/Kg | | 16 | 20 - 180 | 2 | 40 |
| Dalapon | ND | | 1.01 | 0.720 | | mg/Kg | | 71 | 20 - 136 | 1 | 40 |
| Dicamba | ND | | 0.0405 | 0.0327 | | mg/Kg | | 81 | 20 - 140 | 2 | 37 |
| Dichlorprop | ND | | 0.405 | 0.284 | | mg/Kg | | 70 | 20 - 142 | 1 | 27 |
| Dinoseb | ND | *- F1 *1 | 0.202 | ND | F1 | mg/Kg | | 0 | 10 - 109 | NC | 40 |
| MCPA | ND | | 40.5 | 30.5 | | mg/Kg | | 75 | 20 - 137 | 6 | 40 |
| MCPP | ND | | 40.5 | 31.4 | | mg/Kg | | 78 | 20 - 138 | 2 | 36 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *: 5* | | *21 - 1T1* |

## GC/MS VOA

### Prep Batch: 140299

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 5035 | |

### Analysis Batch: 140432

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 8260B | 140299 |
| MB 570-140432/7 | Method Blank | Total/NA | Solid | 8260B | |
| LCS 570-140432/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| LCSD 570-140432/5 | Lab Control Sample Dup | Total/NA | Solid | 8260B | |

## GC VOA

### Prep Batch: 140299

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 5035 | |

### Analysis Batch: 140468

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 8015B | 140299 |
| MB 570-140468/5 | Method Blank | Total/NA | Solid | 8015B | |
| LCS 570-140468/3 | Lab Control Sample | Total/NA | Solid | 8015B | |
| LCSD 570-140468/4 | Lab Control Sample Dup | Total/NA | Solid | 8015B | |

## GC Semi VOA

### Prep Batch: 141030

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 8151A | |
| MB 570-141030/1-A | Method Blank | Total/NA | Solid | 8151A | |
| LCS 570-141030/2-A | Lab Control Sample | Total/NA | Solid | 8151A | |
| LCSD 570-141030/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | |
| 570-54791-A-5-E MS | Matrix Spike | Total/NA | Solid | 8151A | |
| 570-54791-B-5-N MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | |

### Prep Batch: 141311

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 3550C | |
| MB 570-141311/1-A | Method Blank | Total/NA | Solid | 3550C | |
| LCS 570-141311/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| LCSD 570-141311/3-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| 440-281440-B-3-A MS | Matrix Spike | Total/NA | Solid | 3550C | |
| 440-281440-B-3-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 3550C | |

### Analysis Batch: 141349

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 8015B | 141311 |
| MB 570-141311/1-A | Method Blank | Total/NA | Solid | 8015B | 141311 |
| LCS 570-141311/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 141311 |
| LCSD 570-141311/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 141311 |
| 440-281440-B-3-A MS | Matrix Spike | Total/NA | Solid | 8015B | 141311 |
| 440-281440-B-3-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B | 141311 |

## GC Semi VOA

### Analysis Batch: 141815

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 8151A | 141030 |
| MB 570-141030/1-A | Method Blank | Total/NA | Solid | 8151A | 141030 |
| LCS 570-141030/2-A | Lab Control Sample | Total/NA | Solid | 8151A | 141030 |
| LCSD 570-141030/3-A | Lab Control Sample Dup | Total/NA | Solid | 8151A | 141030 |
| 570-54791-A-5-E MS | Matrix Spike | Total/NA | Solid | 8151A | 141030 |
| 570-54791-B-5-N MSD | Matrix Spike Duplicate | Total/NA | Solid | 8151A | 141030 |

### Prep Batch: 141818

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 3546 | |
| MB 570-141818/1-A | Method Blank | Total/NA | Solid | 3546 | |
| LCS 570-141818/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 570-141818/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| 570-55746-A-1-B MS | Matrix Spike | Total/NA | Solid | 3546 | |
| 570-55746-A-1-C MSD | Matrix Spike Duplicate | Total/NA | Solid | 3546 | |

### Analysis Batch: 142304

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281259-1 | B-6-115 | Total/NA | Solid | 8081A | 141818 |
| MB 570-141818/1-A | Method Blank | Total/NA | Solid | 8081A | 141818 |
| LCS 570-141818/2-A | Lab Control Sample | Total/NA | Solid | 8081A | 141818 |
| LCSD 570-141818/3-A | Lab Control Sample Dup | Total/NA | Solid | 8081A | 141818 |
| 570-55746-A-1-B MS | Matrix Spike | Total/NA | Solid | 8081A | 141818 |
| 570-55746-A-1-C MSD | Matrix Spike Duplicate | Total/NA | Solid | 8081A | 141818 |

# Definitions/Glossary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281259-1

## Qualifiers

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| *- | LCS and/or LCSD is outside acceptance limits, low biased. |
| *1 | LCS/LCSD RPD exceeds control limits. |
| E | Result exceeded calibration range. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| F2 | MS/MSD RPD exceeds control limits |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| p | The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281259-1

## Laboratory: Eurofins Calscience LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8015B | 3550C | Solid | C13-C22 |
| 8015B | 3550C | Solid | C23-C40 |
| 8015B | 5035 | Solid | Gasoline Range Organics (C4-C12) |
| 8081A | 3546 | Solid | 4,4'-DDD |
| 8081A | 3546 | Solid | 4,4'-DDE |
| 8081A | 3546 | Solid | 4,4'-DDT |
| 8081A | 3546 | Solid | Aldrin |
| 8081A | 3546 | Solid | alpha-BHC |
| 8081A | 3546 | Solid | alpha-Chlordane |
| 8081A | 3546 | Solid | beta-BHC |
| 8081A | 3546 | Solid | Chlordane |
| 8081A | 3546 | Solid | delta-BHC |
| 8081A | 3546 | Solid | Dieldrin |
| 8081A | 3546 | Solid | Endosulfan I |
| 8081A | 3546 | Solid | Endosulfan II |
| 8081A | 3546 | Solid | Endosulfan sulfate |
| 8081A | 3546 | Solid | Endrin |
| 8081A | 3546 | Solid | Endrin aldehyde |
| 8081A | 3546 | Solid | Endrin ketone |
| 8081A | 3546 | Solid | gamma-BHC |
| 8081A | 3546 | Solid | gamma-Chlordane |
| 8081A | 3546 | Solid | Heptachlor |
| 8081A | 3546 | Solid | Heptachlor epoxide |
| 8081A | 3546 | Solid | Methoxychlor |
| 8081A | 3546 | Solid | Toxaphene |
| 8151A | 8151A | Solid | 2,4,5-T |
| 8151A | 8151A | Solid | 2,4,5-TP (Silvex) |
| 8151A | 8151A | Solid | 2,4-D |
| 8151A | 8151A | Solid | 2,4-DB |
| 8151A | 8151A | Solid | Dalapon |
| 8151A | 8151A | Solid | Dicamba |
| 8151A | 8151A | Solid | Dichlorprop |
| 8151A | 8151A | Solid | Dinoseb |
| 8151A | 8151A | Solid | MCPA |
| 8151A | 8151A | Solid | MCPP |
| 8260B | 5035 | Solid | 1,1,1,2-Tetrachloroethane |
| 8260B | 5035 | Solid | 1,1,1-Trichloroethane |
| 8260B | 5035 | Solid | 1,1,2,2-Tetrachloroethane |
| 8260B | 5035 | Solid | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| 8260B | 5035 | Solid | 1,1,2-Trichloroethane |
| 8260B | 5035 | Solid | 1,1-Dichloroethane |
| 8260B | 5035 | Solid | 1,1-Dichloroethene |
| 8260B | 5035 | Solid | 1,1-Dichloropropene |
| 8260B | 5035 | Solid | 1,2,3-Trichlorobenzene |
| 8260B | 5035 | Solid | 1,2,3-Trichloropropane |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

| | | | |
|---|---|---|---|
| 8260B | 5035 | Solid | 1,2,4-Trichlorobenzene |
| 8260B | 5035 | Solid | 1,2,4-Trimethylbenzene |
| 8260B | 5035 | Solid | 1,2-Dibromo-3-Chloropropane |
| 8260B | 5035 | Solid | 1,2-Dibromoethane |
| 8260B | 5035 | Solid | 1,2-Dichlorobenzene |
| 8260B | 5035 | Solid | 1,2-Dichloroethane |
| 8260B | 5035 | Solid | 1,2-Dichloropropane |
| 8260B | 5035 | Solid | 1,3,5-Trimethylbenzene |
| 8260B | 5035 | Solid | 1,3-Dichlorobenzene |
| 8260B | 5035 | Solid | 1,3-Dichloropropane |
| 8260B | 5035 | Solid | 1,4-Dichlorobenzene |
| 8260B | 5035 | Solid | 2,2-Dichloropropane |
| 8260B | 5035 | Solid | 2-Butanone |
| 8260B | 5035 | Solid | 2-Chlorotoluene |
| 8260B | 5035 | Solid | 2-Hexanone |
| 8260B | 5035 | Solid | 4-Chlorotoluene |
| 8260B | 5035 | Solid | 4-Methyl-2-pentanone |
| 8260B | 5035 | Solid | Acetone |
| 8260B | 5035 | Solid | Benzene |
| 8260B | 5035 | Solid | Bromobenzene |
| 8260B | 5035 | Solid | Bromochloromethane |
| 8260B | 5035 | Solid | Bromodichloromethane |
| 8260B | 5035 | Solid | Bromoform |
| 8260B | 5035 | Solid | Bromomethane |
| 8260B | 5035 | Solid | Carbon disulfide |
| 8260B | 5035 | Solid | Carbon tetrachloride |
| 8260B | 5035 | Solid | Chlorobenzene |
| 8260B | 5035 | Solid | Chloroethane |
| 8260B | 5035 | Solid | Chloroform |
| 8260B | 5035 | Solid | Chloromethane |
| 8260B | 5035 | Solid | cis-1,2-Dichloroethene |
| 8260B | 5035 | Solid | cis-1,3-Dichloropropene |
| 8260B | 5035 | Solid | Dibromochloromethane |
| 8260B | 5035 | Solid | Dibromomethane |
| 8260B | 5035 | Solid | Dichlorodifluoromethane |
| 8260B | 5035 | Solid | Di-isopropyl ether (DIPE) |
| 8260B | 5035 | Solid | Ethanol |
| 8260B | 5035 | Solid | Ethylbenzene |
| 8260B | 5035 | Solid | Ethyl-t-butyl ether (ETBE) |
| 8260B | 5035 | Solid | Hexachloro-1,3-butadiene |
| 8260B | 5035 | Solid | Isopropylbenzene |
| 8260B | 5035 | Solid | m,p-Xylene |
| 8260B | 5035 | Solid | Methylene Chloride |
| 8260B | 5035 | Solid | Methyl-t-Butyl Ether (MTBE) |
| 8260B | 5035 | Solid | Naphthalene |
| 8260B | 5035 | Solid | n-Butylbenzene |
| 8260B | 5035 | Solid | N-Propylbenzene |
| 8260B | 5035 | Solid | o-Xylene |
| 8260B | 5035 | Solid | p-Isopropyltoluene |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

| | | | |
|---|---|---|---|
| 8260B | 5035 | Solid | sec-Butylbenzene |
| 8260B | 5035 | Solid | Styrene |
| 8260B | 5035 | Solid | Tert-amyl-methyl ether (TAME) |
| 8260B | 5035 | Solid | tert-Butyl alcohol (TBA) |
| 8260B | 5035 | Solid | tert-Butylbenzene |
| 8260B | 5035 | Solid | Tetrachloroethene |
| 8260B | 5035 | Solid | Toluene |
| 8260B | 5035 | Solid | trans-1,2-Dichloroethene |
| 8260B | 5035 | Solid | trans-1,3-Dichloropropene |
| 8260B | 5035 | Solid | Trichloroethene |
| 8260B | 5035 | Solid | Trichlorofluoromethane |
| 8260B | 5035 | Solid | Vinyl acetate |
| 8260B | 5035 | Solid | Vinyl chloride |
| 8260B | 5035 | Solid | Xylenes, Total |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: EuroFins
Address:
Phone:
Contact: Danielle
PO/SO #: CB21PO20

Office Location: Colton
Project Manager: Todd G. McFarland

Sampler's Name: Tom C. Johnson
Sampler's Signature:

Project Number: CB21PO20
Project Name: Broken Horn Saddlery

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers: Vol | P/O | TPH 8015 | VOCs 8260 | Herbicides 8151A | OCPs 8081A | CAM 17 Metals | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 3/30 | 15:17 | | X | B-6-115 | | | 5 | 1 | ✓ | ✓ | ✓ | | | |

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE

TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 1

440-281259 Chain of Custody

3/31/21

TURNAROUND TIME: ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 3/31 | 16:00 | William Rivera | 3/31/21 | 1600 |
| William Rivera | 3/31/21 | 1800 | | 3/31/21 | 1600 |
| | | | | | |
| | | | | | |

NOTES: 5 Day TAT

Matrix: WW Wastewater; W Water; S Soil; L -Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil

Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml Glass wide mouth; P/O Plastic or other

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

4/13/2021

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167426 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone | E-Mail: Danielle Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281259-1 |
| Address: 7440 Lincoln Way | Due Date Requested: 4/6/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | PO #: | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | WO #: | | | |
| Email: | | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B/5035FM_Calc (MOD) Routine + Oxy's | 8260B/5035FP_Calc (MOD) Routine + Oxy's | 8015B_GRO/5035FM_Calc Gasoline Range Organics C4-C12 | 8015B_GRO/5035FP_Calc Gasoline Range Organics C4-C12 | 8151A/8151A_SP Routine Herbicides List (full spike list | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | |
| B-6-115 (440-281259-1) | 3/30/21 | 15 17 Pacific | | Solid | | | X | X | X | X | X | 6 | |

Note: Since laboratory accreditations are subject to change Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Olga Cinelas | 4/1/21 14:00 | ECI-IRV | | 4-1-2021 14:00 | ECI |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: N/A | Cooler Temperature(s) °C and Other Remarks: 2.4/2.8 SCT |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281259-1

**Login Number: 281259**
**List Number: 1**
**Creator: Escalante, Maria I**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281259-1

**Login Number: 281259**
**List Number: 2**
**Creator: Ortiz-Luis, Michael**

**List Source: Eurofins Calscience**
**List Creation: 04/01/21 04:06 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.8 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# APPENDIX I

## Analytical Reports and Chain of Custody Forms – Water

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-280936-1
Client Project/Site: Broken Horn Saddler V

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*3/31/2021 5:27:38 PM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 440-280936-1 | TSW-1 | Water | 03/22/21 16:10 | 03/23/21 18:30 | |
| 440-280936-2 | Trip Blank | Water | 03/22/21 16:10 | 03/23/21 18:30 | |

## Job ID: 440-280936-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-280936-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/23/2021 6:30 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8º C.

**GC/MS VOA**
Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-139250.

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 570-139250 recovered outside control limits for the following analyte: Vinyl acetate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 570-139250 recovered above the upper control limit for Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 570-139250/2).

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 570-139544 recovered outside control limits for the following analytes: 1,1,1-Trichloroethane and 1,1-Dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-139544.

Method 8260B: The following sample was diluted due to the nature of the sample matrix: TSW-1 (440-280936-1). Elevated reporting limits (RLs) are provided. High sediment.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC/MS Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**HPLC/IC**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-139268. LCS/LCSD was performed to meet QC requirement.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

## Client Sample ID: TSW-1 — Lab Sample ID: 440-280936-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | 160 | | 72 | 32 | ug/L | 1 | | 8015B | Total/NA |
| C23-C40 | 63 | J | 72 | 32 | ug/L | 1 | | 8015B | Total/NA |
| Perchlorate | 1.1 | J | 2.0 | 0.91 | ug/L | 1 | | 314.0 | Total/NA |

## Client Sample ID: Trip Blank — Lab Sample ID: 440-280936-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

**Client Sample ID: TSW-1**
**Date Collected: 03/22/21 16:10**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280936-1**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 4.0 | 0.66 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,1,1-Trichloroethane | ND | *+ | 2.0 | 0.64 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.41 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 20 | 1.2 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.59 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.74 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.66 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,1-Dichloropropene | ND | *+ | 2.0 | 0.91 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2,3-Trichlorobenzene | ND | | 2.0 | 0.86 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2,3-Trichloropropane | ND | | 10 | 0.55 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.72 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | 0.69 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2-Dibromo-3-Chloropropane | ND | | 20 | 3.0 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2-Dibromoethane | ND | | 2.0 | 0.76 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 0.55 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.43 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,2-Dichloropropane | ND | | 2.0 | 0.78 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,3,5-Trimethylbenzene | ND | | 2.0 | 0.68 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,3-Dichlorobenzene | ND | | 2.0 | 0.52 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,3-Dichloropropane | ND | | 2.0 | 0.59 | ug/L | | | 03/30/21 15:00 | 2 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 0.49 | ug/L | | | 03/30/21 15:00 | 2 |
| 2,2-Dichloropropane | ND | | 2.0 | 1.1 | ug/L | | | 03/30/21 15:00 | 2 |
| 2-Butanone | ND | | 40 | 7.1 | ug/L | | | 03/30/21 15:00 | 2 |
| 2-Chlorotoluene | ND | | 2.0 | 0.54 | ug/L | | | 03/30/21 15:00 | 2 |
| 2-Hexanone | ND | | 20 | 6.3 | ug/L | | | 03/30/21 15:00 | 2 |
| 4-Chlorotoluene | ND | | 2.0 | 0.64 | ug/L | | | 03/30/21 15:00 | 2 |
| 4-Methyl-2-pentanone | ND | | 20 | 5.9 | ug/L | | | 03/30/21 15:00 | 2 |
| Acetone | ND | | 40 | 20 | ug/L | | | 03/30/21 15:00 | 2 |
| Benzene | ND | | 1.0 | 0.39 | ug/L | | | 03/30/21 15:00 | 2 |
| Bromobenzene | ND | | 2.0 | 0.60 | ug/L | | | 03/30/21 15:00 | 2 |
| Bromochloromethane | ND | | 4.0 | 0.60 | ug/L | | | 03/30/21 15:00 | 2 |
| Bromodichloromethane | ND | | 2.0 | 0.57 | ug/L | | | 03/30/21 15:00 | 2 |
| Bromoform | ND | | 10 | 2.9 | ug/L | | | 03/30/21 15:00 | 2 |
| Bromomethane | ND | | 50 | 30 | ug/L | | | 03/30/21 15:00 | 2 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 1.0 | ug/L | | | 03/30/21 15:00 | 2 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.46 | ug/L | | | 03/30/21 15:00 | 2 |
| Carbon disulfide | ND | | 20 | 0.79 | ug/L | | | 03/30/21 15:00 | 2 |
| Carbon tetrachloride | ND | | 1.0 | 0.69 | ug/L | | | 03/30/21 15:00 | 2 |
| Chlorobenzene | ND | | 2.0 | 0.42 | ug/L | | | 03/30/21 15:00 | 2 |
| Chloroethane | ND | | 10 | 4.8 | ug/L | | | 03/30/21 15:00 | 2 |
| Chloroform | ND | | 2.0 | 1.0 | ug/L | | | 03/30/21 15:00 | 2 |
| Chloromethane | ND | | 20 | 4.6 | ug/L | | | 03/30/21 15:00 | 2 |
| Dibromochloromethane | ND | | 4.0 | 0.68 | ug/L | | | 03/30/21 15:00 | 2 |
| Dibromomethane | ND | | 2.0 | 0.75 | ug/L | | | 03/30/21 15:00 | 2 |
| Dichlorodifluoromethane | ND | | 10 | 1.1 | ug/L | | | 03/30/21 15:00 | 2 |
| Ethylbenzene | ND | | 2.0 | 0.66 | ug/L | | | 03/30/21 15:00 | 2 |
| Isopropylbenzene | ND | | 2.0 | 0.74 | ug/L | | | 03/30/21 15:00 | 2 |
| Methylene Chloride | ND | | 20 | 8.0 | ug/L | | | 03/30/21 15:00 | 2 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.68 | ug/L | | | 03/30/21 15:00 | 2 |

## Client Sample ID: TSW-1

**Date Collected: 03/22/21 16:10**
**Date Received: 03/23/21 18:30**

## Lab Sample ID: 440-280936-1

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 20 | 10 | ug/L | | | 03/30/21 15:00 | 2 |
| n-Butylbenzene | ND | | 2.0 | 0.58 | ug/L | | | 03/30/21 15:00 | 2 |
| N-Propylbenzene | ND | | 2.0 | 0.83 | ug/L | | | 03/30/21 15:00 | 2 |
| o-Xylene | ND | | 2.0 | 0.51 | ug/L | | | 03/30/21 15:00 | 2 |
| m,p-Xylene | ND | | 4.0 | 0.97 | ug/L | | | 03/30/21 15:00 | 2 |
| p-Isopropyltoluene | ND | | 2.0 | 0.76 | ug/L | | | 03/30/21 15:00 | 2 |
| sec-Butylbenzene | ND | | 2.0 | 0.58 | ug/L | | | 03/30/21 15:00 | 2 |
| Styrene | ND | | 2.0 | 0.75 | ug/L | | | 03/30/21 15:00 | 2 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.63 | ug/L | | | 03/30/21 15:00 | 2 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.60 | ug/L | | | 03/30/21 15:00 | 2 |
| tert-Butylbenzene | ND | | 2.0 | 0.71 | ug/L | | | 03/30/21 15:00 | 2 |
| Tetrachloroethene | ND | | 2.0 | 0.70 | ug/L | | | 03/30/21 15:00 | 2 |
| Toluene | ND | | 2.0 | 0.68 | ug/L | | | 03/30/21 15:00 | 2 |
| Trichloroethene | ND | | 2.0 | 0.70 | ug/L | | | 03/30/21 15:00 | 2 |
| Trichlorofluoromethane | ND | | 20 | 0.72 | ug/L | | | 03/30/21 15:00 | 2 |
| Vinyl acetate | ND | | 20 | 9.2 | ug/L | | | 03/30/21 15:00 | 2 |
| Vinyl chloride | ND | | 1.0 | 0.53 | ug/L | | | 03/30/21 15:00 | 2 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *70 - 123* | | *03/30/21 15:00* | *2* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *80 - 120* | | *03/30/21 15:00* | *2* |
| *Dibromofluoromethane (Surr)* | *103* | | *78 - 120* | | *03/30/21 15:00* | *2* |
| *Toluene-d8 (Surr)* | *102* | | *80 - 120* | | *03/30/21 15:00* | *2* |

### Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.34 | ug/L | | 03/25/21 07:43 | 03/29/21 17:24 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *36* | | *15 - 150* | *03/25/21 07:43* | *03/29/21 17:24* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *91* | | *46 - 128* | *03/25/21 07:43* | *03/29/21 17:24* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 03/25/21 20:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *85* | | *38 - 134* | | *03/25/21 20:18* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C13-C22** | **160** | | 72 | 32 | ug/L | | 03/29/21 09:16 | 03/29/21 18:08 | 1 |
| **C23-C40** | **63** | **J** | 72 | 32 | ug/L | | 03/29/21 09:16 | 03/29/21 18:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *105* | | *53 - 151* | *03/29/21 09:16* | *03/29/21 18:08* | *1* |

### Method: 314.0 - Perchlorate (IC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Perchlorate** | **1.1** | **J** | 2.0 | 0.91 | ug/L | | | 03/30/21 11:58 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

**Client Sample ID: Trip Blank**
**Date Collected: 03/22/21 16:10**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280936-2**
**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | 0.33 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.32 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.20 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10 | 0.58 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.37 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.45 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.43 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 0.27 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.36 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | 1.5 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.38 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.28 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2-Dichloroethane | ND | | 0.50 | 0.22 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.39 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 03/29/21 11:39 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.24 | ug/L | | | 03/29/21 11:39 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.55 | ug/L | | | 03/29/21 11:39 | 1 |
| 2-Butanone | ND | | 20 | 3.6 | ug/L | | | 03/29/21 11:39 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.27 | ug/L | | | 03/29/21 11:39 | 1 |
| 2-Hexanone | ND | | 10 | 3.1 | ug/L | | | 03/29/21 11:39 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.32 | ug/L | | | 03/29/21 11:39 | 1 |
| 4-Methyl-2-pentanone | ND | | 10 | 2.9 | ug/L | | | 03/29/21 11:39 | 1 |
| Acetone | ND | | 20 | 10 | ug/L | | | 03/29/21 11:39 | 1 |
| Benzene | ND | | 0.50 | 0.20 | ug/L | | | 03/29/21 11:39 | 1 |
| Bromobenzene | ND | | 1.0 | 0.30 | ug/L | | | 03/29/21 11:39 | 1 |
| Bromochloromethane | ND | | 2.0 | 0.30 | ug/L | | | 03/29/21 11:39 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.28 | ug/L | | | 03/29/21 11:39 | 1 |
| Bromoform | ND | | 5.0 | 1.5 | ug/L | | | 03/29/21 11:39 | 1 |
| Bromomethane | ND | | 25 | 15 | ug/L | | | 03/29/21 11:39 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.51 | ug/L | | | 03/29/21 11:39 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.50 | 0.23 | ug/L | | | 03/29/21 11:39 | 1 |
| Carbon disulfide | ND | | 10 | 0.40 | ug/L | | | 03/29/21 11:39 | 1 |
| Carbon tetrachloride | ND | | 0.50 | 0.34 | ug/L | | | 03/29/21 11:39 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.21 | ug/L | | | 03/29/21 11:39 | 1 |
| Chloroethane | ND | | 5.0 | 2.4 | ug/L | | | 03/29/21 11:39 | 1 |
| Chloroform | ND | | 1.0 | 0.50 | ug/L | | | 03/29/21 11:39 | 1 |
| Chloromethane | ND | | 10 | 2.3 | ug/L | | | 03/29/21 11:39 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.34 | ug/L | | | 03/29/21 11:39 | 1 |
| Dibromomethane | ND | | 1.0 | 0.38 | ug/L | | | 03/29/21 11:39 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.56 | ug/L | | | 03/29/21 11:39 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.33 | ug/L | | | 03/29/21 11:39 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.37 | ug/L | | | 03/29/21 11:39 | 1 |
| Methylene Chloride | ND | | 10 | 4.0 | ug/L | | | 03/29/21 11:39 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 1.0 | 0.34 | ug/L | | | 03/29/21 11:39 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

**Client Sample ID: Trip Blank**
**Date Collected: 03/22/21 16:10**
**Date Received: 03/23/21 18:30**

**Lab Sample ID: 440-280936-2**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 10 | 5.0 | ug/L | | | 03/29/21 11:39 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 03/29/21 11:39 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.41 | ug/L | | | 03/29/21 11:39 | 1 |
| o-Xylene | ND | | 1.0 | 0.26 | ug/L | | | 03/29/21 11:39 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.48 | ug/L | | | 03/29/21 11:39 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.38 | ug/L | | | 03/29/21 11:39 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 03/29/21 11:39 | 1 |
| Styrene | ND | | 1.0 | 0.38 | ug/L | | | 03/29/21 11:39 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.31 | ug/L | | | 03/29/21 11:39 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.50 | 0.30 | ug/L | | | 03/29/21 11:39 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.36 | ug/L | | | 03/29/21 11:39 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.35 | ug/L | | | 03/29/21 11:39 | 1 |
| Toluene | ND | | 1.0 | 0.34 | ug/L | | | 03/29/21 11:39 | 1 |
| Trichloroethene | ND | | 1.0 | 0.35 | ug/L | | | 03/29/21 11:39 | 1 |
| Trichlorofluoromethane | ND | | 10 | 0.36 | ug/L | | | 03/29/21 11:39 | 1 |
| Vinyl acetate | ND | *+ | 10 | 4.6 | ug/L | | | 03/29/21 11:39 | 1 |
| Vinyl chloride | ND | | 0.50 | 0.26 | ug/L | | | 03/29/21 11:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *94* | | *70 - 123* | | *03/29/21 11:39* | *1* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *80 - 120* | | *03/29/21 11:39* | *1* |
| *Dibromofluoromethane (Surr)* | *95* | | *78 - 120* | | *03/29/21 11:39* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *80 - 120* | | *03/29/21 11:39* | *1* |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (70-123) | (80-120) | (78-120) | (80-120) |
| 440-280936-1 | TSW-1 | 97 | 105 | 103 | 102 |
| 440-280936-2 | Trip Blank | 94 | 98 | 95 | 99 |
| LCS 570-139250/3 | Lab Control Sample | 96 | 100 | 97 | 100 |
| LCS 570-139544/4 | Lab Control Sample | 105 | 101 | 106 | 100 |
| LCSD 570-139250/4 | Lab Control Sample Dup | 97 | 98 | 100 | 100 |
| LCSD 570-139544/5 | Lab Control Sample Dup | 101 | 99 | 103 | 101 |
| MB 570-139250/7 | Method Blank | 93 | 98 | 99 | 101 |
| MB 570-139544/8 | Method Blank | 95 | 108 | 103 | 103 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | NBZ |
| Lab Sample ID | Client Sample ID | (46-128) |
| 440-280936-1 | TSW-1 | 91 |
| 570-54532-D-4-A MS | Matrix Spike | 63 |
| 570-54532-D-4-B MSD | Matrix Spike Duplicate | 83 |
| LCS 570-138515/2-A | Lab Control Sample | 71 |
| LCSD 570-138515/3-A | Lab Control Sample Dup | 56 |
| MB 570-138515/1-A | Method Blank | 59 |

**Surrogate Legend**

NBZ = Nitrobenzene-d5 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | BFB1 |
| Lab Sample ID | Client Sample ID | (38-134) |
| 440-280555-E-1 MS | Matrix Spike | 96 |
| 440-280555-E-1 MSD | Matrix Spike Duplicate | 96 |
| 440-280936-1 | TSW-1 | 85 |
| LCS 570-138560/3 | Lab Control Sample | 95 |
| LCSD 570-138560/6 | Lab Control Sample Dup | 94 |
| MB 570-138560/5 | Method Blank | 85 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

Client: Terracon Consultants Inc
Job ID: 440-280936-1
Project/Site: Broken Horn Saddler V

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | OTCSN1 (53-151) |
| 440-280936-1 | TSW-1 | 105 |
| LCS 570-139268/2-A | Lab Control Sample | 87 |
| LCSD 570-139268/3-A | Lab Control Sample Dup | 112 |
| MB 570-139268/1-A | Method Blank | 110 |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# Method Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | ECL 2 |
| 8270C SIM ID | Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) | SW846 | ECL 1 |
| 8015B | Gasoline Range Organics - (GC) | SW846 | ECL 2 |
| 8015B | Diesel Range Organics(DRO)/Oil Range Organics (ORO) | SW846 | ECL 1 |
| 314.0 | Perchlorate (IC) | EPA | ECL 1 |
| 3510C | Liquid-Liquid Extraction (Separatory Funnel) | SW846 | ECL 1 |
| 5030C | Purge and Trap | SW846 | ECL 2 |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC  Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC  Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

## Client Sample ID: TSW-1

**Lab Sample ID: 440-280936-1**

**Date Collected: 03/22/21 16:10**

**Matrix: Water**

**Date Received: 03/23/21 18:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 2 | 5 mL | 5 mL | 139544 | 03/30/21 15:00 | CVA6 | ECL 2 |
| Total/NA | Prep | 3510C | | | 100.0 mL | 10 mL | 138515 | 03/25/21 07:43 | PQS1 | ECL 1 |
| Total/NA | Analysis | 8270C SIM ID | | 1 | | | 139313 | 03/29/21 17:24 | AJ2Q | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | 5 mL | 5 mL | 138560 | 03/25/21 20:18 | P1R | ECL 2 |
| Total/NA | Prep | 3510C | | | 346.4 mL | 2.5 mL | 139268 | 03/29/21 09:16 | UFLU | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 139365 | 03/29/21 18:08 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 314.0 | | 1 | | | 139557 | 03/30/21 11:58 | URMH | ECL 1 |

## Client Sample ID: Trip Blank

**Lab Sample ID: 440-280936-2**

**Date Collected: 03/22/21 16:10**

**Matrix: Water**

**Date Received: 03/23/21 18:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 139250 | 03/29/21 11:39 | NET3 | ECL 2 |

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-139250/7**
**Matrix: Water**
**Analysis Batch: 139250**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | 0.33 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.32 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.20 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10 | 0.58 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.37 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.45 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.43 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 0.27 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.36 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | 1.5 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.38 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.28 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2-Dichloroethane | ND | | 0.50 | 0.22 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.39 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 03/29/21 11:10 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.24 | ug/L | | | 03/29/21 11:10 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.55 | ug/L | | | 03/29/21 11:10 | 1 |
| 2-Butanone | ND | | 20 | 3.6 | ug/L | | | 03/29/21 11:10 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.27 | ug/L | | | 03/29/21 11:10 | 1 |
| 2-Hexanone | ND | | 10 | 3.1 | ug/L | | | 03/29/21 11:10 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.32 | ug/L | | | 03/29/21 11:10 | 1 |
| 4-Methyl-2-pentanone | ND | | 10 | 2.9 | ug/L | | | 03/29/21 11:10 | 1 |
| Acetone | ND | | 20 | 10 | ug/L | | | 03/29/21 11:10 | 1 |
| Benzene | ND | | 0.50 | 0.20 | ug/L | | | 03/29/21 11:10 | 1 |
| Bromobenzene | ND | | 1.0 | 0.30 | ug/L | | | 03/29/21 11:10 | 1 |
| Bromochloromethane | ND | | 2.0 | 0.30 | ug/L | | | 03/29/21 11:10 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.28 | ug/L | | | 03/29/21 11:10 | 1 |
| Bromoform | ND | | 5.0 | 1.5 | ug/L | | | 03/29/21 11:10 | 1 |
| Bromomethane | ND | | 25 | 15 | ug/L | | | 03/29/21 11:10 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.51 | ug/L | | | 03/29/21 11:10 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.50 | 0.23 | ug/L | | | 03/29/21 11:10 | 1 |
| Carbon disulfide | ND | | 10 | 0.40 | ug/L | | | 03/29/21 11:10 | 1 |
| Carbon tetrachloride | ND | | 0.50 | 0.34 | ug/L | | | 03/29/21 11:10 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.21 | ug/L | | | 03/29/21 11:10 | 1 |
| Chloroethane | ND | | 5.0 | 2.4 | ug/L | | | 03/29/21 11:10 | 1 |
| Chloroform | ND | | 1.0 | 0.50 | ug/L | | | 03/29/21 11:10 | 1 |
| Chloromethane | ND | | 10 | 2.3 | ug/L | | | 03/29/21 11:10 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.34 | ug/L | | | 03/29/21 11:10 | 1 |
| Dibromomethane | ND | | 1.0 | 0.38 | ug/L | | | 03/29/21 11:10 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.56 | ug/L | | | 03/29/21 11:10 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.33 | ug/L | | | 03/29/21 11:10 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.37 | ug/L | | | 03/29/21 11:10 | 1 |
| Methylene Chloride | ND | | 10 | 4.0 | ug/L | | | 03/29/21 11:10 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-139250/7**
**Matrix: Water**
**Analysis Batch: 139250**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl-t-Butyl Ether (MTBE) | ND | | 1.0 | 0.34 | ug/L | | | 03/29/21 11:10 | 1 |
| Naphthalene | ND | | 10 | 5.0 | ug/L | | | 03/29/21 11:10 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 03/29/21 11:10 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.41 | ug/L | | | 03/29/21 11:10 | 1 |
| o-Xylene | ND | | 1.0 | 0.26 | ug/L | | | 03/29/21 11:10 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.48 | ug/L | | | 03/29/21 11:10 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.38 | ug/L | | | 03/29/21 11:10 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 03/29/21 11:10 | 1 |
| Styrene | ND | | 1.0 | 0.38 | ug/L | | | 03/29/21 11:10 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.31 | ug/L | | | 03/29/21 11:10 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.50 | 0.30 | ug/L | | | 03/29/21 11:10 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.36 | ug/L | | | 03/29/21 11:10 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.35 | ug/L | | | 03/29/21 11:10 | 1 |
| Toluene | ND | | 1.0 | 0.34 | ug/L | | | 03/29/21 11:10 | 1 |
| Trichloroethene | ND | | 1.0 | 0.35 | ug/L | | | 03/29/21 11:10 | 1 |
| Trichlorofluoromethane | ND | | 10 | 0.36 | ug/L | | | 03/29/21 11:10 | 1 |
| Vinyl acetate | ND | | 10 | 4.6 | ug/L | | | 03/29/21 11:10 | 1 |
| Vinyl chloride | ND | | 0.50 | 0.26 | ug/L | | | 03/29/21 11:10 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *03 - 127* | | *37/29/21 115 13* | *1* |
| *4-Bromofluorobenzene (Surr)* | *9:* | | *: 3 - 123* | | *37/29/21 115 13* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *0: - 123* | | *37/29/21 115 13* | *1* |
| *8oluene-d: (Surr)* | *131* | | *: 3 - 123* | | *37/29/21 115 13* | *1* |

**Lab Sample ID: LCS 570-139250/3**
**Matrix: Water**
**Analysis Batch: 139250**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 50.0 | 50.3 | | ug/L | | 101 | 64 - 121 |
| 1,2-Dibromoethane | 50.0 | 55.1 | | ug/L | | 110 | 80 - 120 |
| 1,2-Dichlorobenzene | 50.0 | 53.6 | | ug/L | | 107 | 80 - 120 |
| 1,2-Dichloroethane | 50.0 | 52.6 | | ug/L | | 105 | 76 - 120 |
| Benzene | 50.0 | 52.4 | | ug/L | | 105 | 76 - 120 |
| Carbon tetrachloride | 50.0 | 50.4 | | ug/L | | 101 | 80 - 127 |
| Chlorobenzene | 50.0 | 53.8 | | ug/L | | 108 | 80 - 120 |
| Ethylbenzene | 50.0 | 53.8 | | ug/L | | 108 | 80 - 120 |
| Methyl-t-Butyl Ether (MTBE) | 50.0 | 51.0 | | ug/L | | 102 | 64 - 120 |
| o-Xylene | 50.0 | 52.7 | | ug/L | | 105 | 80 - 121 |
| m,p-Xylene | 100 | 103 | | ug/L | | 103 | 74 - 122 |
| Toluene | 50.0 | 51.9 | | ug/L | | 104 | 76 - 120 |
| Trichloroethene | 50.0 | 50.6 | | ug/L | | 101 | 80 - 122 |
| Vinyl chloride | 50.0 | 50.7 | | ug/L | | 101 | 70 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *9T* | | *03 - 127* |
| *4-Bromofluorobenzene (Surr)* | *133* | | *: 3 - 123* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-139250/3**
**Matrix: Water**
**Analysis Batch: 139250**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| *Dibromofluoromethane (Surr)* | *90* | | *0: - 123* |
| *8oluene-d: (Surr)* | *133* | | *: 3 - 123* |

**Lab Sample ID: LCSD 570-139250/4**
**Matrix: Water**
**Analysis Batch: 139250**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | | | 50.0 | 53.2 | | ug/L | | 106 | 64 - 121 | 6 | 20 |
| 1,2-Dibromoethane | | | 50.0 | 53.9 | | ug/L | | 108 | 80 - 120 | 2 | 20 |
| 1,2-Dichlorobenzene | | | 50.0 | 55.5 | | ug/L | | 111 | 80 - 120 | 3 | 20 |
| 1,2-Dichloroethane | | | 50.0 | 53.2 | | ug/L | | 106 | 76 - 120 | 1 | 20 |
| Benzene | | | 50.0 | 54.4 | | ug/L | | 109 | 76 - 120 | 4 | 20 |
| Carbon tetrachloride | | | 50.0 | 52.2 | | ug/L | | 104 | 80 - 127 | 3 | 20 |
| Chlorobenzene | | | 50.0 | 56.1 | | ug/L | | 112 | 80 - 120 | 4 | 20 |
| Ethylbenzene | | | 50.0 | 55.0 | | ug/L | | 110 | 80 - 120 | 2 | 20 |
| Methyl-t-Butyl Ether (MTBE) | | | 50.0 | 51.7 | | ug/L | | 103 | 64 - 120 | 1 | 20 |
| o-Xylene | | | 50.0 | 56.3 | | ug/L | | 113 | 80 - 121 | 7 | 20 |
| m,p-Xylene | | | 100 | 108 | | ug/L | | 108 | 74 - 122 | 5 | 20 |
| Toluene | | | 50.0 | 56.0 | | ug/L | | 112 | 76 - 120 | 8 | 20 |
| Trichloroethene | | | 50.0 | 53.7 | | ug/L | | 107 | 80 - 122 | 6 | 20 |
| Vinyl chloride | | | 50.0 | 52.6 | | ug/L | | 105 | 70 - 124 | 4 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *90* | | *03 - 127* |
| *4-Bromofluorobenzene (Surr)* | *9:* | | *: 3 - 123* |
| *Dibromofluoromethane (Surr)* | *133* | | *0: - 123* |
| *8oluene-d: (Surr)* | *133* | | *: 3 - 123* |

**Lab Sample ID: MB 570-139544/8**
**Matrix: Water**
**Analysis Batch: 139544**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | 0.33 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.32 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.20 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10 | 0.58 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.37 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.45 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.43 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 0.27 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.36 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | 1.5 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.38 | ug/L | | | 03/30/21 11:49 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-139544/8**
**Matrix: Water**
**Analysis Batch: 139544**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.28 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,2-Dichloroethane | ND | | 0.50 | 0.22 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.39 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 03/30/21 11:49 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.24 | ug/L | | | 03/30/21 11:49 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.55 | ug/L | | | 03/30/21 11:49 | 1 |
| 2-Butanone | ND | | 20 | 3.6 | ug/L | | | 03/30/21 11:49 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.27 | ug/L | | | 03/30/21 11:49 | 1 |
| 2-Hexanone | ND | | 10 | 3.1 | ug/L | | | 03/30/21 11:49 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.32 | ug/L | | | 03/30/21 11:49 | 1 |
| 4-Methyl-2-pentanone | ND | | 10 | 2.9 | ug/L | | | 03/30/21 11:49 | 1 |
| Acetone | ND | | 20 | 10 | ug/L | | | 03/30/21 11:49 | 1 |
| Benzene | ND | | 0.50 | 0.20 | ug/L | | | 03/30/21 11:49 | 1 |
| Bromobenzene | ND | | 1.0 | 0.30 | ug/L | | | 03/30/21 11:49 | 1 |
| Bromochloromethane | ND | | 2.0 | 0.30 | ug/L | | | 03/30/21 11:49 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.28 | ug/L | | | 03/30/21 11:49 | 1 |
| Bromoform | ND | | 5.0 | 1.5 | ug/L | | | 03/30/21 11:49 | 1 |
| Bromomethane | ND | | 25 | 15 | ug/L | | | 03/30/21 11:49 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.51 | ug/L | | | 03/30/21 11:49 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.50 | 0.23 | ug/L | | | 03/30/21 11:49 | 1 |
| Carbon disulfide | ND | | 10 | 0.40 | ug/L | | | 03/30/21 11:49 | 1 |
| Carbon tetrachloride | ND | | 0.50 | 0.34 | ug/L | | | 03/30/21 11:49 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.21 | ug/L | | | 03/30/21 11:49 | 1 |
| Chloroethane | ND | | 5.0 | 2.4 | ug/L | | | 03/30/21 11:49 | 1 |
| Chloroform | ND | | 1.0 | 0.50 | ug/L | | | 03/30/21 11:49 | 1 |
| Chloromethane | ND | | 10 | 2.3 | ug/L | | | 03/30/21 11:49 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.34 | ug/L | | | 03/30/21 11:49 | 1 |
| Dibromomethane | ND | | 1.0 | 0.38 | ug/L | | | 03/30/21 11:49 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.56 | ug/L | | | 03/30/21 11:49 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.33 | ug/L | | | 03/30/21 11:49 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.37 | ug/L | | | 03/30/21 11:49 | 1 |
| Methylene Chloride | ND | | 10 | 4.0 | ug/L | | | 03/30/21 11:49 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 1.0 | 0.34 | ug/L | | | 03/30/21 11:49 | 1 |
| Naphthalene | ND | | 10 | 5.0 | ug/L | | | 03/30/21 11:49 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 03/30/21 11:49 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.41 | ug/L | | | 03/30/21 11:49 | 1 |
| o-Xylene | ND | | 1.0 | 0.26 | ug/L | | | 03/30/21 11:49 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.48 | ug/L | | | 03/30/21 11:49 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.38 | ug/L | | | 03/30/21 11:49 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 03/30/21 11:49 | 1 |
| Styrene | ND | | 1.0 | 0.38 | ug/L | | | 03/30/21 11:49 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.31 | ug/L | | | 03/30/21 11:49 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.50 | 0.30 | ug/L | | | 03/30/21 11:49 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.36 | ug/L | | | 03/30/21 11:49 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.35 | ug/L | | | 03/30/21 11:49 | 1 |
| Toluene | ND | | 1.0 | 0.34 | ug/L | | | 03/30/21 11:49 | 1 |
| Trichloroethene | ND | | 1.0 | 0.35 | ug/L | | | 03/30/21 11:49 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-139544/8**
**Matrix: Water**
**Analysis Batch: 139544**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | ND | | 10 | 0.36 | ug/L | | | 03/30/21 11:49 | 1 |
| Vinyl acetate | ND | | 10 | 4.6 | ug/L | | | 03/30/21 11:49 | 1 |
| Vinyl chloride | ND | | 0.50 | 0.26 | ug/L | | | 03/30/21 11:49 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *9x* | | *03 - 127* | | *37/73/21 1154 9* | *1* |
| *4-Bromofluorobenzene (Surr)* | *13:* | | *: 3 - 123* | | *37/73/21 1154 9* | *1* |
| *Dibromofluoromethane (Surr)* | *137* | | *0: - 123* | | *37/73/21 1154 9* | *1* |
| *8oluene-d: (Surr)* | *137* | | *: 3 - 123* | | *37/73/21 1154 9* | *1* |

**Lab Sample ID: LCS 570-139544/4**
**Matrix: Water**
**Analysis Batch: 139544**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 50.0 | 55.8 | | ug/L | | 112 | 64 - 121 |
| 1,2-Dibromoethane | 50.0 | 49.3 | | ug/L | | 99 | 80 - 120 |
| 1,2-Dichlorobenzene | 50.0 | 50.0 | | ug/L | | 100 | 80 - 120 |
| 1,2-Dichloroethane | 50.0 | 52.6 | | ug/L | | 105 | 76 - 120 |
| Benzene | 50.0 | 52.7 | | ug/L | | 105 | 76 - 120 |
| Carbon tetrachloride | 50.0 | 62.0 | | ug/L | | 124 | 80 - 127 |
| Chlorobenzene | 50.0 | 51.1 | | ug/L | | 102 | 80 - 120 |
| Ethylbenzene | 50.0 | 49.7 | | ug/L | | 99 | 80 - 120 |
| Methyl-t-Butyl Ether (MTBE) | 50.0 | 53.4 | | ug/L | | 107 | 64 - 120 |
| o-Xylene | 50.0 | 50.4 | | ug/L | | 101 | 80 - 121 |
| m,p-Xylene | 100 | 98.7 | | ug/L | | 99 | 74 - 122 |
| Toluene | 50.0 | 54.2 | | ug/L | | 108 | 76 - 120 |
| Trichloroethene | 50.0 | 56.3 | | ug/L | | 113 | 80 - 122 |
| Vinyl chloride | 50.0 | 58.9 | | ug/L | | 118 | 70 - 124 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *13x* | | *03 - 127* |
| *4-Bromofluorobenzene (Surr)* | *131* | | *: 3 - 123* |
| *Dibromofluoromethane (Surr)* | *13T* | | *0: - 123* |
| *8oluene-d: (Surr)* | *133* | | *: 3 - 123* |

**Lab Sample ID: LCSD 570-139544/5**
**Matrix: Water**
**Analysis Batch: 139544**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 50.0 | 53.4 | | ug/L | | 107 | 64 - 121 | 4 | 20 |
| 1,2-Dibromoethane | 50.0 | 49.4 | | ug/L | | 99 | 80 - 120 | 0 | 20 |
| 1,2-Dichlorobenzene | 50.0 | 49.9 | | ug/L | | 100 | 80 - 120 | 0 | 20 |
| 1,2-Dichloroethane | 50.0 | 53.6 | | ug/L | | 107 | 76 - 120 | 2 | 20 |
| Benzene | 50.0 | 53.2 | | ug/L | | 106 | 76 - 120 | 1 | 20 |
| Carbon tetrachloride | 50.0 | 61.3 | | ug/L | | 123 | 80 - 127 | 1 | 20 |
| Chlorobenzene | 50.0 | 50.2 | | ug/L | | 100 | 80 - 120 | 2 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-139544/5**
**Matrix: Water**
**Analysis Batch: 139544**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | | | 50.0 | 48.8 | | ug/L | | 98 | 80 - 120 | 2 | 20 |
| Methyl-t-Butyl Ether (MTBE) | | | 50.0 | 52.3 | | ug/L | | 105 | 64 - 120 | 2 | 20 |
| o-Xylene | | | 50.0 | 49.7 | | ug/L | | 99 | 80 - 121 | 1 | 20 |
| m,p-Xylene | | | 100 | 96.6 | | ug/L | | 97 | 74 - 122 | 2 | 20 |
| Toluene | | | 50.0 | 54.4 | | ug/L | | 109 | 76 - 120 | 0 | 20 |
| Trichloroethene | | | 50.0 | 55.8 | | ug/L | | 112 | 80 - 122 | 1 | 20 |
| Vinyl chloride | | | 50.0 | 56.4 | | ug/L | | 113 | 70 - 124 | 4 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *131* | | *03 - 127* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *: 3 - 123* |
| *Dibromofluoromethane (Surr)* | *137* | | *0: - 123* |
| *8oluene-d: (Surr)* | *131* | | *: 3 - 123* |

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Lab Sample ID: MB 570-138515/1-A**
**Matrix: Water**
**Analysis Batch: 139313**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 138515**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.34 | ug/L | | 03/25/21 07:42 | 03/29/21 16:54 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dio6ane-d:* | *7x* | | *1x - 1x3* | *37/2x/21 305:2* | *37/29/21 1T5:4* | *1* |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-dx (Surr)* | *x9* | | *4T - 12:* | *37/2x/21 305:2* | *37/29/21 1T5:4* | *1* |

**Lab Sample ID: LCS 570-138515/2-A**
**Matrix: Water**
**Analysis Batch: 139313**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 138515**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 20.0 | 21.7 | | ug/L | | 108 | 57 - 136 | | |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dio6ane-d:* | *47* | | *1x - 1x3* |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-dx (Surr)* | *01* | | *4T - 12:* |

**Lab Sample ID: LCSD 570-138515/3-A**
**Matrix: Water**
**Analysis Batch: 139313**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 138515**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 20.0 | 20.8 | | ug/L | | 104 | 57 - 136 | 4 | 20 |

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1,4-Dio6ane-d: | 74 | | 1x - 1x3 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| Nitrobenzene-dx (Surr) | xT | | 4T - 12: |

**Lab Sample ID: 570-54532-D-4-A MS**
**Matrix: Water**
**Analysis Batch: 139420**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 138515**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 3.6 | | 20.0 | 25.1 | | ug/L | | 107 | 45 - 139 |

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 1,4-Dio6ane-d: | T3 | | 1x - 1x3 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| Nitrobenzene-dx (Surr) | T7 | | 4T - 12: |

**Lab Sample ID: 570-54532-D-4-B MSD**
**Matrix: Water**
**Analysis Batch: 139313**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 138515**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 3.6 | | 20.0 | 21.9 | | ug/L | | 92 | 45 - 139 | 13 | 17 |

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 1,4-Dio6ane-d: | T9 | | 1x - 1x3 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| Nitrobenzene-dx (Surr) | : 7 | | 4T - 12: |

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-138560/5**
**Matrix: Water**
**Analysis Batch: 138560**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 03/25/21 12:06 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | : x | | 7: - 174 | | 37/2x/21 125 3T | 1 |

**Lab Sample ID: LCS 570-138560/3**
**Matrix: Water**
**Analysis Batch: 138560**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | 1990 | 2030 | | ug/L | | 103 | 78 - 120 |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 9x | | 7: - 174 |

### Lab Sample ID: LCSD 570-138560/6
### Matrix: Water
### Analysis Batch: 138560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1990 | 2100 | | ug/L | | 106 | 78 - 120 | 3 | 10 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 94 | | 7: - 174 |

### Lab Sample ID: 440-280555-E-1 MS
### Matrix: Water
### Analysis Batch: 138560

Client Sample ID: Matrix Spike
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | 62 | | 1990 | 2260 | | ug/L | | 111 | 68 - 122 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 9T | | 7: - 174 |

### Lab Sample ID: 440-280555-E-1 MSD
### Matrix: Water
### Analysis Batch: 138560

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | 62 | | 1990 | 2330 | | ug/L | | 114 | 68 - 122 | 3 | 18 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 9T | | 7: - 174 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

### Lab Sample ID: MB 570-139268/1-A
### Matrix: Water
### Analysis Batch: 139365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 139268

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 50 | 22 | ug/L | | 03/29/21 09:16 | 03/29/21 15:28 | 1 |
| C23-C40 | ND | | 50 | 22 | ug/L | | 03/29/21 09:16 | 03/29/21 15:28 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 113 | | x7 - 1x1 | 37/29/21 395T | 37/29/21 1x52: | 1 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Lab Sample ID: LCS 570-139268/2-A**
**Matrix: Water**
**Analysis Batch: 139365**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 139268**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 2000 | 1660 | | ug/L | | 83 | 70 - 131 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *: 0* | | *x7 - 1x1* |

**Lab Sample ID: LCSD 570-139268/3-A**
**Matrix: Water**
**Analysis Batch: 139365**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139268**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 2000 | 1940 | | ug/L | | 97 | 70 - 131 | 16 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *112* | | *x7 - 1x1* |

## Method: 314.0 - Perchlorate (IC)

**Lab Sample ID: MB 570-139557/6**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.91 | ug/L | | | 03/30/21 10:50 | 1 |

**Lab Sample ID: LCS 570-139557/7**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | | | 25.0 | 22.8 | | ug/L | | 91 | 85 - 115 | | |

**Lab Sample ID: LCSD 570-139557/8**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | | | 25.0 | 22.6 | | ug/L | | 90 | 85 - 115 | 1 | 15 |

**Lab Sample ID: 570-54991-D-1 MS**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 7.7 | | 50.0 | 58.4 | | ug/L | | 101 | 80 - 120 | | |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

## Method: 314.0 - Perchlorate (IC) (Continued)

**Lab Sample ID: 570-54991-D-1 MSD**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 7.7 | | 50.0 | 59.6 | | ug/L | | 104 | 80 - 120 | 2 | 15 |

## GC/MS VOA

### Analysis Batch: 139250

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280936-2 | Trip Blank | Total/NA | Water | 8260B | |
| MB 570-139250/7 | Method Blank | Total/NA | Water | 8260B | |
| LCS 570-139250/3 | Lab Control Sample | Total/NA | Water | 8260B | |
| LCSD 570-139250/4 | Lab Control Sample Dup | Total/NA | Water | 8260B | |

### Analysis Batch: 139544

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280936-1 | TSW-1 | Total/NA | Water | 8260B | |
| MB 570-139544/8 | Method Blank | Total/NA | Water | 8260B | |
| LCS 570-139544/4 | Lab Control Sample | Total/NA | Water | 8260B | |
| LCSD 570-139544/5 | Lab Control Sample Dup | Total/NA | Water | 8260B | |

## GC/MS Semi VOA

### Prep Batch: 138515

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280936-1 | TSW-1 | Total/NA | Water | 3510C | |
| MB 570-138515/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 570-138515/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 570-138515/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |
| 570-54532-D-4-A MS | Matrix Spike | Total/NA | Water | 3510C | |
| 570-54532-D-4-B MSD | Matrix Spike Duplicate | Total/NA | Water | 3510C | |

### Analysis Batch: 139313

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280936-1 | TSW-1 | Total/NA | Water | 8270C SIM ID | 138515 |
| MB 570-138515/1-A | Method Blank | Total/NA | Water | 8270C SIM ID | 138515 |
| LCS 570-138515/2-A | Lab Control Sample | Total/NA | Water | 8270C SIM ID | 138515 |
| LCSD 570-138515/3-A | Lab Control Sample Dup | Total/NA | Water | 8270C SIM ID | 138515 |
| 570-54532-D-4-B MSD | Matrix Spike Duplicate | Total/NA | Water | 8270C SIM ID | 138515 |

### Analysis Batch: 139420

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-54532-D-4-A MS | Matrix Spike | Total/NA | Water | 8270C SIM ID | 138515 |

## GC VOA

### Analysis Batch: 138560

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280936-1 | TSW-1 | Total/NA | Water | 8015B | |
| MB 570-138560/5 | Method Blank | Total/NA | Water | 8015B | |
| LCS 570-138560/3 | Lab Control Sample | Total/NA | Water | 8015B | |
| LCSD 570-138560/6 | Lab Control Sample Dup | Total/NA | Water | 8015B | |
| 440-280555-E-1 MS | Matrix Spike | Total/NA | Water | 8015B | |
| 440-280555-E-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 8015B | |

## GC Semi VOA

### Prep Batch: 139268

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280936-1 | TSW-1 | Total/NA | Water | 3510C | |
| MB 570-139268/1-A | Method Blank | Total/NA | Water | 3510C | |

## GC Semi VOA (Continued)

### Prep Batch: 139268 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 570-139268/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 570-139268/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

### Analysis Batch: 139365

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280936-1 | TSW-1 | Total/NA | Water | 8015B | 139268 |
| MB 570-139268/1-A | Method Blank | Total/NA | Water | 8015B | 139268 |
| LCS 570-139268/2-A | Lab Control Sample | Total/NA | Water | 8015B | 139268 |
| LCSD 570-139268/3-A | Lab Control Sample Dup | Total/NA | Water | 8015B | 139268 |

## HPLC/IC

### Analysis Batch: 139557

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-280936-1 | TSW-1 | Total/NA | Water | 314.0 | |
| MB 570-139557/6 | Method Blank | Total/NA | Water | 314.0 | |
| LCS 570-139557/7 | Lab Control Sample | Total/NA | Water | 314.0 | |
| LCSD 570-139557/8 | Lab Control Sample Dup | Total/NA | Water | 314.0 | |
| 570-54991-D-1 MS | Matrix Spike | Total/NA | Water | 314.0 | |
| 570-54991-D-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 314.0 | |

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| *+ | LCS and/or LCSD is outside acceptance limits, high biased. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

Client: Terracon Consultants Inc
Job ID: 440-280936-1
Project/Site: Broken Horn Saddler V

## Laboratory: Eurofins Calscience LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 314.0 | | Water | Perchlorate |
| 8015B | | Water | Gasoline Range Organics (C4-C12) |
| 8015B | 3510C | Water | C13-C22 |
| 8015B | 3510C | Water | C23-C40 |
| 8260B | | Water | 1,1,1,2-Tetrachloroethane |
| 8260B | | Water | 1,1,1-Trichloroethane |
| 8260B | | Water | 1,1,2,2-Tetrachloroethane |
| 8260B | | Water | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| 8260B | | Water | 1,1,2-Trichloroethane |
| 8260B | | Water | 1,1-Dichloroethane |
| 8260B | | Water | 1,1-Dichloroethene |
| 8260B | | Water | 1,1-Dichloropropene |
| 8260B | | Water | 1,2,3-Trichlorobenzene |
| 8260B | | Water | 1,2,3-Trichloropropane |
| 8260B | | Water | 1,2,4-Trichlorobenzene |
| 8260B | | Water | 1,2,4-Trimethylbenzene |
| 8260B | | Water | 1,2-Dibromo-3-Chloropropane |
| 8260B | | Water | 1,2-Dibromoethane |
| 8260B | | Water | 1,2-Dichlorobenzene |
| 8260B | | Water | 1,2-Dichloroethane |
| 8260B | | Water | 1,2-Dichloropropane |
| 8260B | | Water | 1,3,5-Trimethylbenzene |
| 8260B | | Water | 1,3-Dichlorobenzene |
| 8260B | | Water | 1,3-Dichloropropane |
| 8260B | | Water | 1,4-Dichlorobenzene |
| 8260B | | Water | 2,2-Dichloropropane |
| 8260B | | Water | 2-Butanone |
| 8260B | | Water | 2-Chlorotoluene |
| 8260B | | Water | 2-Hexanone |
| 8260B | | Water | 4-Chlorotoluene |
| 8260B | | Water | 4-Methyl-2-pentanone |
| 8260B | | Water | Acetone |
| 8260B | | Water | Benzene |
| 8260B | | Water | Bromobenzene |
| 8260B | | Water | Bromochloromethane |
| 8260B | | Water | Bromodichloromethane |
| 8260B | | Water | Bromoform |
| 8260B | | Water | Bromomethane |
| 8260B | | Water | Carbon disulfide |
| 8260B | | Water | Carbon tetrachloride |
| 8260B | | Water | Chlorobenzene |
| 8260B | | Water | Chloroethane |
| 8260B | | Water | Chloroform |
| 8260B | | Water | Chloromethane |
| 8260B | | Water | cis-1,2-Dichloroethene |

Client: Terracon Consultants Inc
Job ID: 440-280936-1
Project/Site: Broken Horn Saddler V

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |
| 8260B | Water | cis-1,3-Dichloropropene | |
| 8260B | Water | Dibromochloromethane | |
| 8260B | Water | Dibromomethane | |
| 8260B | Water | Dichlorodifluoromethane | |
| 8260B | Water | Ethylbenzene | |
| 8260B | Water | Isopropylbenzene | |
| 8260B | Water | m,p-Xylene | |
| 8260B | Water | Methylene Chloride | |
| 8260B | Water | Methyl-t-Butyl Ether (MTBE) | |
| 8260B | Water | Naphthalene | |
| 8260B | Water | n-Butylbenzene | |
| 8260B | Water | N-Propylbenzene | |
| 8260B | Water | o-Xylene | |
| 8260B | Water | p-Isopropyltoluene | |
| 8260B | Water | sec-Butylbenzene | |
| 8260B | Water | Styrene | |
| 8260B | Water | tert-Butylbenzene | |
| 8260B | Water | Tetrachloroethene | |
| 8260B | Water | Toluene | |
| 8260B | Water | trans-1,2-Dichloroethene | |
| 8260B | Water | trans-1,3-Dichloropropene | |
| 8260B | Water | Trichloroethene | |
| 8260B | Water | Trichlorofluoromethane | |
| 8260B | Water | Vinyl acetate | |
| 8260B | Water | Vinyl chloride | |
| 8270C SIM ID 3510C | Water | 1,4-Dioxane | |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory ~~Eurofins~~ Eurofins
Address
Phone
Office Location Colton
Project Manager Todd G. McFarland
Contact Danielle Roberts
PO/SO # CB21P020

Sampler's Name Thomas C. Johnson Sampler's Signature

Project Number CB21P020
Project Name Broken Horn Saddlery

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers 3A/G | P/O | VOA | 1A/G | TPH EPA 8015 | VOCs EPA 8260 | Perchlorate EPA 314.0 | 1,4-Dioxane 8270C | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W | 3/22 | 16:10 | | | TSW-1 | | | | X | X | X | X | X | X | X | |
| ~~W~~ | ~~3/22~~ | | | | | | | | | | | | | | | |
| W | 3/22 | 16:10 | | | Trip Blank | | | | | | | | X | | | |

440-280936 Chain of Custody

LAB USE ONLY
DUE DATE.
TEMP OF COOLER WHEN RECEIVED (°C)
Page 1 of 1

TURNAROUND TIME ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 3/23 | 14:35 | William Rivera | 3/23/21 | 1435 |
| William Rivera | 3/23/21 | 1830 | | 3/23/21 | 1830 |
| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |

NOTES. 5-day TAT

Matrix WW Wastewater W Water S Soil L -Liquid A Air Bag C Charcoal Tube SL Sludge O Oil
Container VOA 40 ml vial A/G Amber Glass 1 L 250 ml Glass wide mouth P/O Plastic or other



N:\Environmental\Forms
Rev 6/30/2017

26/28 #93

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167264.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle.Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-280936-1 |
| Address: 7440 Lincoln Way, , | Due Date Requested: 3/29/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B/5030C Routine Volatiles List | 8270C_SIM_MS_ID/3510C 1,4-Dioxane - SIM_MS_ID | 8015B_DRO/3510C C13-C22 / C23-C40 - No Silica Gel Surrog | 314.0/ Perchlorate | 8015B_GRO/5030C Gasoline Range Organics C4-C12 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | |
| TSW-1 (440-280936-1) | 3/22/21 | 16 10 Pacific | | Water | | | X | X | X | X | X | 4 | |
| Trip Blank (440-280936-2) | 3/22/21 | 16.10 Pacific | | Water | | | X | | | | X | 2 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 3-24-21 1023 | ECI | | 3/24/21 1023 | ECI |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No. N/A | Cooler Temperature(s) °C and Other Remarks: 2.9/1.8 IR6 |
|---|---|---|

Ver: 11/01/2020



3/31/2021

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-28091R-d

**Login Number: 280936**
**List Number: 1**
**Creator: Lagunas, Jorge L**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| v ayioactiwit' h asnlt c<ec/ ey or is =g bac/ Arouny as measurey b' a surwe' meter, | True | |
| T<e coolerls custoy' sealpiSPresentpis intact, | Ngf | Not Present |
| OamPle custoy' sealspiSPresentpare intact, | Ngf | Not Fresent |
| T<e cooler or samPles yo not aPPear to <awe been comPromisey or tamPerey h it<, | True | |
| OamPles h ere receiwey on ice, | True | |
| Cooler TemPerature is accePtable, | True | |
| Cooler TemPerature is recoryey, | True | |
| C? C is Present, | True | |
| C? C is Slley out in in/ any leAible, | True | |
| C? C is Slley out h it< all Pertinent inSormation, | True | |
| Is t<e Hiely OamPlerls name Present on C? C( | True | |
| T<ere are no yiscrePancies beth een t<e containers receiwey any t<e C? C, | True | |
| OamPles are receiwey h it<in x olyinA Time )eVcluyinA tests h it< immeyiate x Tsq | True | |
| OamPle containers <awe leAible labels, | True | |
| Containers are not bro/ en or lea/ inA, | True | |
| OamPle collection yategimes are Prowiyey, | True | |
| f PProPriate samPle containers are usey, | True | |
| OamPle bottles are comPletel' Slley, | True | |
| OamPle Freserwation MeriSey, | Ngf | |
| T<ere is suSScient wol, Sor all reDuestey anal' sespincl, an' reDuestey z Ogz O6 s | True | |
| Containers reDuirinA " ero <eaysPace <awe no <eaysPace or bubble is =Rmm )dg43q | True | |
| z ultiP<asic samPles are not Present, | True | |
| OamPles yo not reDuire sPlittinA or comPositinA, | True | |
| v esiyual C<lorine C<ec/ ey, | Ngf | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-28091R-d

**Login Number: 280936**
**List Number: 2**
**Creator: Ortiz-Luis, Michael**

**List Source: Eurofins Calscience**
**List Creation: 03/24/21 05:13 PM**

| Question | Answer | Comment |
|---|---|---|
| v ayioactiwit' h asnkt c<ec/ ey or is =g bac/ Arouny as measurey b' a surwe' meter, | Ngf | |
| T<e coolerks custoy' sealpiSPresentpis intact, | Ngf | |
| OamPle custoy' sealspiSPresentpare intact, | Ngf | |
| T<e cooler or samPles yo not aPPear to <awe been comPromisey or tamPerey h it<, | True | |
| OamPles h ere receiwey on ice, | True | |
| Cooler TemPerature is accePtable, | True | |
| Cooler TemPerature is recoryey, | True | d,8 |
| C? C is Present, | True | |
| C? C is Slley out in in/ any leAible, | True | |
| C? C is Slley out h it< all Pertinent inSormation, | True | |
| Is t<e Hiely OamPlerks name Present on C? C( | Halse | v eceiwey Project as a subcontract, |
| T<ere are no yiscrePancies beth een t<e containers receiwey any t<e C? C, | True | |
| OamPles are receiwey h it<in x olyinA Time )eVcluyinA tests h it< immeyiate x Tsq | True | |
| OamPle containers <awe leAible labels, | True | |
| Containers are not bro/ en or lea/ inA, | True | |
| OamPle collection yategimes are Prowiyey, | True | |
| f PProPriate samPle containers are usey, | True | |
| OamPle bottles are comPletel' Slley, | True | |
| OamPle Freserwation MeriSey, | True | |
| T<ere is suSScient wol, Sor all reDuestey anal' sespincl, an' reDuestey z Ogz O6 s | True | |
| Containers reDuirinA " ero <eaysPace <awe no <eaysPace or bubble is =Rmm )dg43q | True | |
| z ultiP<asic samPles are not Present, | True | |
| OamPles yo not reDuire sPlittinA or comPositinA, | True | |
| v esiyual C<lorine C<ec/ ey, | Ngf | |

# Isotope Dilution Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddler V

Job ID: 440-280936-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DXE (15-150) | | | | | | |
| 440-280936-1 | TSW-1 | 36 | | | | | | |
| 570-54532-D-4-A MS | Matrix Spike | 60 | | | | | | |
| 570-54532-D-4-B MSD | Matrix Spike Duplicate | 69 | | | | | | |
| LCS 570-138515/2-A | Lab Control Sample | 43 | | | | | | |
| LCSD 570-138515/3-A | Lab Control Sample Dup | 34 | | | | | | |
| MB 570-138515/1-A | Method Blank | 35 | | | | | | |

**Surrogate Legend**

DXE = 1,4-Dioxane-d8

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281062-1
Client Project/Site: Broken Horn Saddlery

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/1/2021 4:14:13 PM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281062-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 440-281062-1 | TSW-2 | Water | 03/24/21 08:35 | 03/25/21 19:00 | |
| 440-281062-2 | TSW-3 | Water | 03/25/21 09:20 | 03/25/21 19:00 | |
| 440-281062-3 | Trip Blank | Water | 03/25/21 11:10 | 03/25/21 19:00 | |

## Job ID: 440-281062-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281062-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/25/2021 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9º C.

**GC/MS VOA**
Method 8260B: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: TSW-2 (440-281062-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC/MS Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**HPLC/IC**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281062-1

## Client Sample ID: TSW-2 — Lab Sample ID: 440-281062-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | 31 | J | 52 | 23 | ug/L | 1 | | 8015B | Total/NA |

## Client Sample ID: TSW-3 — Lab Sample ID: 440-281062-2

No Detections.

## Client Sample ID: Trip Blank — Lab Sample ID: 440-281062-3

No Detections.

This Detection Summary does not include radiochemical test results.

## Client Sample ID: 6S1 -2

**Date Cr llexteo: 0cd24d29 08:c/**
**Date Rexeiveo: 0cd2/ d29 9h:00**

## Lab Sample ID: 440-289032-9

**T atWM 1 ateW**

### T etBr o: 8230V - Or latile g W anix Cr mpr unos G; CdT SA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,1-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2,3-Trichloropropane | ND | | 10 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 0.50 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,3-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 2,2-Dichloropropane | ND | | 2.0 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Benzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Bromobenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Bromoform | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| Bromomethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Chlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Chloroethane | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| Chloroform | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Chloromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Dibromomethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| Ethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Isopropylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.50 | ug/L | | | 03/31/21 00:42 | 1 |
| Methylene Chloride | ND | | 5.0 | 0.88 | ug/L | | | 03/31/21 00:42 | 1 |
| Naphthalene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| n-Butylbenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 00:42 | 1 |
| N-Propylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| o-Xylene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Styrene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Tetrachloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Toluene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |

## Client Sample ID: 6S1 -2

**Lab Sample ID: 440-289032-9**

**Date Cr llexteo: 0cd24d29 08:c/**
**Date Rexeiveo: 0cd2/ d29 9h:00**

**T atWM 1 ateW**

### T etBr o: 8230V - Or latile g W(anix Cr mpr unos G; CdT SAGCr ntinueoA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWepaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Trichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 1,2-Dibromoethane (EDB) | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Bromochloromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Bromodichloromethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| p-Isopropyltoluene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 00:42 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 2.5 | ug/L | | | 03/31/21 00:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *103* | | *80 - 128* | | *03/31/21 00:42* | *1* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *80 - 120* | | *03/31/21 00:42* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *76 - 132* | | *03/31/21 00:42* | *1* |

### T etBr o: 8250C SIT ID - Semivr latile g W(anix Cr mpr unos G; CdT S SIT dlsr tr pe Dilutir nA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWepaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.34 | ug/L | | 03/30/21 07:30 | 03/31/21 13:29 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *65* | | *15 - 150* | *03/30/21 07:30* | *03/31/21 13:29* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *61* | | *46 - 128* | *03/30/21 07:30* | *03/31/21 13:29* | *1* |

### T etBr o: 809/ V - ) asr line Ran( e g W(anixs - G; CA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWepaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 03/30/21 20:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *74* | | *38 - 134* | | *03/30/21 20:19* | *1* |

### T etBr o: 809/ V - Diesel Ran( e g W(anixsCDRg Atg il Ran( e g W(anixs Gg Rg A

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWepaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| C9c-C22 | c9 | J | 52 | 23 | ug/L | | 03/30/21 15:37 | 03/31/21 12:53 | 1 |
| C23-C40 | ND | | 52 | 23 | ug/L | | 03/30/21 15:37 | 03/31/21 12:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *111* | | *53 - 151* | *03/30/21 15:37* | *03/31/21 12:53* | *1* |

### T etBr o: c94.0 - UeWXBlr Wte GCA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWepaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.91 | ug/L | | | 03/30/21 14:34 | 1 |

## Client Sample ID: 6S1 -c

**Lab Sample ID: 440-289032-2**

**Date Cr llexteo: 0cd2/ d29 0h:20**
**Date Rexeiveo: 0cd2/ d29 9h:00**

**T atWM 1 ateW**

### T etBr o: 8230V - Or latile g W(anix Cr mpr unos G; CdT SA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWepaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281062-1

**Client Sample ID: 6S1 -c**
**Date Cr llexteo: 0cd2/ d29 0h:20**
**Date Rexeiveo: 0cd2/ d29 9h:00**

**Lab Sample ID: 440-289032-2**
**T atWM 1 ateW**

**T etBr o: 8230V - Or latile g W anix Cr mpr unos G; Cd T SAG Cr ntinueoA**

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,1-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2,3-Trichloropropane | ND | | 10 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 0.50 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,3-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 2,2-Dichloropropane | ND | | 2.0 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Benzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Bromobenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Bromoform | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| Bromomethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Chlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Chloroethane | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| Chloroform | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Chloromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Dibromomethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| Ethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Isopropylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.50 | ug/L | | | 03/31/21 01:09 | 1 |
| Methylene Chloride | ND | | 5.0 | 0.88 | ug/L | | | 03/31/21 01:09 | 1 |
| Naphthalene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| n-Butylbenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:09 | 1 |
| N-Propylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| o-Xylene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Styrene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Tetrachloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Toluene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |

## Client Sample ID: 6S1 -c

**Lab Sample ID: 440-289032-2**

**Date Cr llexteo: 0cd2/ d29 0h:20**
**T atWM 1 ateW**
**Date Rexeiveo: 0cd2/ d29 9h:00**

### T etBr o: 8230V - Or latile g W(anix Cr mpr unos G; CdT SAGCr ntinueoA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Trichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 1,2-Dibromoethane (EDB) | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Bromochloromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Bromodichloromethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| p-Isopropyltoluene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:09 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 2.5 | ug/L | | | 03/31/21 01:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *102* | | *80 - 128* | | *03/31/21 01:09* | *1* |
| *4-Bromofluorobenzene (Surr)* | *92* | | *80 - 120* | | *03/31/21 01:09* | *1* |
| *Dibromofluoromethane (Surr)* | *104* | | *76 - 132* | | *03/31/21 01:09* | *1* |

### T etBr o: 8250C SIT ID - Semivr latile g W(anix Cr mpr unos G; CdT S SIT dlsr tr pe Dilutir nA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.34 | ug/L | | 03/30/21 07:30 | 03/31/21 13:44 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *50* | | *15 - 150* | *03/30/21 07:30* | *03/31/21 13:44* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *55* | | *46 - 128* | *03/30/21 07:30* | *03/31/21 13:44* | *1* |

### T etBr o: 809/ V - ) asr line Ran( e g W(anixs - G; CA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 03/28/21 06:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *82* | | *38 - 134* | | *03/28/21 06:05* | *1* |

### T etBr o: 809/ V - Diesel Ran( e g W(anixsGDRg Adg il Ran( e g W(anixs G; g Rg A

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 52 | 23 | ug/L | | 03/30/21 15:37 | 03/31/21 13:13 | 1 |
| C23-C40 | ND | | 52 | 23 | ug/L | | 03/30/21 15:37 | 03/31/21 13:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *116* | | *53 - 151* | *03/30/21 15:37* | *03/31/21 13:13* | *1* |

### T etBr o: c94.0 - UeWXBIr Wte GCA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.91 | ug/L | | | 03/30/21 14:57 | 1 |

## Client Sample ID: 6Wp Vlank

**Lab Sample ID: 440-289032-c**

**Date Cr llexteo: 0cd2/ d29 99:90**
**T atWM 1 ateW**
**Date Rexeiveo: 0cd2/ d29 9h:00**

### T etBr o: 8230V - Or latile g W(anix Cr mpr unos G; CdT SA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |

## Client Sample ID: 6Wp Vlank

**Date Cr llexteo: 0cd2/ d29 99:90**
**Date Rexeiveo: 0cd2/ d29 9h:00**

## Lab Sample ID: 440-289032-c

**T atWM 1 ateW**

### T etBr o: 8230V - Or latile g W anix Cr mpr unos G; CdT SAGCr ntinueoA

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,1-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2,3-Trichloropropane | ND | | 10 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 0.50 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,3-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 2,2-Dichloropropane | ND | | 2.0 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Benzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Bromobenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Bromoform | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| Bromomethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Chlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Chloroethane | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| Chloroform | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Chloromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Dibromomethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| Ethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Isopropylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.50 | ug/L | | | 03/31/21 01:36 | 1 |
| Methylene Chloride | ND | | 5.0 | 0.88 | ug/L | | | 03/31/21 01:36 | 1 |
| Naphthalene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| n-Butylbenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/31/21 01:36 | 1 |
| N-Propylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| o-Xylene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Styrene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Tetrachloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Toluene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281062-1

**Client Sample ID: 6Wp Vlank**
**Date Cr llexteo: 0cd2/ d29 99:90**
**Date Rexeiveo: 0cd2/ d29 9h:00**

**Lab Sample ID: 440-289032-c**
**T atWM 1 ateW**

**T etBr o: 8230V - Or latile g W anix Cr mpr unos G; Cd T SAG Cr ntinueoA**

| y nalFte | Result | f uali7eW | RL | T DL | Qnit | D | UWpaWo | y nalFPeo | Dil zax |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 1,2-Dibromoethane (EDB) | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Bromochloromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Bromodichloromethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| p-Isopropyltoluene | ND | | 2.0 | 0.25 | ug/L | | | 03/31/21 01:36 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 2.5 | ug/L | | | 03/31/21 01:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *105* | | *80 - 128* | | *03/31/21 01:36* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *80 - 120* | | *03/31/21 01:36* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *76 - 132* | | *03/31/21 01:36* | *1* |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281062-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | TOL (80-728) | BFB (80-720) | DBFM (16-732) |
| 440-281062-1 | TSW-2 | 103 | 90 | 99 |
| 440-281062-2 | TSW-3 | 102 | 92 | 104 |
| 440-281062-3 | Trip Blank | 105 | 96 | 102 |
| 440-281171-D-1 MS | Matrix Spike | 97 | 95 | 100 |
| 440-281171-D-1 MSD | Matrix Spike Duplicate | 98 | 90 | 99 |
| LCS 440-642731/1002 | Lab Control Sample | 95 | 94 | 104 |
| MB 440-642731/4 | Method Blank | 102 | 91 | 101 |

**Surrogate Legend**

TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

## Method: 8210C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | NBZ (46-728) |
| 440-281062-1 | TSW-2 | 61 |
| 440-281062-2 | TSW-3 | 55 |
| LCS 570-139536/2-A | Lab Control Sample | 70 |
| LCSD 570-139536/3-A | Lab Control Sample Dup | 63 |
| MB 570-139536/1-A | Method Blank | 66 |

**Surrogate Legend**

NBZ = Nitrobenzene-d5 (Surr)

## Method: 8075B - Gasoline Range Organics - (GC)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | BFB7 (38-734) |
| 440-280995-C-1 MS | Matrix Spike | 92 |
| 440-280995-C-1 MSD | Matrix Spike Duplicate | 93 |
| 440-281054-D-2 MS | Matrix Spike | 94 |
| 440-281054-D-2 MSD | Matrix Spike Duplicate | 95 |
| 440-281062-1 | TSW-2 | 74 |
| 440-281062-2 | TSW-3 | 82 |
| LCS 570-139190/32 | Lab Control Sample | 92 |
| LCS 570-139640/3 | Lab Control Sample | 90 |
| LCSD 570-139190/33 | Lab Control Sample Dup | 93 |
| LCSD 570-139640/4 | Lab Control Sample Dup | 93 |
| MB 570-139190/34 | Method Blank | 82 |
| MB 570-139640/5 | Method Blank | 74 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

Client: Terracon Consultants Inc
Job ID: 440-281062-1
Project/Site: Broken Horn Saddlery

## Method: 8075B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | OTCSN7 (53-757) | | | | | | | | |
| 440-281062-1 | TSW-2 | 111 | | | | | | | | |
| 440-281062-2 | TSW-3 | 116 | | | | | | | | |
| LCS 570-139704/2-A | Lab Control Sample | 88 | | | | | | | | |
| LCSD 570-139704/3-A | Lab Control Sample Dup | 94 | | | | | | | | |
| MB 570-139704/1-A | Method Blank | 92 | | | | | | | | |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8230/ | Vo1Te3 WtOTi C 6og moci ka p( 6RGj M | j d 843 | n) EILV |
| 82706 j IG ID | j l g Qo1Te3 WtOTi C 6og moci ka p( 6RGj j IG Plaoeom DC3e6i M | j d 843 | 56E9 |
| 809R/ | ( Tao1Cl L Ti Cl WtOTi Ca - p( 6M | j d 843 | 56E2 |
| 809R/ | DCal 1L Ti Cl WtOTi CapDL WMWC3L Ti Cl WtOTi CapWL WM | j d 843 | 56E9 |
| A94.0 | sl trh1otTe- pl6M | 5s) | 56E9 |
| AR906 | EQqcQ-EQqcQ 5xeTre6i pj l mTtTeotHyci i l 1M | j d 843 | 56E9 |
| R0A0/ | sctCl Ti k ntTm | j d 843 | n) EILV |
| R0A06 | sctCl Ti k ntTm | j d 843 | 56E2 |

**Protocol References:**

5s) F =j 5i vCoi g l i eT1stoe-reCi ) Cl i r H

j d 843 F Uhl aeGl ehoka yot 5vT1cTeCOj o1Q d Tae- " shHaCT1R6hl g CT1Gl ehokaU nhCk 5kGCi ", ovl g bl t 9N83 ) i k lea = mkTe- a.

**Laboratory References:**

56E9 F 5ctofCa 6T1arCi r l EE6 ECro1 " 7440 ECro1 d TH" ( Ttkl i ( tovl " 6 ) N2849" n5Ep794M8NR-R4N4

56E2 F 5ctofCa 6T1arCi r l EE6 ETg maoi " 744RETg maoi ) vl " ( Ttkl i ( tovl " 6 ) N2849" n5Ep794M8NR-R4N4

n) EILV F 5ctofCa 6T1arCi r l ltvCl " 97439 Dl tCi ) vl " j ce- 900" ltvCl " 6 ) N2394-R897" n5EpN4NM239-9022

## Client Sample ID: TSW-2

**Date Collected: 03/24/21 08:35**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281062-1

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| TotalPVd | dnalHsis | 8230/ | | 9 | 90 Ny | 90 Ny | 342LA9 | 0APA9P29 00:42 | V9d | Tdy I5E |
| TotalPVd | 6rem | Ap90C | | | 900M Ny | 90 Ny | 9A7pA3 | 0APA0P29 0L:A0 | 6Qj 9 | . Cy 9 |
| TotalPVd | dnalHsis | 82L0C j IR ID | | 9 | | | 9A7L99 | 0APA9P29 9A:27 | . RpC | . Cy 9 |
| TotalPVd | dnalHsis | 809p/ | | 9 | p Ny | p Ny | 9A7340 | 0APA0P29 20:97 | 695 | . Cy 2 |
| TotalPVd | 6rem | Ap90C | | | 484M Ny | 2M Ny | 9A7L04 | 0APA0P29 9p:AL | UFyU | . Cy 9 |
| TotalPVd | dnalHsis | 809p/ | | 9 | | | 9A732p | 0APA9P29 92:pA | VpYA | . Cy 9 |
| TotalPVd | dnalHsis | A94M | | 9 | | | 9A7ppL | 0APA0P29 94:A4 | U5RB | . Cy 9 |

## Client Sample ID: TSW-3

**Date Collected: 03/25/21 09:20**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281062-2

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| TotalPVd | dnalHsis | 8230/ | | 9 | 90 Ny | 90 Ny | 342LA9 | 0APA9P29 09:07 | V9d | Tdy I5E |
| TotalPVd | 6rem | Ap90C | | | 900M Ny | 90 Ny | 9A7pA3 | 0APA0P29 0L:A0 | 6Qj 9 | . Cy 9 |
| TotalPVd | dnalHsis | 82L0C j IR ID | | 9 | | | 9A7L99 | 0APA9P29 9A:44 | . RpC | . Cy 9 |
| TotalPVd | dnalHsis | 809p/ | | 9 | p Ny | p Ny | 9A7970 | 0AP28P29 03:0p | 695 | . Cy 2 |
| TotalPVd | 6rem | Ap90C | | | 480M Ny | 2M Ny | 9A7L04 | 0APA0P29 9p:AL | UFyU | . Cy 9 |
| TotalPVd | dnalHsis | 809p/ | | 9 | | | 9A732p | 0APA9P29 9A:9A | VpYA | . Cy 9 |
| TotalPVd | dnalHsis | A94M | | 9 | | | 9A7ppL | 0APA0P29 94:pL | U5RB | . Cy 9 |

## Client Sample ID: Trip Blank

**Date Collected: 03/25/21 11:10**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281062-3

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| TotalPVd | dnalHsis | 8230/ | | 9 | 90 Ny | 90 Ny | 342LA9 | 0APA9P29 09:A3 | V9d | Tdy I5E |

**Laboratory References:**

. Cy 9 = . urofins Calscience yyC yincoln, L440 yincoln WaH, Garken Grove, Cd 72849, T. y (L94)87p-p474

. Cy 2 = . urofins Calscience yyC yaNmson, L44p yaNmson dve, Garken Grove, Cd 72849, T. y (L94)87p-p474

Tdy I5E = . urofins Calscience Irvine, 9L439 Derian dve, j uite 900, Irvine, Cd 72394-p89L, T. y (747)239-9022

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-642731/4**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,1-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2,3-Trichloropropane | ND | | 10 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 0.50 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,3-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 2,2-Dichloropropane | ND | | 2.0 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Benzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Bromobenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Bromoform | ND | | 5.0 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| Bromomethane | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Chlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Chloroethane | ND | | 5.0 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| Chloroform | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Chloromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Dibromomethane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| Ethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Isopropylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.50 | ug/L | | | 03/30/21 21:09 | 1 |
| Methylene Chloride | ND | | 5.0 | 0.88 | ug/L | | | 03/30/21 21:09 | 1 |
| Naphthalene | ND | | 5.0 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| n-Butylbenzene | ND | | 5.0 | 0.40 | ug/L | | | 03/30/21 21:09 | 1 |
| N-Propylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| o-Xylene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Styrene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Tetrachloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-642731/4**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Trichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 1,2-Dibromoethane (EDB) | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Bromochloromethane | ND | | 5.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Bromodichloromethane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| p-Isopropyltoluene | ND | | 2.0 | 0.25 | ug/L | | | 03/30/21 21:09 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 2.5 | ug/L | | | 03/30/21 21:09 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *103* | | *80 - 138* | | *02/20/31 31:04* | *1* |
| *B-mrof obuorozen9ene (Surr)* | *41* | | *80 - 130* | | *02/20/31 31:04* | *1* |
| *Dizrof obuorof ethane (Surr)* | *101* | | *76 - 123* | | *02/20/31 31:04* | *1* |

**Lab Sample ID: LCS 440-642731/1002**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 25.0 | 25.0 | | ug/L | | 100 | 60 - 141 |
| 1,1,1-Trichloroethane | 25.0 | 24.2 | | ug/L | | 97 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 24.1 | | ug/L | | 97 | 63 - 130 |
| 1,1,2-Trichloroethane | 25.0 | 22.5 | | ug/L | | 90 | 70 - 130 |
| 1,1-Dichloroethane | 25.0 | 23.1 | | ug/L | | 92 | 64 - 130 |
| 1,1-Dichloroethene | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| 1,1-Dichloropropene | 25.0 | 23.9 | | ug/L | | 96 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 25.0 | 22.6 | | ug/L | | 90 | 60 - 140 |
| 1,2,3-Trichloropropane | 25.0 | 22.1 | | ug/L | | 88 | 63 - 130 |
| 1,2,4-Trichlorobenzene | 25.0 | 23.9 | | ug/L | | 96 | 60 - 140 |
| 1,2,4-Trimethylbenzene | 25.0 | 23.3 | | ug/L | | 93 | 70 - 135 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 21.5 | | ug/L | | 86 | 52 - 140 |
| 1,2-Dichlorobenzene | 25.0 | 23.0 | | ug/L | | 92 | 70 - 130 |
| 1,2-Dichloroethane | 25.0 | 22.5 | | ug/L | | 90 | 57 - 138 |
| 1,2-Dichloropropane | 25.0 | 22.8 | | ug/L | | 91 | 67 - 130 |
| 1,3,5-Trimethylbenzene | 25.0 | 22.1 | | ug/L | | 88 | 70 - 136 |
| 1,3-Dichlorobenzene | 25.0 | 23.4 | | ug/L | | 94 | 70 - 130 |
| 1,3-Dichloropropane | 25.0 | 21.5 | | ug/L | | 86 | 70 - 130 |
| 1,4-Dichlorobenzene | 25.0 | 23.0 | | ug/L | | 92 | 70 - 130 |
| 2,2-Dichloropropane | 25.0 | 24.7 | | ug/L | | 99 | 68 - 141 |
| 2-Chlorotoluene | 25.0 | 21.5 | | ug/L | | 86 | 70 - 130 |
| 4-Chlorotoluene | 25.0 | 22.0 | | ug/L | | 88 | 70 - 130 |
| Benzene | 25.0 | 24.2 | | ug/L | | 97 | 68 - 130 |
| Bromobenzene | 25.0 | 24.6 | | ug/L | | 98 | 70 - 130 |
| Bromoform | 25.0 | 27.1 | | ug/L | | 108 | 60 - 148 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-642731/1002**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Bromomethane | 25.0 | 21.9 | | ug/L | | 87 | 64 - 139 |
| Carbon tetrachloride | 25.0 | 26.5 | | ug/L | | 106 | 60 - 150 |
| Chlorobenzene | 25.0 | 22.9 | | ug/L | | 91 | 70 - 130 |
| Chloroethane | 25.0 | 23.1 | | ug/L | | 92 | 64 - 135 |
| Chloroform | 25.0 | 23.2 | | ug/L | | 93 | 70 - 130 |
| Chloromethane | 25.0 | 21.0 | | ug/L | | 84 | 47 - 140 |
| cis-1,2-Dichloroethene | 25.0 | 25.7 | | ug/L | | 103 | 70 - 133 |
| cis-1,3-Dichloropropene | 25.0 | 23.3 | | ug/L | | 93 | 70 - 133 |
| Dibromomethane | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 |
| Dichlorodifluoromethane | 25.0 | 22.2 | | ug/L | | 89 | 29 - 150 |
| Ethylbenzene | 25.0 | 22.9 | | ug/L | | 91 | 70 - 130 |
| Hexachlorobutadiene | 25.0 | 22.8 | | ug/L | | 91 | 10 - 150 |
| Isopropylbenzene | 25.0 | 24.0 | | ug/L | | 96 | 70 - 136 |
| m,p-Xylene | 25.0 | 24.9 | | ug/L | | 100 | 70 - 130 |
| Methylene Chloride | 25.0 | 23.3 | | ug/L | | 93 | 52 - 130 |
| Naphthalene | 25.0 | 22.9 | | ug/L | | 92 | 60 - 140 |
| n-Butylbenzene | 25.0 | 23.8 | | ug/L | | 95 | 65 - 150 |
| N-Propylbenzene | 25.0 | 22.7 | | ug/L | | 91 | 67 - 139 |
| o-Xylene | 25.0 | 23.5 | | ug/L | | 94 | 70 - 130 |
| sec-Butylbenzene | 25.0 | 23.1 | | ug/L | | 93 | 70 - 138 |
| Styrene | 25.0 | 22.9 | | ug/L | | 92 | 70 - 134 |
| tert-Butylbenzene | 25.0 | 23.1 | | ug/L | | 92 | 70 - 130 |
| Tetrachloroethene | 25.0 | 24.4 | | ug/L | | 98 | 70 - 130 |
| Toluene | 25.0 | 22.4 | | ug/L | | 90 | 70 - 130 |
| trans-1,2-Dichloroethene | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 |
| trans-1,3-Dichloropropene | 25.0 | 23.2 | | ug/L | | 93 | 70 - 132 |
| Trichloroethene | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 |
| Trichlorofluoromethane | 25.0 | 23.4 | | ug/L | | 93 | 60 - 150 |
| Vinyl chloride | 25.0 | 22.3 | | ug/L | | 89 | 59 - 133 |
| 1,2-Dibromoethane (EDB) | 25.0 | 23.9 | | ug/L | | 96 | 70 - 130 |
| Bromochloromethane | 25.0 | 27.1 | | ug/L | | 108 | 70 - 130 |
| Bromodichloromethane | 25.0 | 23.4 | | ug/L | | 93 | 70 - 132 |
| Dibromochloromethane | 25.0 | 26.3 | | ug/L | | 105 | 69 - 145 |
| p-Isopropyltoluene | 25.0 | 22.9 | | ug/L | | 91 | 70 - 132 |
| 2-Butanone (MEK) | 125 | 113 | | ug/L | | 90 | 44 - 150 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *4,* | | *80 - 138* |
| *B-mrof obuorozen9ene (Surr)* | *4B* | | *80 - 130* |
| *Dizrof obuorof ethane (Surr)* | *10B* | | *76 - 123* |

**Lab Sample ID: 440-281171-D-1 MS**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 10.0 | 10.6 | | ug/L | | 106 | 60 - 149 |
| 1,1,1-Trichloroethane | ND | | 10.0 | 9.55 | | ug/L | | 96 | 70 - 130 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-281171-D-1 MS**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 10.0 | 11.2 | | ug/L | | 112 | 63 - 130 |
| 1,1,2-Trichloroethane | ND | | 10.0 | 9.90 | | ug/L | | 99 | 70 - 130 |
| 1,1-Dichloroethane | ND | | 10.0 | 9.16 | | ug/L | | 92 | 65 - 130 |
| 1,1-Dichloroethene | ND | | 10.0 | 9.55 | | ug/L | | 96 | 70 - 130 |
| 1,1-Dichloropropene | ND | | 10.0 | 9.64 | | ug/L | | 96 | 64 - 130 |
| 1,2,3-Trichlorobenzene | ND | | 10.0 | 9.08 | | ug/L | | 91 | 60 - 140 |
| 1,2,3-Trichloropropane | ND | | 10.0 | 8.90 | J | ug/L | | 89 | 60 - 130 |
| 1,2,4-Trichlorobenzene | ND | | 10.0 | 9.56 | | ug/L | | 96 | 60 - 140 |
| 1,2,4-Trimethylbenzene | ND | | 10.0 | 9.31 | | ug/L | | 93 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10.0 | 8.11 | | ug/L | | 81 | 48 - 140 |
| 1,2-Dichlorobenzene | ND | | 10.0 | 9.73 | | ug/L | | 97 | 70 - 130 |
| 1,2-Dichloroethane | ND | | 10.0 | 9.20 | | ug/L | | 92 | 56 - 146 |
| 1,2-Dichloropropane | ND | | 10.0 | 9.15 | | ug/L | | 92 | 69 - 130 |
| 1,3,5-Trimethylbenzene | ND | | 10.0 | 9.18 | | ug/L | | 92 | 70 - 130 |
| 1,3-Dichlorobenzene | ND | | 10.0 | 9.48 | | ug/L | | 95 | 70 - 130 |
| 1,3-Dichloropropane | ND | | 10.0 | 9.07 | | ug/L | | 91 | 70 - 130 |
| 1,4-Dichlorobenzene | ND | | 10.0 | 9.55 | | ug/L | | 95 | 70 - 130 |
| 2,2-Dichloropropane | ND | | 10.0 | 9.87 | | ug/L | | 99 | 69 - 138 |
| 2-Chlorotoluene | ND | | 10.0 | 8.79 | | ug/L | | 88 | 70 - 130 |
| 4-Chlorotoluene | ND | | 10.0 | 8.99 | | ug/L | | 90 | 70 - 130 |
| Benzene | ND | | 10.0 | 9.82 | | ug/L | | 98 | 66 - 130 |
| Bromobenzene | ND | | 10.0 | 9.87 | | ug/L | | 99 | 70 - 130 |
| Bromoform | ND | | 10.0 | 11.2 | | ug/L | | 112 | 59 - 150 |
| Bromomethane | ND | | 10.0 | 8.58 | | ug/L | | 86 | 62 - 131 |
| Carbon tetrachloride | ND | | 10.0 | 10.8 | | ug/L | | 108 | 60 - 150 |
| Chlorobenzene | ND | | 10.0 | 9.58 | | ug/L | | 96 | 70 - 130 |
| Chloroethane | ND | | 10.0 | 9.02 | | ug/L | | 90 | 68 - 130 |
| Chloroform | ND | | 10.0 | 9.01 | | ug/L | | 90 | 70 - 130 |
| Chloromethane | ND | | 10.0 | 8.15 | | ug/L | | 82 | 39 - 144 |
| cis-1,2-Dichloroethene | ND | | 10.0 | 10.5 | | ug/L | | 105 | 70 - 130 |
| cis-1,3-Dichloropropene | ND | | 10.0 | 9.53 | | ug/L | | 95 | 70 - 133 |
| Dibromomethane | ND | | 10.0 | 10.3 | | ug/L | | 103 | 70 - 130 |
| Dichlorodifluoromethane | ND | | 10.0 | 8.59 | | ug/L | | 86 | 25 - 142 |
| Ethylbenzene | ND | | 10.0 | 9.26 | | ug/L | | 93 | 70 - 130 |
| Hexachlorobutadiene | ND | | 10.0 | 9.64 | | ug/L | | 96 | 10 - 150 |
| Isopropylbenzene | ND | | 10.0 | 9.79 | | ug/L | | 98 | 70 - 132 |
| m,p-Xylene | ND | | 10.0 | 9.87 | | ug/L | | 99 | 70 - 133 |
| Methylene Chloride | ND | | 10.0 | 9.15 | | ug/L | | 91 | 52 - 130 |
| Naphthalene | ND | | 10.0 | 8.66 | | ug/L | | 87 | 60 - 140 |
| n-Butylbenzene | ND | | 10.0 | 9.77 | | ug/L | | 98 | 61 - 149 |
| N-Propylbenzene | ND | | 10.0 | 9.01 | | ug/L | | 90 | 66 - 135 |
| o-Xylene | ND | | 10.0 | 9.42 | | ug/L | | 94 | 70 - 133 |
| sec-Butylbenzene | ND | | 10.0 | 9.45 | | ug/L | | 95 | 67 - 134 |
| Styrene | ND | | 10.0 | 9.21 | | ug/L | | 92 | 29 - 150 |
| tert-Butylbenzene | ND | | 10.0 | 9.45 | | ug/L | | 95 | 70 - 130 |
| Tetrachloroethene | ND | | 10.0 | 10.8 | | ug/L | | 108 | 70 - 137 |
| Toluene | ND | | 10.0 | 9.51 | | ug/L | | 95 | 70 - 130 |
| trans-1,2-Dichloroethene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 70 - 130 |
| trans-1,3-Dichloropropene | ND | | 10.0 | 9.64 | | ug/L | | 96 | 70 - 138 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-281171-D-1 MS**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | | 10.0 | 9.88 | | ug/L | | 99 | 70 - 130 |
| Trichlorofluoromethane | ND | | 10.0 | 8.97 | | ug/L | | 90 | 60 - 150 |
| Vinyl chloride | ND | | 10.0 | 8.63 | | ug/L | | 86 | 50 - 137 |
| 1,2-Dibromoethane (EDB) | ND | | 10.0 | 10.4 | | ug/L | | 104 | 70 - 131 |
| Bromochloromethane | ND | | 10.0 | 11.1 | | ug/L | | 111 | 70 - 130 |
| Bromodichloromethane | ND | | 10.0 | 9.74 | | ug/L | | 97 | 70 - 138 |
| Dibromochloromethane | ND | | 10.0 | 10.3 | | ug/L | | 103 | 70 - 148 |
| p-Isopropyltoluene | ND | | 10.0 | 9.05 | | ug/L | | 90 | 70 - 130 |
| 2-Butanone (MEK) | ND | | 50.0 | 47.3 | | ug/L | | 95 | 48 - 140 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *47* | | *80 - 138* |
| *B-mrof obuorozen9ene (Surr)* | *4,* | | *80 - 130* |
| *Dizrof obuorof ethane (Surr)* | *100* | | *76 - 123* |

**Lab Sample ID: 440-281171-D-1 MSD**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 10.0 | 10.5 | | ug/L | | 105 | 60 - 149 | 1 | 20 |
| 1,1,1-Trichloroethane | ND | | 10.0 | 9.83 | | ug/L | | 98 | 70 - 130 | 3 | 20 |
| 1,1,2,2-Tetrachloroethane | ND | | 10.0 | 11.3 | | ug/L | | 113 | 63 - 130 | 1 | 30 |
| 1,1,2-Trichloroethane | ND | | 10.0 | 9.47 | | ug/L | | 95 | 70 - 130 | 4 | 25 |
| 1,1-Dichloroethane | ND | | 10.0 | 9.21 | | ug/L | | 92 | 65 - 130 | 1 | 20 |
| 1,1-Dichloroethene | ND | | 10.0 | 10.2 | | ug/L | | 102 | 70 - 130 | 7 | 20 |
| 1,1-Dichloropropene | ND | | 10.0 | 9.77 | | ug/L | | 98 | 64 - 130 | 1 | 20 |
| 1,2,3-Trichlorobenzene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 60 - 140 | 13 | 20 |
| 1,2,3-Trichloropropane | ND | | 10.0 | 9.27 | J | ug/L | | 93 | 60 - 130 | 4 | 30 |
| 1,2,4-Trichlorobenzene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 60 - 140 | 8 | 20 |
| 1,2,4-Trimethylbenzene | ND | | 10.0 | 9.46 | | ug/L | | 95 | 70 - 130 | 2 | 25 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10.0 | 9.20 | | ug/L | | 92 | 48 - 140 | 13 | 30 |
| 1,2-Dichlorobenzene | ND | | 10.0 | 10.0 | | ug/L | | 100 | 70 - 130 | 3 | 20 |
| 1,2-Dichloroethane | ND | | 10.0 | 8.99 | | ug/L | | 90 | 56 - 146 | 2 | 20 |
| 1,2-Dichloropropane | ND | | 10.0 | 9.28 | | ug/L | | 93 | 69 - 130 | 1 | 20 |
| 1,3,5-Trimethylbenzene | ND | | 10.0 | 9.04 | | ug/L | | 90 | 70 - 130 | 2 | 20 |
| 1,3-Dichlorobenzene | ND | | 10.0 | 9.78 | | ug/L | | 98 | 70 - 130 | 3 | 20 |
| 1,3-Dichloropropane | ND | | 10.0 | 9.38 | | ug/L | | 94 | 70 - 130 | 3 | 25 |
| 1,4-Dichlorobenzene | ND | | 10.0 | 9.34 | | ug/L | | 93 | 70 - 130 | 2 | 20 |
| 2,2-Dichloropropane | ND | | 10.0 | 9.68 | | ug/L | | 97 | 69 - 138 | 2 | 25 |
| 2-Chlorotoluene | ND | | 10.0 | 9.25 | | ug/L | | 92 | 70 - 130 | 5 | 20 |
| 4-Chlorotoluene | ND | | 10.0 | 9.06 | | ug/L | | 91 | 70 - 130 | 1 | 20 |
| Benzene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 66 - 130 | 3 | 20 |
| Bromobenzene | ND | | 10.0 | 10.2 | | ug/L | | 102 | 70 - 130 | 3 | 20 |
| Bromoform | ND | | 10.0 | 11.3 | | ug/L | | 113 | 59 - 150 | 1 | 25 |
| Bromomethane | ND | | 10.0 | 9.03 | | ug/L | | 90 | 62 - 131 | 5 | 25 |
| Carbon tetrachloride | ND | | 10.0 | 10.1 | | ug/L | | 101 | 60 - 150 | 7 | 25 |
| Chlorobenzene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 70 - 130 | 5 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-281171-D-1 MSD**
**Matrix: Water**
**Analysis Batch: 642731**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | ND | | 10.0 | 8.96 | | ug/L | | 90 | 68 - 130 | 1 | 25 |
| Chloroform | ND | | 10.0 | 9.70 | | ug/L | | 97 | 70 - 130 | 7 | 20 |
| Chloromethane | ND | | 10.0 | 8.98 | | ug/L | | 90 | 39 - 144 | 10 | 25 |
| cis-1,2-Dichloroethene | ND | | 10.0 | 11.2 | | ug/L | | 112 | 70 - 130 | 6 | 20 |
| cis-1,3-Dichloropropene | ND | | 10.0 | 9.81 | | ug/L | | 98 | 70 - 133 | 3 | 20 |
| Dibromomethane | ND | | 10.0 | 10.0 | | ug/L | | 100 | 70 - 130 | 3 | 25 |
| Dichlorodifluoromethane | ND | | 10.0 | 9.34 | | ug/L | | 93 | 25 - 142 | 8 | 30 |
| Ethylbenzene | ND | | 10.0 | 9.20 | | ug/L | | 92 | 70 - 130 | 1 | 20 |
| Hexachlorobutadiene | ND | | 10.0 | 9.74 | | ug/L | | 97 | 10 - 150 | 1 | 20 |
| Isopropylbenzene | ND | | 10.0 | 9.64 | | ug/L | | 96 | 70 - 132 | 2 | 20 |
| m,p-Xylene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 70 - 133 | 4 | 25 |
| Methylene Chloride | ND | | 10.0 | 8.73 | | ug/L | | 87 | 52 - 130 | 5 | 20 |
| Naphthalene | ND | | 10.0 | 9.65 | | ug/L | | 97 | 60 - 140 | 11 | 30 |
| n-Butylbenzene | ND | | 10.0 | 9.96 | | ug/L | | 100 | 61 - 149 | 2 | 20 |
| N-Propylbenzene | ND | | 10.0 | 9.37 | | ug/L | | 94 | 66 - 135 | 4 | 20 |
| o-Xylene | ND | | 10.0 | 9.95 | | ug/L | | 100 | 70 - 133 | 5 | 20 |
| sec-Butylbenzene | ND | | 10.0 | 9.54 | | ug/L | | 95 | 67 - 134 | 1 | 20 |
| Styrene | ND | | 10.0 | 9.59 | | ug/L | | 96 | 29 - 150 | 4 | 35 |
| tert-Butylbenzene | ND | | 10.0 | 9.34 | | ug/L | | 93 | 70 - 130 | 1 | 20 |
| Tetrachloroethene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 70 - 137 | 0 | 20 |
| Toluene | ND | | 10.0 | 9.51 | | ug/L | | 95 | 70 - 130 | 0 | 20 |
| trans-1,2-Dichloroethene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 70 - 130 | 0 | 20 |
| trans-1,3-Dichloropropene | ND | | 10.0 | 9.67 | | ug/L | | 97 | 70 - 138 | 0 | 25 |
| Trichloroethene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 70 - 130 | 5 | 20 |
| Trichlorofluoromethane | ND | | 10.0 | 8.87 | | ug/L | | 89 | 60 - 150 | 1 | 25 |
| Vinyl chloride | ND | | 10.0 | 9.38 | | ug/L | | 94 | 50 - 137 | 8 | 30 |
| 1,2-Dibromoethane (EDB) | ND | | 10.0 | 9.92 | | ug/L | | 99 | 70 - 131 | 4 | 25 |
| Bromochloromethane | ND | | 10.0 | 11.5 | | ug/L | | 115 | 70 - 130 | 3 | 25 |
| Bromodichloromethane | ND | | 10.0 | 10.3 | | ug/L | | 103 | 70 - 138 | 6 | 20 |
| Dibromochloromethane | ND | | 10.0 | 10.4 | | ug/L | | 104 | 70 - 148 | 1 | 25 |
| p-Isopropyltoluene | ND | | 10.0 | 9.59 | | ug/L | | 96 | 70 - 130 | 6 | 20 |
| 2-Butanone (MEK) | ND | | 50.0 | 47.6 | | ug/L | | 95 | 48 - 140 | 1 | 40 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *48* | | *80 - 138* |
| *B-mrof obuorozen9ene (Surr)* | *40* | | *80 - 130* |
| *Dizrof obuorof ethane (Surr)* | *44* | | *76 - 123* |

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Lab Sample ID: MB 570-139536/1-A**
**Matrix: Water**
**Analysis Batch: 139711**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139536**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.34 | ug/L | | 03/30/21 07:30 | 03/31/21 10:32 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1xB-Dio5ane-d8* | *, ,* | | *1, - 1, 0* | *02/20/31 07:20* | *02/21/31 10:23* | *1* |

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrozen9ene-d, (Surr) | 66 | | B6 - 138 | 02/20/31 07:20 | 02/21/31 10:23 | 1 |

**Lab Sample ID: LCS 570-139536/2-A**
**Matrix: Water**
**Analysis Batch: 139711**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 139536**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 20.0 | 21.7 | | ug/L | | 109 | 57 - 136 | | |

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1xB-Dio5ane-d8 | , 2 | | 1, - 1, 0 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| Nitrozen9ene-d, (Surr) | 70 | | B6 - 138 |

**Lab Sample ID: LCSD 570-139536/3-A**
**Matrix: Water**
**Analysis Batch: 139711**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139536**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 20.0 | 23.8 | | ug/L | | 119 | 57 - 136 | 9 | 20 |

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1xB-Dio5ane-d8 | 71 | | 1, - 1, 0 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| Nitrozen9ene-d, (Surr) | 62 | | B6 - 138 |

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-139190/34**
**Matrix: Water**
**Analysis Batch: 139190**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 03/28/21 00:05 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| B-mrof oluorozen9ene (Surr) | 83 | | 28 - 12B | | 02/38/31 00:0, | 1 |

**Lab Sample ID: LCS 570-139190/32**
**Matrix: Water**
**Analysis Batch: 139190**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1990 | 2090 | | ug/L | | 105 | 78 - 120 | | |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: LCS 570-139190/32**
**Matrix: Water**
**Analysis Batch: 139190**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| B-mrof obuorozen9ene (Surr) | 43 | | 28 - 12B |

**Lab Sample ID: LCSD 570-139190/33**
**Matrix: Water**
**Analysis Batch: 139190**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1990 | 2100 | | ug/L | | 106 | 78 - 120 | 1 | 10 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| B-mrof obuorozen9ene (Surr) | 42 | | 28 - 12B |

**Lab Sample ID: 440-280995-C-1 MS**
**Matrix: Water**
**Analysis Batch: 139190**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | ND | | 1990 | 2170 | | ug/L | | 110 | 68 - 122 | | |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| B-mrof obuorozen9ene (Surr) | 43 | | 28 - 12B |

**Lab Sample ID: 440-280995-C-1 MSD**
**Matrix: Water**
**Analysis Batch: 139190**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | ND | | 1990 | 2170 | | ug/L | | 109 | 68 - 122 | 0 | 18 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| B-mrof obuorozen9ene (Surr) | 42 | | 28 - 12B |

**Lab Sample ID: MB 570-139640/5**
**Matrix: Water**
**Analysis Batch: 139640**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 03/30/21 15:52 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| B-mrof obuorozen9ene (Surr) | 7B | | 28 - 12B | | 02/20/31 1, :, 3 | 1 |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: LCS 570-139640/3**
**Matrix: Water**
**Analysis Batch: 139640**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1990 | 2320 | | ug/L | | 117 | 78 - 120 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *B-mrof obuorozen9ene (Surr)* | *40* | | *28 - 12B* |

**Lab Sample ID: LCSD 570-139640/4**
**Matrix: Water**
**Analysis Batch: 139640**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1990 | 2220 | | ug/L | | 112 | 78 - 120 | 5 | 10 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *B-mrof obuorozen9ene (Surr)* | *42* | | *28 - 12B* |

**Lab Sample ID: 440-281054-D-2 MS**
**Matrix: Water**
**Analysis Batch: 139640**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | ND | | 1990 | 2110 | | ug/L | | 106 | 68 - 122 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *B-mrof obuorozen9ene (Surr)* | *4B* | | *28 - 12B* |

**Lab Sample ID: 440-281054-D-2 MSD**
**Matrix: Water**
**Analysis Batch: 139640**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | ND | | 1990 | 2150 | | ug/L | | 108 | 68 - 122 | 2 | 18 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *B-mrof obuorozen9ene (Surr)* | *4,* | | *28 - 12B* |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Lab Sample ID: MB 570-139704/1-A**
**Matrix: Water**
**Analysis Batch: 139625**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139704**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 50 | 22 | ug/L | | 03/30/21 15:37 | 03/31/21 09:02 | 1 |
| C23-C40 | ND | | 50 | 22 | ug/L | | 03/30/21 15:37 | 03/31/21 09:02 | 1 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Lab Sample ID: MB 570-139704/1-A**
**Matrix: Water**
**Analysis Batch: 139625**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 139704**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 43 | | , 2 - 1, 1 | 02/20/31 1, :27 | 02/21/31 04:03 | 1 |

**Lab Sample ID: LCS 570-139704/2-A**
**Matrix: Water**
**Analysis Batch: 139625**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 139704**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 2000 | 1850 | | ug/L | | 93 | 70 - 131 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 88 | | , 2 - 1, 1 |

**Lab Sample ID: LCSD 570-139704/3-A**
**Matrix: Water**
**Analysis Batch: 139625**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 139704**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 2000 | 2000 | | ug/L | | 100 | 70 - 131 | 8 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 4B | | , 2 - 1, 1 |

## Method: 314.0 - Perchlorate (IC)

**Lab Sample ID: MB 570-139557/6**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.91 | ug/L | | | 03/30/21 10:50 | 1 |

**Lab Sample ID: LCS 570-139557/7**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | | | 25.0 | 22.8 | | ug/L | | 91 | 85 - 115 | | |

**Lab Sample ID: LCSD 570-139557/8**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | | | 25.0 | 22.6 | | ug/L | | 90 | 85 - 115 | 1 | 15 |

## Method: 314.0 - Perchlorate (IC) (Continued)

**Lab Sample ID: 570-54991-D-1 MS**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 7.7 | | 50.0 | 58.4 | | ug/L | | 101 | 80 - 120 | | |

**Lab Sample ID: 570-54991-D-1 MSD**
**Matrix: Water**
**Analysis Batch: 139557**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 7.7 | | 50.0 | 59.6 | | ug/L | | 104 | 80 - 120 | 2 | 15 |

## GC/MS VOA

### Analysis Batch: 642731

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281062-1 | TSW-2 | Total/NA | Water | 8260B | |
| 440-281062-2 | TSW-3 | Total/NA | Water | 8260B | |
| 440-281062-3 | Trip Blank | Total/NA | Water | 8260B | |
| MB 440-642731/4 | Method Blank | Total/NA | Water | 8260B | |
| LCS 440-642731/1002 | Lab Control Sample | Total/NA | Water | 8260B | |
| 440-281171-D-1 MS | Matrix Spike | Total/NA | Water | 8260B | |
| 440-281171-D-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260B | |

## GC/MS Semi VOA

### Prep Batch: 139536

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281062-1 | TSW-2 | Total/NA | Water | 3510C | |
| 440-281062-2 | TSW-3 | Total/NA | Water | 3510C | |
| MB 570-139536/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 570-139536/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 570-139536/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

### Analysis Batch: 139711

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281062-1 | TSW-2 | Total/NA | Water | 8270C SIM ID | 139536 |
| 440-281062-2 | TSW-3 | Total/NA | Water | 8270C SIM ID | 139536 |
| MB 570-139536/1-A | Method Blank | Total/NA | Water | 8270C SIM ID | 139536 |
| LCS 570-139536/2-A | Lab Control Sample | Total/NA | Water | 8270C SIM ID | 139536 |
| LCSD 570-139536/3-A | Lab Control Sample Dup | Total/NA | Water | 8270C SIM ID | 139536 |

## GC VOA

### Analysis Batch: 139190

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281062-2 | TSW-3 | Total/NA | Water | 8015B | |
| MB 570-139190/34 | Method Blank | Total/NA | Water | 8015B | |
| LCS 570-139190/32 | Lab Control Sample | Total/NA | Water | 8015B | |
| LCSD 570-139190/33 | Lab Control Sample Dup | Total/NA | Water | 8015B | |
| 440-280995-C-1 MS | Matrix Spike | Total/NA | Water | 8015B | |
| 440-280995-C-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 8015B | |

### Analysis Batch: 139640

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281062-1 | TSW-2 | Total/NA | Water | 8015B | |
| MB 570-139640/5 | Method Blank | Total/NA | Water | 8015B | |
| LCS 570-139640/3 | Lab Control Sample | Total/NA | Water | 8015B | |
| LCSD 570-139640/4 | Lab Control Sample Dup | Total/NA | Water | 8015B | |
| 440-281054-D-2 MS | Matrix Spike | Total/NA | Water | 8015B | |
| 440-281054-D-2 MSD | Matrix Spike Duplicate | Total/NA | Water | 8015B | |

## GC Semi VOA

### Analysis Batch: 139625

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281062-1 | TSW-2 | Total/NA | Water | 8015B | 139704 |
| 440-281062-2 | TSW-3 | Total/NA | Water | 8015B | 139704 |

## GC Semi VOA (Continued)

### Analysis Batch: 139625 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 570-139704/1-A | Method Blank | Total/NA | Water | 8015B | 139704 |
| LCS 570-139704/2-A | Lab Control Sample | Total/NA | Water | 8015B | 139704 |
| LCSD 570-139704/3-A | Lab Control Sample Dup | Total/NA | Water | 8015B | 139704 |

### Prep Batch: 139704

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281062-1 | TSW-2 | Total/NA | Water | 3510C | |
| 440-281062-2 | TSW-3 | Total/NA | Water | 3510C | |
| MB 570-139704/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 570-139704/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 570-139704/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

## HPLC/IC

### Analysis Batch: 139557

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281062-1 | TSW-2 | Total/NA | Water | 314.0 | |
| 440-281062-2 | TSW-3 | Total/NA | Water | 314.0 | |
| MB 570-139557/6 | Method Blank | Total/NA | Water | 314.0 | |
| LCS 570-139557/7 | Lab Control Sample | Total/NA | Water | 314.0 | |
| LCSD 570-139557/8 | Lab Control Sample Dup | Total/NA | Water | 314.0 | |
| 570-54991-D-1 MS | Matrix Spike | Total/NA | Water | 314.0 | |
| 570-54991-D-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 314.0 | |

# Definitions/Glossary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281062-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281062-1

## Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | State | 2706 | 06-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8260B | | Water | 1,1-Dichloropropene |
| 8260B | | Water | 1,2,3-Trichlorobenzene |
| 8260B | | Water | 1,2,4-Trimethylbenzene |
| 8260B | | Water | 1,3,5-Trimethylbenzene |
| 8260B | | Water | 1,3-Dichloropropane |
| 8260B | | Water | 2,2-Dichloropropane |
| 8260B | | Water | 2-Butanone (MEK) |
| 8260B | | Water | 2-Chlorotoluene |
| 8260B | | Water | Isopropylbenzene |
| 8260B | | Water | m,p-Xylene |
| 8260B | | Water | p-Isopropyltoluene |

## Laboratory: Eurofins Calscience LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 314.0 | | Water | Perchlorate |
| 8015B | | Water | Gasoline Range Organics (C4-C12) |
| 8015B | 3510C | Water | C13-C22 |
| 8015B | 3510C | Water | C23-C40 |
| 8270C SIM ID | 3510C | Water | 1,4-Dioxane |

| | | | |
|---|---|---|---|
| California | State | 2944 | 09-30-21 |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: EuroFins
Address:
Phone:
Office Location: Colton
Contact: Danielle
Project Manager: Todd G. McFarland
PO/SO #: CB21P020

Sampler's Name: Thomas C. Johnson
Sampler's Signature:

Project Number: CB21P020
Project Name: Broken Horn Saddlery

ANALYSIS REQUESTED: TPH 8015; VOCs 8260; 1,4-Dioxane 8270; Perchlorate 314.0

LAB USE ONLY
DUE DATE.

TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 1

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers: VOA | A/G | P/O | TPH 8015 | VOCs 8260 | 1,4-Dioxane 8270 | Perchlorate 314.0 | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W | 3/24 | 08:35 | | X | TSW-2 | | | 3 | 3 | - | ✓ | ✓ | ✓ | ✓ | |
| W | 3/25 | 0920 | | X | TSW-3 | | | 3 | 3 | 1 | ✓ | ✓ | ✓ | ✓ | |
| W | 3/25 | 11:10 | | | Trip Blank | | | 1 | | | | ✓ | | | |

440-281062 Chain of Custody

TURNAROUND TIME ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 3/25 | 16:01 | William Rivera | 3/25/21 | 1601 |
| CWR | 3/25/21 | 1900 | | | |
| | | | Olga Cimelas | 3/25/21 | 1900 |
| | | | | | |

NOTES.
5-Day TAT

EDD

Matrix: WW Wastewater; W Water; S Soil; L -Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml Glass wide mouth; P/O Plastic or other

**Eurofins Calscience LLC**
7440 Lincoln Way
Garden Grove, CA 92841
Phone: 714-895-5494 Fax: 714-894-7501

# Chain of Custody Record

eurofins

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 570-91383.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle.Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP California; State California | | Job #: 440-281062-1 |
| Address: 17461 Derian Ave, Suite 100 | Due Date Requested: 3/31/2021 | | | |
| City: Irvine | TAT Requested (days): | | | |
| State, Zip: CA, 92614-5817 | | | | |
| Phone: 949-261 1022(Tel) 949-260-3297(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes.**

A HCL M Hexane
B NaOH N None
C Zn Acetate O AsNaO2
D Nitric Acid P Na2O4S
E NaHSO4 Q Na2SO3
F MeOH R Na2S2O3
G Amchlor S H2SO4
H Ascorbic Acid T TSP Dodecahydrate
I Ice U Acetone
J DI Water V MCAA
K EDTA W pH 4-5
L EDA Z other (specify)

Other:

| Sample Identification Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B/5030B Default 8260B Volatiles | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| TSW-2 (440-281062-1) | 3/24/21 | 08:35 Pacific | | Water | | | X | 2 | |
| TSW-3 (440-281062-2) | 3/25/21 | 09:20 Pacific | | Water | | | X | 2 | |
| Trip Blank (440-281062-3) | 3/25/21 | 11 10 Pacific | | Water | | | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Calscience attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| ***Possible Hazard Identification*** *Unconfirmed* | ***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months* |
|---|---|
| Deliverable Requested: I, II III, IV Other (specify) Primary Deliverable Rank: 2 | Special Instructions/QC Requirements. |

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| | 03/29/21 1723 | ECL | | | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: Olga Oneias | Date/Time: 3/29/21 1723 | Company ECLNV |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No. | Cooler Temperature(s) °C and Other Remarks: ZR-89 5 2/2/9 |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281062-1

**Login Number: 281062**
**List Number: 1**
**Creator: Skinner, Alma D**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281062-1

**Login Number: 281062**
**List Number: 2**
**Creator: Stratford, Jordan**

**List Source: Eurofins Calscience**
**List Creation: 03/26/21 07:58 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 1.7 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Isotope Dilution Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281062-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DXE (15-150) | | | | | | |
| 440-281062-1 | TSW-2 | 65 | | | | | | |
| 440-281062-2 | TSW-3 | 50 | | | | | | |
| LCS 570-139536/2-A | Lab Control Sample | 53 | | | | | | |
| LCSD 570-139536/3-A | Lab Control Sample Dup | 71 | | | | | | |
| MB 570-139536/1-A | Method Blank | 55 | | | | | | |

**Surrogate Legend**

DXE = 1,4-Dioxane-d8

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281211-1
Client Project/Site: Broken Horn Saddlery

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/6/2021 1:05:26 PM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

| Lab Sample ID | Client Sample ID | Ratric | Cvlledteo | Medeixeo | Asset ID |
|---|---|---|---|---|---|
| 440-281211-1 | TSW-4 | Water | 03/29/21 09:57 | 03/30/21 15:00 | |
| 440-281211-2 | TSW-5 | Water | 03/30/21 09:00 | 03/30/21 15:00 | |
| 440-281211-3 | TSW-5 DUP | Water | 03/30/21 09:00 | 03/30/21 15:00 | |
| 440-281211-4 | Trip Balnk | Water | 03/30/21 10:05 | 03/30/21 15:00 | |

## Job ID: 440-281211-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281211-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/30/2021 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

**GC/MS VOA**
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 570-140799 were outside control limits: (570-55034-A-4 MS) and (570-55034-A-4 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC/MS Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**HPLC/IC**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

## Client Sample ID: TSW-4 — Lab Sample ID: 440-281211-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | 82 | | 52 | 23 | ug/L | 1 | | 8015B | Total/NA |
| C23-C40 | 99 | | 52 | 23 | ug/L | 1 | | 8015B | Total/NA |
| Perchlorate | 0.91 | J | 2.0 | 0.91 | ug/L | 1 | | 314.0 | Total/NA |

## Client Sample ID: TSW-5 — Lab Sample ID: 440-281211-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.95 | | 0.50 | 0.34 | ug/L | 1 | | 8270C SIM ID | Total/NA |

## Client Sample ID: TSW-5 DUP — Lab Sample ID: 440-281211-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.60 | | 0.50 | 0.34 | ug/L | 1 | | 8270C SIM ID | Total/NA |

## Client Sample ID: Trip Balnk — Lab Sample ID: 440-281211-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

**Client Sample ID: TSW-4**
**Date Collected: 03/29/21 09:57**
**Date Received: 03/30/21 15:00**

**Lab Sample ID: 440-281211-1**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | 0.33 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.20 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10 | 0.58 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.45 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.43 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 0.27 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | 1.5 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2-Dichloroethane | ND | | 0.50 | 0.22 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.39 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 20:43 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.24 | ug/L | | | 04/03/21 20:43 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.55 | ug/L | | | 04/03/21 20:43 | 1 |
| 2-Butanone | ND | | 20 | 3.6 | ug/L | | | 04/03/21 20:43 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.27 | ug/L | | | 04/03/21 20:43 | 1 |
| 2-Hexanone | ND | | 10 | 3.1 | ug/L | | | 04/03/21 20:43 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 20:43 | 1 |
| 4-Methyl-2-pentanone | ND | | 10 | 2.9 | ug/L | | | 04/03/21 20:43 | 1 |
| Acetone | ND | | 20 | 10 | ug/L | | | 04/03/21 20:43 | 1 |
| Benzene | ND | | 0.50 | 0.20 | ug/L | | | 04/03/21 20:43 | 1 |
| Bromobenzene | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 20:43 | 1 |
| Bromochloromethane | ND | | 2.0 | 0.30 | ug/L | | | 04/03/21 20:43 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 20:43 | 1 |
| Bromoform | ND | | 5.0 | 1.5 | ug/L | | | 04/03/21 20:43 | 1 |
| Bromomethane | ND | | 25 | 15 | ug/L | | | 04/03/21 20:43 | 1 |
| Carbon disulfide | ND | | 10 | 0.40 | ug/L | | | 04/03/21 20:43 | 1 |
| Carbon tetrachloride | ND | | 0.50 | 0.34 | ug/L | | | 04/03/21 20:43 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.21 | ug/L | | | 04/03/21 20:43 | 1 |
| Chloroethane | ND | | 5.0 | 2.4 | ug/L | | | 04/03/21 20:43 | 1 |
| Chloroform | ND | | 1.0 | 0.50 | ug/L | | | 04/03/21 20:43 | 1 |
| Chloromethane | ND | | 10 | 2.3 | ug/L | | | 04/03/21 20:43 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.51 | ug/L | | | 04/03/21 20:43 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.50 | 0.23 | ug/L | | | 04/03/21 20:43 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.34 | ug/L | | | 04/03/21 20:43 | 1 |
| Dibromomethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 20:43 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.56 | ug/L | | | 04/03/21 20:43 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 20:43 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 20:43 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 20:43 | 1 |
| Methylene Chloride | ND | | 10 | 4.0 | ug/L | | | 04/03/21 20:43 | 1 |

## Client Sample ID: TSW-4
**Date Collected: 03/29/21 09:57**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281211-1
**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl-t-Butyl Ether (MTBE) | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 20:43 | 1 |
| Naphthalene | ND | | 10 | 5.0 | ug/L | | | 04/03/21 20:43 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 20:43 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.41 | ug/L | | | 04/03/21 20:43 | 1 |
| o-Xylene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 20:43 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 20:43 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 20:43 | 1 |
| Styrene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 20:43 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 20:43 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 20:43 | 1 |
| Toluene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 20:43 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.31 | ug/L | | | 04/03/21 20:43 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.50 | 0.30 | ug/L | | | 04/03/21 20:43 | 1 |
| Trichloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 20:43 | 1 |
| Trichlorofluoromethane | ND | | 10 | 0.36 | ug/L | | | 04/03/21 20:43 | 1 |
| Vinyl acetate | ND | | 10 | 4.6 | ug/L | | | 04/03/21 20:43 | 1 |
| Vinyl chloride | ND | | 0.50 | 0.26 | ug/L | | | 04/03/21 20:43 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 20:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *112* | | *97 - 120* | | *743703 21 27/40* | *1* |
| *4-5ro: oBuoromenf ene (Surr)* | *bz* | | *87 - 127* | | *743703 21 27/40* | *1* |
| *Dimro: oBuoro: ethane (Surr)* | *17T* | | *98 - 127* | | *743703 21 27/40* | *1* |
| *xoluene-d8 (Surr)* | *177* | | *87 - 127* | | *743703 21 27/40* | *1* |

### Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.34 | ug/L | | 04/01/21 07:36 | 04/03/21 07:04 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dio6ane-d8* | *T2* | | *1T - 1T7* | *743713 21 79/0z* | *743703 21 79/74* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitromenf ene-dT (Surr)* | *b7* | | *4z - 128* | *743713 21 79/0z* | *743703 21 79/74* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 04/01/21 23:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-5ro: oBuoromenf ene (Surr)* | *zb* | | *08 - 104* | | *743713 21 20/7T* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C13-C22** | **82** | | 52 | 23 | ug/L | | 04/02/21 14:45 | 04/03/21 14:00 | 1 |
| **C23-C40** | **99** | | 52 | 23 | ug/L | | 04/02/21 14:45 | 04/03/21 14:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *bz* | | *T0 - 1T1* | *743723 21 14/4T* | *743703 21 14/77* | *1* |

## Client Sample ID: TSW-4

**Lab Sample ID: 440-281211-1**

**Date Collected: 03/29/21 09:57**

**Matrix: Water**

**Date Received: 03/30/21 15:00**

### Method: 314.0 - Perchlorate (IC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 0.91 | J | 2.0 | 0.91 | ug/L | | | 04/02/21 21:10 | 1 |

## Client Sample ID: TSW-5

**Lab Sample ID: 440-281211-2**

**Date Collected: 03/30/21 09:00**

**Matrix: Water**

**Date Received: 03/30/21 15:00**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | 0.33 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.20 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10 | 0.58 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.45 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.43 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 0.27 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | 1.5 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2-Dichloroethane | ND | | 0.50 | 0.22 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.39 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 21:10 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.24 | ug/L | | | 04/03/21 21:10 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.55 | ug/L | | | 04/03/21 21:10 | 1 |
| 2-Butanone | ND | | 20 | 3.6 | ug/L | | | 04/03/21 21:10 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.27 | ug/L | | | 04/03/21 21:10 | 1 |
| 2-Hexanone | ND | | 10 | 3.1 | ug/L | | | 04/03/21 21:10 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 21:10 | 1 |
| 4-Methyl-2-pentanone | ND | | 10 | 2.9 | ug/L | | | 04/03/21 21:10 | 1 |
| Acetone | ND | | 20 | 10 | ug/L | | | 04/03/21 21:10 | 1 |
| Benzene | ND | | 0.50 | 0.20 | ug/L | | | 04/03/21 21:10 | 1 |
| Bromobenzene | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 21:10 | 1 |
| Bromochloromethane | ND | | 2.0 | 0.30 | ug/L | | | 04/03/21 21:10 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 21:10 | 1 |
| Bromoform | ND | | 5.0 | 1.5 | ug/L | | | 04/03/21 21:10 | 1 |
| Bromomethane | ND | | 25 | 15 | ug/L | | | 04/03/21 21:10 | 1 |
| Carbon disulfide | ND | | 10 | 0.40 | ug/L | | | 04/03/21 21:10 | 1 |
| Carbon tetrachloride | ND | | 0.50 | 0.34 | ug/L | | | 04/03/21 21:10 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.21 | ug/L | | | 04/03/21 21:10 | 1 |
| Chloroethane | ND | | 5.0 | 2.4 | ug/L | | | 04/03/21 21:10 | 1 |
| Chloroform | ND | | 1.0 | 0.50 | ug/L | | | 04/03/21 21:10 | 1 |
| Chloromethane | ND | | 10 | 2.3 | ug/L | | | 04/03/21 21:10 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.51 | ug/L | | | 04/03/21 21:10 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.50 | 0.23 | ug/L | | | 04/03/21 21:10 | 1 |

**Client Sample ID: TSW-5**
**Date Collected: 03/30/21 09:00**
**Date Received: 03/30/21 15:00**

**Lab Sample ID: 440-281211-2**
**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dibromochloromethane | ND | | 2.0 | 0.34 | ug/L | | | 04/03/21 21:10 | 1 |
| Dibromomethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 21:10 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.56 | ug/L | | | 04/03/21 21:10 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 21:10 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 21:10 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 21:10 | 1 |
| Methylene Chloride | ND | | 10 | 4.0 | ug/L | | | 04/03/21 21:10 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 21:10 | 1 |
| Naphthalene | ND | | 10 | 5.0 | ug/L | | | 04/03/21 21:10 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 21:10 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.41 | ug/L | | | 04/03/21 21:10 | 1 |
| o-Xylene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 21:10 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 21:10 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 21:10 | 1 |
| Styrene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 21:10 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 21:10 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 21:10 | 1 |
| Toluene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 21:10 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.31 | ug/L | | | 04/03/21 21:10 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.50 | 0.30 | ug/L | | | 04/03/21 21:10 | 1 |
| Trichloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 21:10 | 1 |
| Trichlorofluoromethane | ND | | 10 | 0.36 | ug/L | | | 04/03/21 21:10 | 1 |
| Vinyl acetate | ND | | 10 | 4.6 | ug/L | | | 04/03/21 21:10 | 1 |
| Vinyl chloride | ND | | 0.50 | 0.26 | ug/L | | | 04/03/21 21:10 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 21:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *97 - 120* | | *04/03/21 21:17* | *1* |
| *4-Bromofluorobenzene (Surr)* | *b8* | | *87 - 127* | | *04/03/21 21:17* | *1* |
| *Dibromofluoromethane (Surr)* | *170* | | *98 - 127* | | *04/03/21 21:17* | *1* |
| *Toluene-d8 (Surr)* | *bb* | | *87 - 127* | | *04/03/21 21:17* | *1* |

### Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,4-Dioxane** | **0.95** | | 0.50 | 0.34 | ug/L | | 04/01/21 07:36 | 04/03/21 07:18 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8* | *74* | | *17 - 177* | *04/01/21 07:02* | *04/03/21 07:18* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *67* | | *44 - 120* | *04/01/21 07:02* | *04/03/21 07:18* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 04/01/21 23:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *94* | | *68 - 104* | | *04/01/21 20:07* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 50 | 22 | ug/L | | 04/02/21 14:45 | 04/03/21 14:26 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

## Client Sample ID: TSW-5

**Date Collected: 03/30/21 09:00**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281211-2

**Matrix: Water**

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C23-C40 | ND | | 50 | 22 | ug/L | | 04/02/21 14:45 | 04/03/21 14:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *bz* | | *T0 - 1T1* | *743723 21 14/4T* | *743703 21 14/2z* | *1* |

### Method: 314.0 - Perchlorate (IC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.91 | ug/L | | | 04/02/21 21:32 | 1 |

## Client Sample ID: TSW-5 DUP

**Date Collected: 03/30/21 09:00**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281211-3

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | 0.33 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.20 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10 | 0.58 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.45 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.43 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 0.27 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | 1.5 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2-Dichloroethane | ND | | 0.50 | 0.22 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.39 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 21:37 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.24 | ug/L | | | 04/03/21 21:37 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.55 | ug/L | | | 04/03/21 21:37 | 1 |
| 2-Butanone | ND | | 20 | 3.6 | ug/L | | | 04/03/21 21:37 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.27 | ug/L | | | 04/03/21 21:37 | 1 |
| 2-Hexanone | ND | | 10 | 3.1 | ug/L | | | 04/03/21 21:37 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 21:37 | 1 |
| 4-Methyl-2-pentanone | ND | | 10 | 2.9 | ug/L | | | 04/03/21 21:37 | 1 |
| Acetone | ND | | 20 | 10 | ug/L | | | 04/03/21 21:37 | 1 |
| Benzene | ND | | 0.50 | 0.20 | ug/L | | | 04/03/21 21:37 | 1 |
| Bromobenzene | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 21:37 | 1 |
| Bromochloromethane | ND | | 2.0 | 0.30 | ug/L | | | 04/03/21 21:37 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 21:37 | 1 |
| Bromoform | ND | | 5.0 | 1.5 | ug/L | | | 04/03/21 21:37 | 1 |
| Bromomethane | ND | | 25 | 15 | ug/L | | | 04/03/21 21:37 | 1 |
| Carbon disulfide | ND | | 10 | 0.40 | ug/L | | | 04/03/21 21:37 | 1 |

**Client Sample ID: TSW-5 DUP**
**Date Collected: 03/30/21 09:00**
**Date Received: 03/30/21 15:00**

**Lab Sample ID: 440-281211-3**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon tetrachloride | ND | | 0.50 | 0.34 | ug/L | | | 04/03/21 21:37 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.21 | ug/L | | | 04/03/21 21:37 | 1 |
| Chloroethane | ND | | 5.0 | 2.4 | ug/L | | | 04/03/21 21:37 | 1 |
| Chloroform | ND | | 1.0 | 0.50 | ug/L | | | 04/03/21 21:37 | 1 |
| Chloromethane | ND | | 10 | 2.3 | ug/L | | | 04/03/21 21:37 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.51 | ug/L | | | 04/03/21 21:37 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.50 | 0.23 | ug/L | | | 04/03/21 21:37 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.34 | ug/L | | | 04/03/21 21:37 | 1 |
| Dibromomethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 21:37 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.56 | ug/L | | | 04/03/21 21:37 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 21:37 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 21:37 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 21:37 | 1 |
| Methylene Chloride | ND | | 10 | 4.0 | ug/L | | | 04/03/21 21:37 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 21:37 | 1 |
| Naphthalene | ND | | 10 | 5.0 | ug/L | | | 04/03/21 21:37 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 21:37 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.41 | ug/L | | | 04/03/21 21:37 | 1 |
| o-Xylene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 21:37 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 21:37 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 21:37 | 1 |
| Styrene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 21:37 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 21:37 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 21:37 | 1 |
| Toluene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 21:37 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.31 | ug/L | | | 04/03/21 21:37 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.50 | 0.30 | ug/L | | | 04/03/21 21:37 | 1 |
| Trichloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 21:37 | 1 |
| Trichlorofluoromethane | ND | | 10 | 0.36 | ug/L | | | 04/03/21 21:37 | 1 |
| Vinyl acetate | ND | | 10 | 4.6 | ug/L | | | 04/03/21 21:37 | 1 |
| Vinyl chloride | ND | | 0.50 | 0.26 | ug/L | | | 04/03/21 21:37 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 21:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *97 - 120* | | *743703 21 21/09* | *1* |
| *4-5ro: oBuoromenf ene (Surr)* | *b8* | | *87 - 127* | | *743703 21 21/09* | *1* |
| *Dimro: oBuoro: ethane (Surr)* | *17z* | | *98 - 127* | | *743703 21 21/09* | *1* |
| *xoluene-d8 (Surr)* | *b8* | | *87 - 127* | | *743703 21 21/09* | *1* |

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,4-Dioxane** | **0.60** | | 0.50 | 0.34 | ug/L | | 04/01/21 07:36 | 04/03/21 07:33 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dio6ane-d8* | *z1* | | *1T - 1T7* | *743713 21 79/0z* | *743703 21 79/00* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitromenf ene-dT (Surr)* | *88* | | *4z - 128* | *743713 21 79/0z* | *743703 21 79/00* | *1* |

## Client Sample ID: TSW-5 DUP

**Lab Sample ID: 440-281211-3**

**Date Collected: 03/30/21 09:00**

**Matrix: Water**

**Date Received: 03/30/21 15:00**

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 04/01/21 23:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-5ro: oBuoromenf ene (Surr)* | *9z* | | *08 - 104* | | *743713:21 20/TT* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 50 | 22 | ug/L | | 04/02/21 14:45 | 04/03/21 14:53 | 1 |
| C23-C40 | ND | | 50 | 22 | ug/L | | 04/02/21 14:45 | 04/03/21 14:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *bz* | | *T0 - 1T1* | *743723:21 14/4T* | *743703:21 14/T0* | *1* |

### Method: 314.0 - Perchlorate (IC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.91 | ug/L | | | 04/02/21 21:53 | 1 |

## Client Sample ID: Trip Balnk

**Lab Sample ID: 440-281211-4**

**Date Collected: 03/30/21 10:05**

**Matrix: Water**

**Date Received: 03/30/21 15:00**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | 0.33 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.20 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10 | 0.58 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.45 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.43 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 0.27 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | 1.5 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2-Dichloroethane | ND | | 0.50 | 0.22 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.39 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 16:08 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.24 | ug/L | | | 04/03/21 16:08 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.55 | ug/L | | | 04/03/21 16:08 | 1 |
| 2-Butanone | ND | | 20 | 3.6 | ug/L | | | 04/03/21 16:08 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.27 | ug/L | | | 04/03/21 16:08 | 1 |
| 2-Hexanone | ND | | 10 | 3.1 | ug/L | | | 04/03/21 16:08 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 16:08 | 1 |
| 4-Methyl-2-pentanone | ND | | 10 | 2.9 | ug/L | | | 04/03/21 16:08 | 1 |
| Acetone | ND | | 20 | 10 | ug/L | | | 04/03/21 16:08 | 1 |

## Client Sample ID: Trip Balnk

**Date Collected: 03/30/21 10:05**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281211-4

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | 0.20 | ug/L | | | 04/03/21 16:08 | 1 |
| Bromobenzene | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 16:08 | 1 |
| Bromochloromethane | ND | | 2.0 | 0.30 | ug/L | | | 04/03/21 16:08 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 16:08 | 1 |
| Bromoform | ND | | 5.0 | 1.5 | ug/L | | | 04/03/21 16:08 | 1 |
| Bromomethane | ND | | 25 | 15 | ug/L | | | 04/03/21 16:08 | 1 |
| Carbon disulfide | ND | | 10 | 0.40 | ug/L | | | 04/03/21 16:08 | 1 |
| Carbon tetrachloride | ND | | 0.50 | 0.34 | ug/L | | | 04/03/21 16:08 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.21 | ug/L | | | 04/03/21 16:08 | 1 |
| Chloroethane | ND | | 5.0 | 2.4 | ug/L | | | 04/03/21 16:08 | 1 |
| Chloroform | ND | | 1.0 | 0.50 | ug/L | | | 04/03/21 16:08 | 1 |
| Chloromethane | ND | | 10 | 2.3 | ug/L | | | 04/03/21 16:08 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.51 | ug/L | | | 04/03/21 16:08 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.50 | 0.23 | ug/L | | | 04/03/21 16:08 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.34 | ug/L | | | 04/03/21 16:08 | 1 |
| Dibromomethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 16:08 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.56 | ug/L | | | 04/03/21 16:08 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 16:08 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 16:08 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 16:08 | 1 |
| Methylene Chloride | ND | | 10 | 4.0 | ug/L | | | 04/03/21 16:08 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 16:08 | 1 |
| Naphthalene | ND | | 10 | 5.0 | ug/L | | | 04/03/21 16:08 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 16:08 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.41 | ug/L | | | 04/03/21 16:08 | 1 |
| o-Xylene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 16:08 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 16:08 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 16:08 | 1 |
| Styrene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 16:08 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 16:08 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 16:08 | 1 |
| Toluene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 16:08 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.31 | ug/L | | | 04/03/21 16:08 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.50 | 0.30 | ug/L | | | 04/03/21 16:08 | 1 |
| Trichloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 16:08 | 1 |
| Trichlorofluoromethane | ND | | 10 | 0.36 | ug/L | | | 04/03/21 16:08 | 1 |
| Vinyl acetate | ND | | 10 | 4.6 | ug/L | | | 04/03/21 16:08 | 1 |
| Vinyl chloride | ND | | 0.50 | 0.26 | ug/L | | | 04/03/21 16:08 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 16:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *179* | | *97 - 120* | | *743703 21 1z/78* | *1* |
| *4-5ro: oBuorom nf ene (Surr)* | *b8* | | *87 - 127* | | *743703 21 1z/78* | *1* |
| *Dim ro: oBuoro: ethane (Surr)* | *174* | | *98 - 127* | | *743703 21 1z/78* | *1* |
| *xoluene-d8 (Surr)* | *177* | | *87 - 127* | | *743703 21 1z/78* | *1* |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (70-123) | (80-120) | (78-120) | (80-120) |
| 440-281211-1 | TSW-4 | 112 | 96 | 105 | 100 |
| 440-281211-2 | TSW-5 | 110 | 98 | 103 | 99 |
| 440-281211-3 | TSW-5 DUP | 110 | 98 | 106 | 98 |
| 440-281211-4 | Trip Balnk | 107 | 98 | 104 | 100 |
| 570-55034-A-4 MS | Matrix Spike | 103 | 110 | 100 | 101 |
| 570-55034-A-4 MSD | Matrix Spike Duplicate | 105 | 108 | 98 | 99 |
| LCS 570-140799/4 | Lab Control Sample | 103 | 108 | 99 | 99 |
| LCSD 570-140799/5 | Lab Control Sample Dup | 103 | 105 | 100 | 98 |
| MB 570-140799/9 | Method Blank | 105 | 96 | 103 | 99 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | NBZ |
| Lab Sample ID | Client Sample ID | (46-128) |
| 440-281211-1 | TSW-4 | 90 |
| 440-281211-2 | TSW-5 | 90 |
| 440-281211-3 | TSW-5 DUP | 88 |
| 570-55242-E-13-A MS | Matrix Spike | 87 |
| 570-55242-E-13-B MSD | Matrix Spike Duplicate | 90 |
| LCS 570-140138/2-A | Lab Control Sample | 84 |
| LCSD 570-140138/3-A | Lab Control Sample Dup | 96 |
| MB 570-140138/1-A | Method Blank | 89 |

**Surrogate Legend**

NBZ = Nitrobenzene-d5 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | BFB1 |
| Lab Sample ID | Client Sample ID | (38-134) |
| 440-281211-1 | TSW-4 | 69 |
| 440-281211-2 | TSW-5 | 74 |
| 440-281211-3 | TSW-5 DUP | 76 |
| 570-55286-G-1 MS | Matrix Spike | 117 |
| 570-55286-G-1 MSD | Matrix Spike Duplicate | 105 |
| LCS 570-140250/3 | Lab Control Sample | 105 |
| LCSD 570-140250/4 | Lab Control Sample Dup | 107 |
| MB 570-140250/5 | Method Blank | 78 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

Client: Terracon Consultants Inc
Job ID: 440-281211-1
Project/Site: Broken Horn Saddlery

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Water**
**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | OTCSN1 (53-151) | | | | | | |
| 440-281211-1 | TSW-4 | 96 | | | | | | |
| 440-281211-2 | TSW-5 | 96 | | | | | | |
| 440-281211-3 | TSW-5 DUP | 96 | | | | | | |
| 570-55286-M-1-A MSD | Matrix Spike Duplicate | 60 | | | | | | |
| 570-55286-N-1-B MS | Matrix Spike | 65 | | | | | | |
| LCS 570-140623/2-A | Lab Control Sample | 111 | | | | | | |
| LCSD 570-140623/3-A | Lab Control Sample Dup | 111 | | | | | | |
| MB 570-140623/1-A | Method Blank | 129 | | | | | | |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 82d0j | Vo6i t6C WhCt l 1T 3 og moal Br p( 3 uGPM | PH 84d | ) 3 E 2 |
| 82L03 PIG ID | PCg 7o6i t6C WhCt l 1T 3 og moal Br p( 3 uGP PIG ulr oiomC D 6ai 1bl M | PH 84d | ) 3 E 9 |
| 809vj | ( t r o6l C 5 t l CC WhCt l 1Tr - p( 3 M | PH 84d | ) 3 E 2 |
| 809vj | D 1Cr C65 t l CC WhCt l 1Tr pD 5 WMdW 65 t l CC WhCt l 1Tr pW5 WM | PH 84d | ) 3 E 9 |
| A94.0 | c CnTh6ort iC pl3 M | ) cR | ) 3 E 9 |
| Av903 | E1qa1B-E1qa1B ) xirt Ti 1bl pPCmt rt iork yal l C6M | PH 84d | ) 3 E 9 |
| v0A03 | c anCC t l B ert m | PH 84d | ) 3 E 2 |

**Protocol References:**

) cR F = P ) l 71nol g Cl it 6c noiCTi 1bl RCCl Tk

PH 84d F UeCr i GCl hoBr yon) 7t 6at i 1 OPo6B H t r iC" c hkr 1Tt 6l 8 hCg 1Tt 6GCl hoBr U' eh 1nB ) B11 bl ", o7Cg bCn9N8d Rl B lir = mBt iCr .

**Laboratory References:**

) 3 E 9 F ) ano f1 r 3 t 6 T1Cl TC EE3 E1 To6 " L44 0 E1 To6 H t k" ( t nBCl ( no7C" 3 R N2849" e) Ep L94M8Nv-v4N4

) 3 E 2 F ) ano f1 r 3 t 6 T1Cl TC EE3 Et g mr ol " L44v Et g mr ol R7C" ( t nBCl ( no7C" 3 R N2849" e) Ep L94M8Nv-v4N4

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

## Client Sample ID: TSW-4

**Date Collected: 03/29/21 09:57**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281211-1

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 140799 | 04/03/21 20:43 | WE4H | ECL 2 |
| Total/NA | Prep | 3510C | | | 100.0 mL | 10 mL | 140138 | 04/01/21 07:36 | PQS1 | ECL 1 |
| Total/NA | Analysis | 8270C SIM ID | | 1 | | | 140339 | 04/03/21 07:04 | AJ2Q | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | 5 mL | 5 mL | 140250 | 04/01/21 23:05 | P1R | ECL 2 |
| Total/NA | Prep | 3510C | | | 481.7 mL | 2.5 mL | 140623 | 04/02/21 14:45 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 140580 | 04/03/21 14:00 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 314.0 | | 1 | | | 140470 | 04/02/21 21:10 | URMH | ECL 1 |

## Client Sample ID: TSW-5

**Date Collected: 03/30/21 09:00**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281211-2

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 140799 | 04/03/21 21:10 | WE4H | ECL 2 |
| Total/NA | Prep | 3510C | | | 100.0 mL | 10 mL | 140138 | 04/01/21 07:36 | PQS1 | ECL 1 |
| Total/NA | Analysis | 8270C SIM ID | | 1 | | | 140339 | 04/03/21 07:18 | AJ2Q | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | 5 mL | 5 mL | 140250 | 04/01/21 23:30 | P1R | ECL 2 |
| Total/NA | Prep | 3510C | | | 497.6 mL | 2.5 mL | 140623 | 04/02/21 14:45 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 140580 | 04/03/21 14:26 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 314.0 | | 1 | | | 140470 | 04/02/21 21:32 | URMH | ECL 1 |

## Client Sample ID: TSW-5 DUP

**Date Collected: 03/30/21 09:00**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281211-3

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 140799 | 04/03/21 21:37 | WE4H | ECL 2 |
| Total/NA | Prep | 3510C | | | 100.0 mL | 10 mL | 140138 | 04/01/21 07:36 | PQS1 | ECL 1 |
| Total/NA | Analysis | 8270C SIM ID | | 1 | | | 140339 | 04/03/21 07:33 | AJ2Q | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | 5 mL | 5 mL | 140250 | 04/01/21 23:55 | P1R | ECL 2 |
| Total/NA | Prep | 3510C | | | 497.4 mL | 2.5 mL | 140623 | 04/02/21 14:45 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 140580 | 04/03/21 14:53 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 314.0 | | 1 | | | 140470 | 04/02/21 21:53 | URMH | ECL 1 |

## Client Sample ID: Trip Balnk

**Date Collected: 03/30/21 10:05**
**Date Received: 03/30/21 15:00**

## Lab Sample ID: 440-281211-4

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 5 mL | 5 mL | 140799 | 04/03/21 16:08 | WE4H | ECL 2 |

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-130799/9**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | 0.33 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.20 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10 | 0.58 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.45 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.43 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 0.27 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | 1.5 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2-Dichloroethane | ND | | 0.50 | 0.22 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.39 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 15:40 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.24 | ug/L | | | 04/03/21 15:40 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.55 | ug/L | | | 04/03/21 15:40 | 1 |
| 2-Butanone | ND | | 20 | 3.6 | ug/L | | | 04/03/21 15:40 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.27 | ug/L | | | 04/03/21 15:40 | 1 |
| 2-Hexanone | ND | | 10 | 3.1 | ug/L | | | 04/03/21 15:40 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.32 | ug/L | | | 04/03/21 15:40 | 1 |
| 4-Methyl-2-pentanone | ND | | 10 | 2.9 | ug/L | | | 04/03/21 15:40 | 1 |
| Acetone | ND | | 20 | 10 | ug/L | | | 04/03/21 15:40 | 1 |
| Benzene | ND | | 0.50 | 0.20 | ug/L | | | 04/03/21 15:40 | 1 |
| Bromobenzene | ND | | 1.0 | 0.30 | ug/L | | | 04/03/21 15:40 | 1 |
| Bromochloromethane | ND | | 2.0 | 0.30 | ug/L | | | 04/03/21 15:40 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.28 | ug/L | | | 04/03/21 15:40 | 1 |
| Bromoform | ND | | 5.0 | 1.5 | ug/L | | | 04/03/21 15:40 | 1 |
| Bromomethane | ND | | 25 | 15 | ug/L | | | 04/03/21 15:40 | 1 |
| Carbon disulfide | ND | | 10 | 0.40 | ug/L | | | 04/03/21 15:40 | 1 |
| Carbon tetrachloride | ND | | 0.50 | 0.34 | ug/L | | | 04/03/21 15:40 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.21 | ug/L | | | 04/03/21 15:40 | 1 |
| Chloroethane | ND | | 5.0 | 2.4 | ug/L | | | 04/03/21 15:40 | 1 |
| Chloroform | ND | | 1.0 | 0.50 | ug/L | | | 04/03/21 15:40 | 1 |
| Chloromethane | ND | | 10 | 2.3 | ug/L | | | 04/03/21 15:40 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.51 | ug/L | | | 04/03/21 15:40 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.50 | 0.23 | ug/L | | | 04/03/21 15:40 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.34 | ug/L | | | 04/03/21 15:40 | 1 |
| Dibromomethane | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 15:40 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.56 | ug/L | | | 04/03/21 15:40 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.33 | ug/L | | | 04/03/21 15:40 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.37 | ug/L | | | 04/03/21 15:40 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 15:40 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-130799/9**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ND | | 10 | 4.0 | ug/L | | | 04/03/21 15:40 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 15:40 | 1 |
| Naphthalene | ND | | 10 | 5.0 | ug/L | | | 04/03/21 15:40 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 15:40 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.41 | ug/L | | | 04/03/21 15:40 | 1 |
| o-Xylene | ND | | 1.0 | 0.26 | ug/L | | | 04/03/21 15:40 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 15:40 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.29 | ug/L | | | 04/03/21 15:40 | 1 |
| Styrene | ND | | 1.0 | 0.38 | ug/L | | | 04/03/21 15:40 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/21 15:40 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 15:40 | 1 |
| Toluene | ND | | 1.0 | 0.34 | ug/L | | | 04/03/21 15:40 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.31 | ug/L | | | 04/03/21 15:40 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.50 | 0.30 | ug/L | | | 04/03/21 15:40 | 1 |
| Trichloroethene | ND | | 1.0 | 0.35 | ug/L | | | 04/03/21 15:40 | 1 |
| Trichlorofluoromethane | ND | | 10 | 0.36 | ug/L | | | 04/03/21 15:40 | 1 |
| Vinyl acetate | ND | | 10 | 4.6 | ug/L | | | 04/03/21 15:40 | 1 |
| Vinyl chloride | ND | | 0.50 | 0.26 | ug/L | | | 04/03/21 15:40 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.48 | ug/L | | | 04/03/21 15:40 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *197* | | *09 - 123* | | *94/93/21 1754 9* | *1* |
| *4-mrof obuorozen8ene (Surr)* | *: B* | | *T9 - 129* | | *94/93/21 1754 9* | *1* |
| *Dizrof obuorof ethane (Surr)* | *193* | | *0T - 129* | | *94/93/21 1754 9* | *1* |
| *xoluene-dT (Surr)* | *: :* | | *T9 - 129* | | *94/93/21 1754 9* | *1* |

**Lab Sample ID: LCS 570-130799/3**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 50.0 | 53.3 | | ug/L | | 107 | 80 - 128 |
| 1,1,1-Trichloroethane | 50.0 | 51.1 | | ug/L | | 102 | 76 - 122 |
| 1,1,2,2-Tetrachloroethane | 50.0 | 48.7 | | ug/L | | 97 | 79 - 120 |
| 1,1,2-Trichloro-1,2,2-trifluoroetha ne | 50.0 | 47.5 | | ug/L | | 95 | 53 - 122 |
| 1,1,2-Trichloroethane | 50.0 | 51.3 | | ug/L | | 103 | 80 - 120 |
| 1,1-Dichloroethane | 50.0 | 43.9 | | ug/L | | 88 | 72 - 120 |
| 1,1-Dichloroethene | 50.0 | 46.3 | | ug/L | | 93 | 64 - 121 |
| 1,1-Dichloropropene | 50.0 | 47.9 | | ug/L | | 96 | 77 - 120 |
| 1,2,3-Trichlorobenzene | 50.0 | 57.4 | | ug/L | | 115 | 78 - 136 |
| 1,2,3-Trichloropropane | 50.0 | 56.2 | | ug/L | | 112 | 74 - 120 |
| 1,2,4-Trichlorobenzene | 50.0 | 56.8 | | ug/L | | 114 | 73 - 138 |
| 1,2,4-Trimethylbenzene | 50.0 | 46.7 | | ug/L | | 93 | 80 - 121 |
| 1,2-Dibromo-3-Chloropropane | 50.0 | 52.8 | | ug/L | | 106 | 74 - 120 |
| 1,2-Dibromoethane | 50.0 | 56.2 | | ug/L | | 112 | 80 - 120 |
| 1,2-Dichlorobenzene | 50.0 | 51.0 | | ug/L | | 102 | 80 - 120 |
| 1,2-Dichloroethane | 50.0 | 53.3 | | ug/L | | 107 | 76 - 120 |
| 1,2-Dichloropropane | 50.0 | 46.8 | | ug/L | | 94 | 73 - 122 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-130799/3**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | 50.0 | 53.9 | | ug/L | | 108 | 80 - 122 |
| 1,3-Dichlorobenzene | 50.0 | 49.8 | | ug/L | | 100 | 80 - 120 |
| 1,3-Dichloropropane | 50.0 | 53.0 | | ug/L | | 106 | 80 - 120 |
| 1,4-Dichlorobenzene | 50.0 | 50.0 | | ug/L | | 100 | 80 - 120 |
| 2,2-Dichloropropane | 50.0 | 49.3 | | ug/L | | 99 | 60 - 150 |
| 2-Butanone | 50.0 | 44.5 | | ug/L | | 89 | 65 - 128 |
| 2-Chlorotoluene | 50.0 | 52.6 | | ug/L | | 105 | 79 - 120 |
| 2-Hexanone | 50.0 | 49.3 | | ug/L | | 99 | 61 - 140 |
| 4-Chlorotoluene | 50.0 | 45.1 | | ug/L | | 90 | 80 - 120 |
| 4-Methyl-2-pentanone | 50.0 | 44.6 | | ug/L | | 89 | 68 - 133 |
| Acetone | 50.0 | 43.6 | | ug/L | | 87 | 50 - 134 |
| Benzene | 50.0 | 45.1 | | ug/L | | 90 | 76 - 120 |
| Bromobenzene | 50.0 | 58.3 | | ug/L | | 117 | 80 - 125 |
| Bromochloromethane | 50.0 | 46.6 | | ug/L | | 93 | 79 - 120 |
| Bromodichloromethane | 50.0 | 55.5 | | ug/L | | 111 | 80 - 123 |
| Bromoform | 50.0 | 54.6 | | ug/L | | 109 | 80 - 128 |
| Bromomethane | 50.0 | 58.8 | | ug/L | | 118 | 64 - 150 |
| Carbon disulfide | 50.0 | 44.8 | | ug/L | | 90 | 67 - 126 |
| Carbon tetrachloride | 50.0 | 50.4 | | ug/L | | 101 | 80 - 127 |
| Chlorobenzene | 50.0 | 53.2 | | ug/L | | 106 | 80 - 120 |
| Chloroethane | 50.0 | 51.6 | | ug/L | | 103 | 67 - 128 |
| Chloroform | 50.0 | 50.3 | | ug/L | | 101 | 80 - 120 |
| Chloromethane | 50.0 | 52.9 | | ug/L | | 106 | 69 - 132 |
| cis-1,2-Dichloroethene | 50.0 | 47.5 | | ug/L | | 95 | 80 - 120 |
| cis-1,3-Dichloropropene | 50.0 | 48.9 | | ug/L | | 98 | 75 - 133 |
| Dibromochloromethane | 50.0 | 59.8 | | ug/L | | 120 | 79 - 130 |
| Dibromomethane | 50.0 | 53.1 | | ug/L | | 106 | 80 - 120 |
| Dichlorodifluoromethane | 50.0 | 49.2 | | ug/L | | 98 | 60 - 138 |
| Ethylbenzene | 50.0 | 51.4 | | ug/L | | 103 | 80 - 120 |
| Isopropylbenzene | 50.0 | 52.7 | | ug/L | | 105 | 80 - 123 |
| m,p-Xylene | 100 | 103 | | ug/L | | 103 | 74 - 122 |
| Methylene Chloride | 50.0 | 46.4 | | ug/L | | 93 | 62 - 133 |
| Methyl-t-Butyl Ether (MTBE) | 50.0 | 47.8 | | ug/L | | 96 | 64 - 120 |
| Naphthalene | 50.0 | 49.4 | | ug/L | | 99 | 80 - 120 |
| n-Butylbenzene | 50.0 | 50.2 | | ug/L | | 100 | 76 - 128 |
| N-Propylbenzene | 50.0 | 55.2 | | ug/L | | 110 | 80 - 122 |
| o-Xylene | 50.0 | 51.6 | | ug/L | | 103 | 80 - 121 |
| p-Isopropyltoluene | 50.0 | 49.0 | | ug/L | | 98 | 78 - 125 |
| sec-Butylbenzene | 50.0 | 48.2 | | ug/L | | 96 | 78 - 125 |
| Styrene | 50.0 | 51.9 | | ug/L | | 104 | 80 - 124 |
| tert-Butylbenzene | 50.0 | 48.1 | | ug/L | | 96 | 76 - 132 |
| Tetrachloroethene | 50.0 | 54.6 | | ug/L | | 109 | 72 - 135 |
| Toluene | 50.0 | 47.8 | | ug/L | | 96 | 76 - 120 |
| trans-1,2-Dichloroethene | 50.0 | 45.5 | | ug/L | | 91 | 73 - 120 |
| trans-1,3-Dichloropropene | 50.0 | 51.5 | | ug/L | | 103 | 80 - 132 |
| Trichloroethene | 50.0 | 48.7 | | ug/L | | 97 | 80 - 122 |
| Trichlorofluoromethane | 50.0 | 59.9 | | ug/L | | 120 | 69 - 139 |
| Vinyl acetate | 50.0 | 47.3 | | ug/L | | 95 | 74 - 147 |
| Vinyl chloride | 50.0 | 52.2 | | ug/L | | 104 | 70 - 124 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 193 | | 09 - 123 |
| 4-mrof obuorozen8ene (Surr) | 19T | | T9 - 129 |
| Dizrof obuorof ethane (Surr) | : : | | 0T - 129 |
| xoluene-dT (Surr) | : : | | T9 - 129 |

**Lab Sample ID: LCSD 570-130799/5**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | | | 50.0 | 56.2 | | ug/L | | 112 | 80 - 128 | 5 | 20 |
| 1,1,1-Trichloroethane | | | 50.0 | 53.2 | | ug/L | | 106 | 76 - 122 | 4 | 20 |
| 1,1,2,2-Tetrachloroethane | | | 50.0 | 49.0 | | ug/L | | 98 | 79 - 120 | 1 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroetha ne | | | 50.0 | 48.5 | | ug/L | | 97 | 53 - 122 | 2 | 20 |
| 1,1,2-Trichloroethane | | | 50.0 | 52.6 | | ug/L | | 105 | 80 - 120 | 3 | 20 |
| 1,1-Dichloroethane | | | 50.0 | 44.7 | | ug/L | | 89 | 72 - 120 | 2 | 20 |
| 1,1-Dichloroethene | | | 50.0 | 47.3 | | ug/L | | 95 | 64 - 121 | 2 | 20 |
| 1,1-Dichloropropene | | | 50.0 | 48.3 | | ug/L | | 97 | 77 - 120 | 1 | 20 |
| 1,2,3-Trichlorobenzene | | | 50.0 | 56.7 | | ug/L | | 113 | 78 - 136 | 1 | 20 |
| 1,2,3-Trichloropropane | | | 50.0 | 54.8 | | ug/L | | 110 | 74 - 120 | 3 | 20 |
| 1,2,4-Trichlorobenzene | | | 50.0 | 56.7 | | ug/L | | 113 | 73 - 138 | 0 | 20 |
| 1,2,4-Trimethylbenzene | | | 50.0 | 47.8 | | ug/L | | 96 | 80 - 121 | 2 | 20 |
| 1,2-Dibromo-3-Chloropropane | | | 50.0 | 50.1 | | ug/L | | 100 | 74 - 120 | 5 | 20 |
| 1,2-Dibromoethane | | | 50.0 | 55.5 | | ug/L | | 111 | 80 - 120 | 1 | 20 |
| 1,2-Dichlorobenzene | | | 50.0 | 51.4 | | ug/L | | 103 | 80 - 120 | 1 | 20 |
| 1,2-Dichloroethane | | | 50.0 | 52.9 | | ug/L | | 106 | 76 - 120 | 1 | 20 |
| 1,2-Dichloropropane | | | 50.0 | 47.2 | | ug/L | | 94 | 73 - 122 | 1 | 20 |
| 1,3,5-Trimethylbenzene | | | 50.0 | 55.7 | | ug/L | | 111 | 80 - 122 | 3 | 20 |
| 1,3-Dichlorobenzene | | | 50.0 | 50.7 | | ug/L | | 101 | 80 - 120 | 2 | 20 |
| 1,3-Dichloropropane | | | 50.0 | 51.3 | | ug/L | | 103 | 80 - 120 | 3 | 20 |
| 1,4-Dichlorobenzene | | | 50.0 | 49.6 | | ug/L | | 99 | 80 - 120 | 1 | 20 |
| 2,2-Dichloropropane | | | 50.0 | 49.5 | | ug/L | | 99 | 60 - 150 | 0 | 20 |
| 2-Butanone | | | 50.0 | 43.1 | | ug/L | | 86 | 65 - 128 | 3 | 20 |
| 2-Chlorotoluene | | | 50.0 | 53.9 | | ug/L | | 108 | 79 - 120 | 3 | 20 |
| 2-Hexanone | | | 50.0 | 48.7 | | ug/L | | 97 | 61 - 140 | 1 | 20 |
| 4-Chlorotoluene | | | 50.0 | 46.6 | | ug/L | | 93 | 80 - 120 | 3 | 20 |
| 4-Methyl-2-pentanone | | | 50.0 | 45.0 | | ug/L | | 90 | 68 - 133 | 1 | 20 |
| Acetone | | | 50.0 | 48.7 | | ug/L | | 97 | 50 - 134 | 11 | 25 |
| Benzene | | | 50.0 | 46.9 | | ug/L | | 94 | 76 - 120 | 4 | 20 |
| Bromobenzene | | | 50.0 | 60.9 | | ug/L | | 122 | 80 - 125 | 4 | 20 |
| Bromochloromethane | | | 50.0 | 48.1 | | ug/L | | 96 | 79 - 120 | 3 | 20 |
| Bromodichloromethane | | | 50.0 | 56.7 | | ug/L | | 113 | 80 - 123 | 2 | 20 |
| Bromoform | | | 50.0 | 55.8 | | ug/L | | 112 | 80 - 128 | 2 | 20 |
| Bromomethane | | | 50.0 | 59.7 | | ug/L | | 119 | 64 - 150 | 1 | 20 |
| Carbon disulfide | | | 50.0 | 46.2 | | ug/L | | 92 | 67 - 126 | 3 | 20 |
| Carbon tetrachloride | | | 50.0 | 52.0 | | ug/L | | 104 | 80 - 127 | 3 | 20 |
| Chlorobenzene | | | 50.0 | 54.2 | | ug/L | | 108 | 80 - 120 | 2 | 20 |
| Chloroethane | | | 50.0 | 53.8 | | ug/L | | 108 | 67 - 128 | 4 | 20 |
| Chloroform | | | 50.0 | 51.9 | | ug/L | | 104 | 80 - 120 | 3 | 20 |
| Chloromethane | | | 50.0 | 53.9 | | ug/L | | 108 | 69 - 132 | 2 | 20 |
| cis-1,2-Dichloroethene | | | 50.0 | 49.1 | | ug/L | | 98 | 80 - 120 | 3 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-130799/5**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | | | 50.0 | 50.5 | | ug/L | | 101 | 75 - 133 | 3 | 20 |
| Dibromochloromethane | | | 50.0 | 60.1 | | ug/L | | 120 | 79 - 130 | 1 | 20 |
| Dibromomethane | | | 50.0 | 53.1 | | ug/L | | 106 | 80 - 120 | 0 | 20 |
| Dichlorodifluoromethane | | | 50.0 | 51.4 | | ug/L | | 103 | 60 - 138 | 4 | 21 |
| Ethylbenzene | | | 50.0 | 52.5 | | ug/L | | 105 | 80 - 120 | 2 | 20 |
| Isopropylbenzene | | | 50.0 | 54.1 | | ug/L | | 108 | 80 - 123 | 3 | 20 |
| m,p-Xylene | | | 100 | 107 | | ug/L | | 107 | 74 - 122 | 3 | 20 |
| Methylene Chloride | | | 50.0 | 46.1 | | ug/L | | 92 | 62 - 133 | 1 | 20 |
| Methyl-t-Butyl Ether (MTBE) | | | 50.0 | 45.9 | | ug/L | | 92 | 64 - 120 | 4 | 20 |
| Naphthalene | | | 50.0 | 49.2 | | ug/L | | 98 | 80 - 120 | 0 | 20 |
| n-Butylbenzene | | | 50.0 | 51.3 | | ug/L | | 103 | 76 - 128 | 2 | 20 |
| N-Propylbenzene | | | 50.0 | 56.5 | | ug/L | | 113 | 80 - 122 | 2 | 20 |
| o-Xylene | | | 50.0 | 52.4 | | ug/L | | 105 | 80 - 121 | 2 | 20 |
| p-Isopropyltoluene | | | 50.0 | 50.6 | | ug/L | | 101 | 78 - 125 | 3 | 20 |
| sec-Butylbenzene | | | 50.0 | 49.2 | | ug/L | | 98 | 78 - 125 | 2 | 20 |
| Styrene | | | 50.0 | 52.7 | | ug/L | | 105 | 80 - 124 | 2 | 20 |
| tert-Butylbenzene | | | 50.0 | 49.8 | | ug/L | | 100 | 76 - 132 | 4 | 20 |
| Tetrachloroethene | | | 50.0 | 55.9 | | ug/L | | 112 | 72 - 135 | 2 | 20 |
| Toluene | | | 50.0 | 49.0 | | ug/L | | 98 | 76 - 120 | 2 | 20 |
| trans-1,2-Dichloroethene | | | 50.0 | 46.4 | | ug/L | | 93 | 73 - 120 | 2 | 20 |
| trans-1,3-Dichloropropene | | | 50.0 | 52.2 | | ug/L | | 104 | 80 - 132 | 1 | 20 |
| Trichloroethene | | | 50.0 | 48.9 | | ug/L | | 98 | 80 - 122 | 0 | 20 |
| Trichlorofluoromethane | | | 50.0 | 59.6 | | ug/L | | 119 | 69 - 139 | 0 | 20 |
| Vinyl acetate | | | 50.0 | 48.5 | | ug/L | | 97 | 74 - 147 | 3 | 20 |
| Vinyl chloride | | | 50.0 | 54.1 | | ug/L | | 108 | 70 - 124 | 4 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *193* | | *09 - 123* |
| *4-mrof obuorozen8ene (Surr)* | *197* | | *T9 - 129* |
| *Dizrof obuorof ethane (Surr)* | *199* | | *0T - 129* |
| *xoluene-dT (Surr)* | *: T* | | *T9 - 129* |

**Lab Sample ID: 570-55043-A-3 MS**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 50.0 | 57.8 | | ug/L | | 116 | 75 - 138 |
| 1,1,1-Trichloroethane | ND | | 50.0 | 53.9 | | ug/L | | 108 | 69 - 127 |
| 1,1,2,2-Tetrachloroethane | ND | F1 | 50.0 | 26.6 | F1 | ug/L | | 53 | 75 - 133 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 50.0 | 42.7 | | ug/L | | 85 | 50 - 125 |
| 1,1,2-Trichloroethane | ND | | 50.0 | 55.6 | | ug/L | | 111 | 75 - 125 |
| 1,1-Dichloroethane | ND | | 50.0 | 45.3 | | ug/L | | 91 | 75 - 125 |
| 1,1-Dichloroethene | ND | | 50.0 | 46.5 | | ug/L | | 93 | 57 - 135 |
| 1,1-Dichloropropene | ND | | 50.0 | 47.7 | | ug/L | | 95 | 73 - 125 |
| 1,2,3-Trichlorobenzene | ND | | 50.0 | 58.7 | | ug/L | | 117 | 73 - 136 |
| 1,2,3-Trichloropropane | ND | | 50.0 | 60.3 | | ug/L | | 121 | 75 - 125 |
| 1,2,4-Trichlorobenzene | ND | | 50.0 | 57.2 | | ug/L | | 114 | 69 - 136 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-55043-A-3 MS**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | ND | | 50.0 | 49.2 | | ug/L | | 98 | 75 - 131 |
| 1,2-Dibromo-3-Chloropropane | ND | | 50.0 | 50.4 | | ug/L | | 101 | 65 - 128 |
| 1,2-Dibromoethane | ND | | 50.0 | 60.7 | | ug/L | | 121 | 75 - 125 |
| 1,2-Dichlorobenzene | ND | | 50.0 | 53.4 | | ug/L | | 107 | 75 - 125 |
| 1,2-Dichloroethane | ND | | 50.0 | 57.7 | | ug/L | | 115 | 75 - 127 |
| 1,2-Dichloropropane | ND | | 50.0 | 47.9 | | ug/L | | 96 | 75 - 126 |
| 1,3,5-Trimethylbenzene | ND | | 50.0 | 59.7 | | ug/L | | 119 | 75 - 129 |
| 1,3-Dichlorobenzene | ND | | 50.0 | 52.6 | | ug/L | | 105 | 75 - 125 |
| 1,3-Dichloropropane | ND | | 50.0 | 56.1 | | ug/L | | 112 | 75 - 126 |
| 1,4-Dichlorobenzene | ND | | 50.0 | 51.5 | | ug/L | | 103 | 75 - 125 |
| 2,2-Dichloropropane | ND | | 50.0 | 48.2 | | ug/L | | 96 | 51 - 141 |
| 2-Butanone | ND | | 50.0 | 43.1 | | ug/L | | 86 | 61 - 137 |
| 2-Chlorotoluene | ND | | 50.0 | 57.5 | | ug/L | | 115 | 75 - 125 |
| 2-Hexanone | ND | | 50.0 | 52.6 | | ug/L | | 105 | 60 - 155 |
| 4-Chlorotoluene | ND | | 50.0 | 47.7 | | ug/L | | 95 | 75 - 130 |
| 4-Methyl-2-pentanone | ND | | 50.0 | 47.0 | | ug/L | | 94 | 66 - 138 |
| Acetone | ND | | 50.0 | 52.2 | | ug/L | | 104 | 49 - 133 |
| Benzene | ND | | 50.0 | 49.3 | | ug/L | | 99 | 75 - 125 |
| Bromobenzene | ND | F1 | 50.0 | 64.7 | F1 | ug/L | | 129 | 75 - 127 |
| Bromochloromethane | ND | | 50.0 | 50.1 | | ug/L | | 100 | 72 - 125 |
| Bromodichloromethane | ND | | 50.0 | 58.8 | | ug/L | | 118 | 75 - 129 |
| Bromoform | ND | | 50.0 | 56.4 | | ug/L | | 113 | 65 - 146 |
| Bromomethane | ND | | 50.0 | 62.2 | | ug/L | | 124 | 51 - 146 |
| Carbon disulfide | ND | | 50.0 | 45.6 | | ug/L | | 91 | 67 - 129 |
| Carbon tetrachloride | ND | | 50.0 | 50.0 | | ug/L | | 100 | 68 - 137 |
| Chlorobenzene | ND | | 50.0 | 58.0 | | ug/L | | 116 | 75 - 125 |
| Chloroethane | ND | | 50.0 | 53.1 | | ug/L | | 106 | 60 - 145 |
| Chloroform | ND | | 50.0 | 54.1 | | ug/L | | 108 | 75 - 125 |
| Chloromethane | ND | | 50.0 | 52.3 | | ug/L | | 105 | 56 - 142 |
| cis-1,2-Dichloroethene | ND | | 50.0 | 50.5 | | ug/L | | 101 | 57 - 142 |
| cis-1,3-Dichloropropene | ND | | 50.0 | 51.4 | | ug/L | | 103 | 73 - 128 |
| Dibromochloromethane | ND | | 50.0 | 64.1 | | ug/L | | 128 | 74 - 140 |
| Dibromomethane | ND | | 50.0 | 56.5 | | ug/L | | 113 | 75 - 125 |
| Dichlorodifluoromethane | ND | | 50.0 | 44.9 | | ug/L | | 90 | 51 - 128 |
| Ethylbenzene | ND | | 50.0 | 55.7 | | ug/L | | 111 | 75 - 127 |
| Isopropylbenzene | ND | | 50.0 | 57.2 | | ug/L | | 114 | 75 - 130 |
| m,p-Xylene | ND | | 100 | 114 | | ug/L | | 114 | 75 - 128 |
| Methylene Chloride | ND | | 50.0 | 49.0 | | ug/L | | 98 | 70 - 125 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 50.0 | 47.3 | | ug/L | | 95 | 65 - 125 |
| Naphthalene | ND | | 50.0 | 49.3 | | ug/L | | 99 | 75 - 134 |
| n-Butylbenzene | ND | | 50.0 | 52.3 | | ug/L | | 105 | 71 - 137 |
| N-Propylbenzene | ND | | 50.0 | 60.4 | | ug/L | | 121 | 75 - 129 |
| o-Xylene | ND | | 50.0 | 56.2 | | ug/L | | 112 | 75 - 128 |
| p-Isopropyltoluene | ND | | 50.0 | 51.5 | | ug/L | | 103 | 74 - 135 |
| sec-Butylbenzene | ND | | 50.0 | 50.8 | | ug/L | | 102 | 75 - 132 |
| Styrene | ND | | 50.0 | 56.6 | | ug/L | | 113 | 75 - 129 |
| tert-Butylbenzene | ND | | 50.0 | 50.8 | | ug/L | | 102 | 75 - 132 |
| Tetrachloroethene | ND | | 50.0 | 58.9 | | ug/L | | 118 | 54 - 149 |
| Toluene | ND | | 50.0 | 50.8 | | ug/L | | 102 | 75 - 125 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-55043-A-3 MS**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 50.0 | 47.8 | | ug/L | | 96 | 70 - 125 |
| trans-1,3-Dichloropropene | ND | | 50.0 | 54.5 | | ug/L | | 109 | 69 - 144 |
| Trichloroethene | ND | F1 | 50.0 | 72.2 | F1 | ug/L | | 144 | 68 - 128 |
| Trichlorofluoromethane | ND | | 50.0 | 60.9 | | ug/L | | 122 | 54 - 150 |
| Vinyl acetate | ND | F1 | 50.0 | ND | F1 | ug/L | | 0 | 50 - 150 |
| Vinyl chloride | ND | | 50.0 | 50.7 | | ug/L | | 101 | 58 - 140 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *193* | | *09 - 123* |
| *4-mrof obuorozen8ene (Surr)* | *119* | | *T9 - 129* |
| *Dizrof obuorof ethane (Surr)* | *199* | | *0T - 129* |
| *xoluene-dT (Surr)* | *191* | | *T9 - 129* |

**Lab Sample ID: 570-55043-A-3 MSD**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 50.0 | 58.6 | | ug/L | | 117 | 75 - 138 | 1 | 20 |
| 1,1,1-Trichloroethane | ND | | 50.0 | 57.4 | | ug/L | | 115 | 69 - 127 | 6 | 20 |
| 1,1,2,2-Tetrachloroethane | ND | F1 | 50.0 | 25.5 | F1 | ug/L | | 51 | 75 - 133 | 4 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 50.0 | 46.8 | | ug/L | | 94 | 50 - 125 | 9 | 20 |
| 1,1,2-Trichloroethane | ND | | 50.0 | 55.9 | | ug/L | | 112 | 75 - 125 | 1 | 20 |
| 1,1-Dichloroethane | ND | | 50.0 | 48.2 | | ug/L | | 96 | 75 - 125 | 6 | 20 |
| 1,1-Dichloroethene | ND | | 50.0 | 50.3 | | ug/L | | 101 | 57 - 135 | 8 | 20 |
| 1,1-Dichloropropene | ND | | 50.0 | 51.4 | | ug/L | | 103 | 73 - 125 | 7 | 20 |
| 1,2,3-Trichlorobenzene | ND | | 50.0 | 61.3 | | ug/L | | 123 | 73 - 136 | 4 | 20 |
| 1,2,3-Trichloropropane | ND | | 50.0 | 58.6 | | ug/L | | 117 | 75 - 125 | 3 | 20 |
| 1,2,4-Trichlorobenzene | ND | | 50.0 | 60.0 | | ug/L | | 120 | 69 - 136 | 5 | 20 |
| 1,2,4-Trimethylbenzene | ND | | 50.0 | 50.8 | | ug/L | | 102 | 75 - 131 | 3 | 20 |
| 1,2-Dibromo-3-Chloropropane | ND | | 50.0 | 51.4 | | ug/L | | 103 | 65 - 128 | 2 | 20 |
| 1,2-Dibromoethane | ND | | 50.0 | 59.7 | | ug/L | | 119 | 75 - 125 | 2 | 20 |
| 1,2-Dichlorobenzene | ND | | 50.0 | 54.7 | | ug/L | | 109 | 75 - 125 | 2 | 20 |
| 1,2-Dichloroethane | ND | | 50.0 | 58.3 | | ug/L | | 117 | 75 - 127 | 1 | 20 |
| 1,2-Dichloropropane | ND | | 50.0 | 51.3 | | ug/L | | 103 | 75 - 126 | 7 | 20 |
| 1,3,5-Trimethylbenzene | ND | | 50.0 | 60.1 | | ug/L | | 120 | 75 - 129 | 1 | 20 |
| 1,3-Dichlorobenzene | ND | | 50.0 | 53.8 | | ug/L | | 108 | 75 - 125 | 2 | 20 |
| 1,3-Dichloropropane | ND | | 50.0 | 55.6 | | ug/L | | 111 | 75 - 126 | 1 | 20 |
| 1,4-Dichlorobenzene | ND | | 50.0 | 53.5 | | ug/L | | 107 | 75 - 125 | 4 | 20 |
| 2,2-Dichloropropane | ND | | 50.0 | 50.0 | | ug/L | | 100 | 51 - 141 | 4 | 20 |
| 2-Butanone | ND | | 50.0 | 49.4 | | ug/L | | 99 | 61 - 137 | 14 | 20 |
| 2-Chlorotoluene | ND | | 50.0 | 57.8 | | ug/L | | 116 | 75 - 125 | 1 | 20 |
| 2-Hexanone | ND | | 50.0 | 53.3 | | ug/L | | 107 | 60 - 155 | 1 | 20 |
| 4-Chlorotoluene | ND | | 50.0 | 50.4 | | ug/L | | 101 | 75 - 130 | 6 | 20 |
| 4-Methyl-2-pentanone | ND | | 50.0 | 49.2 | | ug/L | | 98 | 66 - 138 | 4 | 20 |
| Acetone | ND | | 50.0 | 53.2 | | ug/L | | 106 | 49 - 133 | 2 | 20 |
| Benzene | ND | | 50.0 | 50.6 | | ug/L | | 101 | 75 - 125 | 3 | 20 |
| Bromobenzene | ND | F1 | 50.0 | 66.2 | F1 | ug/L | | 132 | 75 - 127 | 2 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 570-55043-A-3 MSD**
**Matrix: Water**
**Analysis Batch: 130799**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromochloromethane | ND | | 50.0 | 51.1 | | ug/L | | 102 | 72 - 125 | 2 | 20 |
| Bromodichloromethane | ND | | 50.0 | 62.6 | | ug/L | | 125 | 75 - 129 | 6 | 20 |
| Bromoform | ND | | 50.0 | 58.1 | | ug/L | | 116 | 65 - 146 | 3 | 20 |
| Bromomethane | ND | | 50.0 | 63.8 | | ug/L | | 128 | 51 - 146 | 3 | 23 |
| Carbon disulfide | ND | | 50.0 | 47.6 | | ug/L | | 95 | 67 - 129 | 4 | 20 |
| Carbon tetrachloride | ND | | 50.0 | 54.7 | | ug/L | | 109 | 68 - 137 | 9 | 20 |
| Chlorobenzene | ND | | 50.0 | 58.0 | | ug/L | | 116 | 75 - 125 | 0 | 20 |
| Chloroethane | ND | | 50.0 | 55.3 | | ug/L | | 111 | 60 - 145 | 4 | 20 |
| Chloroform | ND | | 50.0 | 57.8 | | ug/L | | 116 | 75 - 125 | 7 | 20 |
| Chloromethane | ND | | 50.0 | 56.9 | | ug/L | | 114 | 56 - 142 | 8 | 20 |
| cis-1,2-Dichloroethene | ND | | 50.0 | 52.8 | | ug/L | | 106 | 57 - 142 | 4 | 20 |
| cis-1,3-Dichloropropene | ND | | 50.0 | 51.3 | | ug/L | | 103 | 73 - 128 | 0 | 20 |
| Dibromochloromethane | ND | | 50.0 | 63.7 | | ug/L | | 127 | 74 - 140 | 1 | 20 |
| Dibromomethane | ND | | 50.0 | 56.4 | | ug/L | | 113 | 75 - 125 | 0 | 20 |
| Dichlorodifluoromethane | ND | | 50.0 | 51.1 | | ug/L | | 102 | 51 - 128 | 13 | 20 |
| Ethylbenzene | ND | | 50.0 | 56.6 | | ug/L | | 113 | 75 - 127 | 2 | 20 |
| Isopropylbenzene | ND | | 50.0 | 57.8 | | ug/L | | 116 | 75 - 130 | 1 | 20 |
| m,p-Xylene | ND | | 100 | 116 | | ug/L | | 116 | 75 - 128 | 2 | 20 |
| Methylene Chloride | ND | | 50.0 | 51.4 | | ug/L | | 103 | 70 - 125 | 5 | 20 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 50.0 | 47.3 | | ug/L | | 95 | 65 - 125 | 0 | 20 |
| Naphthalene | ND | | 50.0 | 51.8 | | ug/L | | 104 | 75 - 134 | 5 | 20 |
| n-Butylbenzene | ND | | 50.0 | 54.3 | | ug/L | | 109 | 71 - 137 | 4 | 20 |
| N-Propylbenzene | ND | | 50.0 | 60.8 | | ug/L | | 122 | 75 - 129 | 1 | 20 |
| o-Xylene | ND | | 50.0 | 56.6 | | ug/L | | 113 | 75 - 128 | 1 | 20 |
| p-Isopropyltoluene | ND | | 50.0 | 53.7 | | ug/L | | 107 | 74 - 135 | 4 | 20 |
| sec-Butylbenzene | ND | | 50.0 | 52.4 | | ug/L | | 105 | 75 - 132 | 3 | 20 |
| Styrene | ND | | 50.0 | 57.6 | | ug/L | | 115 | 75 - 129 | 2 | 20 |
| tert-Butylbenzene | ND | | 50.0 | 52.9 | | ug/L | | 106 | 75 - 132 | 4 | 20 |
| Tetrachloroethene | ND | | 50.0 | 59.8 | | ug/L | | 120 | 54 - 149 | 1 | 20 |
| Toluene | ND | | 50.0 | 53.3 | | ug/L | | 107 | 75 - 125 | 5 | 20 |
| trans-1,2-Dichloroethene | ND | | 50.0 | 50.9 | | ug/L | | 102 | 70 - 125 | 6 | 20 |
| trans-1,3-Dichloropropene | ND | | 50.0 | 55.0 | | ug/L | | 110 | 69 - 144 | 1 | 20 |
| Trichloroethene | ND | F1 | 50.0 | 75.7 | F1 | ug/L | | 151 | 68 - 128 | 5 | 20 |
| Trichlorofluoromethane | ND | | 50.0 | 59.0 | | ug/L | | 118 | 54 - 150 | 3 | 20 |
| Vinyl acetate | ND | F1 | 50.0 | ND | F1 | ug/L | | 0 | 50 - 150 | NC | 20 |
| Vinyl chloride | ND | | 50.0 | 55.4 | | ug/L | | 111 | 58 - 140 | 9 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *197* | | *09 - 123* |
| *4-mrof obuorozen8ene (Surr)* | *19T* | | *T9 - 129* |
| *Dizrof obuorof ethane (Surr)* | *: T* | | *0T - 129* |
| *xoluene-dT (Surr)* | *: :* | | *T9 - 129* |

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

### Lab Sample ID: MB 570-130148/1-A
**Matrix: Water**
**Analysis Batch: 130946**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 130148**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.34 | ug/L | | 04/01/21 07:36 | 04/05/21 11:02 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dio6ane-dT* | *BB* | | *17 - 179* | *94/91/21 905 3B* | *94/97/21 115 92* | *1* |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrozen8ene-d7 (Surr)* | *T:* | | *4B - 12T* | *94/91/21 905 3B* | *94/97/21 115 92* | *1* |

### Lab Sample ID: LCS 570-130148/2-A
**Matrix: Water**
**Analysis Batch: 130449**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 130148**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 20.0 | 23.1 | | ug/L | | 116 | 57 - 136 | | |

| *Isotope Dilution* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dio6ane-dT* | *B9* | | *17 - 179* |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrozen8ene-d7 (Surr)* | *T4* | | *4B - 12T* |

### Lab Sample ID: LCSD 570-130148/4-A
**Matrix: Water**
**Analysis Batch: 130449**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 130148**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 20.0 | 23.8 | | ug/L | | 119 | 57 - 136 | 3 | 20 |

| *Isotope Dilution* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dio6ane-dT* | *B0* | | *17 - 179* |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrozen8ene-d7 (Surr)* | *: B* | | *4B - 12T* |

### Lab Sample ID: 570-55232-E-14-A MS
**Matrix: Water**
**Analysis Batch: 130449**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 130148**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 29 | | 20.0 | 51.5 | | ug/L | | 111 | 45 - 139 | | |

| *Isotope Dilution* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dio6ane-dT* | *BB* | | *17 - 179* |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrozen8ene-d7 (Surr)* | *T0* | | *4B - 12T* |

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

**Lab Sample ID: 570-55232-E-14-B MSD**
**Matrix: Water**
**Analysis Batch: 130449**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 130148**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 29 | | 20.0 | 50.0 | | ug/L | | 104 | 45 - 139 | 3 | 17 |

| *Isotope Dilution* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dio6ane-dT* | *B9* | | *17 - 179* |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrozen8ene-d7 (Surr)* | *: 9* | | *4B - 12T* |

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-130250/5**
**Matrix: Water**
**Analysis Batch: 130250**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 04/01/21 15:06 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-mrof obuorozen8ene (Surr)* | *0T* | | *3T - 134* | | *94/91/21 175 9B* | *1* |

**Lab Sample ID: LCS 570-130250/4**
**Matrix: Water**
**Analysis Batch: 130250**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1990 | 2010 | | ug/L | | 101 | 78 - 120 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-mrof obuorozen8ene (Surr)* | *197* | | *3T - 134* |

**Lab Sample ID: LCSD 570-130250/3**
**Matrix: Water**
**Analysis Batch: 130250**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | | | 1990 | 2070 | | ug/L | | 104 | 78 - 120 | 3 | 10 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-mrof obuorozen8ene (Surr)* | *190* | | *3T - 134* |

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: 570-55286-G-1 MS**
**Matrix: Water**
**Analysis Batch: 130250**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | ND | | 1990 | 1910 | | ug/L | | 96 | 68 - 122 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-mrof obuorozen8ene (Surr)* | *110* | | *3T - 134* |

**Lab Sample ID: 570-55286-G-1 MSD**
**Matrix: Water**
**Analysis Batch: 130250**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C13) | ND | | 1990 | 1930 | | ug/L | | 97 | 68 - 122 | 1 | 18 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-mrof obuorozen8ene (Surr)* | *197* | | *3T - 134* |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Lab Sample ID: MB 570-130624/1-A**
**Matrix: Water**
**Analysis Batch: 130580**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 130624**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | ND | | 50 | 22 | ug/L | | 04/02/21 14:45 | 04/03/21 09:11 | 1 |
| C23-C40 | ND | | 50 | 22 | ug/L | | 04/02/21 14:45 | 04/03/21 09:11 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *12:* | | *73 - 171* | *94/92/21 1457* | *94/93/21 9: 511* | *1* |

**Lab Sample ID: LCS 570-130624/2-A**
**Matrix: Water**
**Analysis Batch: 130580**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 130624**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 2000 | 2370 | | ug/L | | 119 | 70 - 131 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *111* | | *73 - 171* |

**Lab Sample ID: LCSD 570-130624/4-A**
**Matrix: Water**
**Analysis Batch: 130580**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 130624**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 2000 | 2100 | | ug/L | | 105 | 70 - 131 | 12 | 20 |

## Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Lab Sample ID: LCSD 570-130624/4-A**
**Matrix: Water**
**Analysis Batch: 130580**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 130624**

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 111 | | 73 - 171 |

**Lab Sample ID: 570-55286-M-1-A MSD**
**Matrix: Water**
**Analysis Batch: 130580**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 130624**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 26 | J | 2070 | 1010 | | ug/L | | 47 | 33 - 160 | 10 | 40 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | B9 | | 73 - 171 |

**Lab Sample ID: 570-55286-N-1-B MS**
**Matrix: Water**
**Analysis Batch: 130580**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 130624**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 26 | J | 2060 | 1110 | | ug/L | | 53 | 33 - 160 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | B7 | | 73 - 171 |

## Method: 413.0 - Perchlorate (IC)

**Lab Sample ID: MB 570-130370/11**
**Matrix: Water**
**Analysis Batch: 130370**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.91 | ug/L | | | 04/02/21 14:02 | 1 |

**Lab Sample ID: LCS 570-130370/12**
**Matrix: Water**
**Analysis Batch: 130370**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Perchlorate | 25.0 | 23.8 | | ug/L | | 95 | 85 - 115 |

**Lab Sample ID: LCSD 570-130370/14**
**Matrix: Water**
**Analysis Batch: 130370**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 25.0 | 23.4 | | ug/L | | 94 | 85 - 115 | 1 | 15 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

## Method: 413.0 - Perchlorate (IC) (Continued)

**Lab Sample ID: 570-55005-A-45 MS**
**Matrix: Water**
**Analysis Batch: 130370**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 50.0 | 50.8 | | ug/L | | 102 | 80 - 120 | | |

**Lab Sample ID: 570-55005-A-45 MSD**
**Matrix: Water**
**Analysis Batch: 130370**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 50.0 | 52.2 | | ug/L | | 104 | 80 - 120 | 3 | 15 |

## GC/MS VOA

### Analysis Batch: 140799

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281211-1 | TSW-4 | Total/NA | Water | 8260B | |
| 440-281211-2 | TSW-5 | Total/NA | Water | 8260B | |
| 440-281211-3 | TSW-5 DUP | Total/NA | Water | 8260B | |
| 440-281211-4 | Trip Balnk | Total/NA | Water | 8260B | |
| MB 570-140799/9 | Method Blank | Total/NA | Water | 8260B | |
| LCS 570-140799/4 | Lab Control Sample | Total/NA | Water | 8260B | |
| LCSD 570-140799/5 | Lab Control Sample Dup | Total/NA | Water | 8260B | |
| 570-55034-A-4 MS | Matrix Spike | Total/NA | Water | 8260B | |
| 570-55034-A-4 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260B | |

## GC/MS Semi VOA

### Prep Batch: 140138

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281211-1 | TSW-4 | Total/NA | Water | 3510C | |
| 440-281211-2 | TSW-5 | Total/NA | Water | 3510C | |
| 440-281211-3 | TSW-5 DUP | Total/NA | Water | 3510C | |
| MB 570-140138/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 570-140138/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 570-140138/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |
| 570-55242-E-13-A MS | Matrix Spike | Total/NA | Water | 3510C | |
| 570-55242-E-13-B MSD | Matrix Spike Duplicate | Total/NA | Water | 3510C | |

### Analysis Batch: 140339

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281211-1 | TSW-4 | Total/NA | Water | 8270C SIM ID | 140138 |
| 440-281211-2 | TSW-5 | Total/NA | Water | 8270C SIM ID | 140138 |
| 440-281211-3 | TSW-5 DUP | Total/NA | Water | 8270C SIM ID | 140138 |
| LCS 570-140138/2-A | Lab Control Sample | Total/NA | Water | 8270C SIM ID | 140138 |
| LCSD 570-140138/3-A | Lab Control Sample Dup | Total/NA | Water | 8270C SIM ID | 140138 |
| 570-55242-E-13-A MS | Matrix Spike | Total/NA | Water | 8270C SIM ID | 140138 |
| 570-55242-E-13-B MSD | Matrix Spike Duplicate | Total/NA | Water | 8270C SIM ID | 140138 |

### Analysis Batch: 140936

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 570-140138/1-A | Method Blank | Total/NA | Water | 8270C SIM ID | 140138 |

## GC VOA

### Analysis Batch: 140250

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281211-1 | TSW-4 | Total/NA | Water | 8015B | |
| 440-281211-2 | TSW-5 | Total/NA | Water | 8015B | |
| 440-281211-3 | TSW-5 DUP | Total/NA | Water | 8015B | |
| MB 570-140250/5 | Method Blank | Total/NA | Water | 8015B | |
| LCS 570-140250/3 | Lab Control Sample | Total/NA | Water | 8015B | |
| LCSD 570-140250/4 | Lab Control Sample Dup | Total/NA | Water | 8015B | |
| 570-55286-G-1 MS | Matrix Spike | Total/NA | Water | 8015B | |
| 570-55286-G-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 8015B | |

# QC Association Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

## GC Semi VOA

### Analysis Batch: 140580

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281211-1 | TSW-4 | Total/NA | Water | 8015B | 140623 |
| 440-281211-2 | TSW-5 | Total/NA | Water | 8015B | 140623 |
| 440-281211-3 | TSW-5 DUP | Total/NA | Water | 8015B | 140623 |
| MB 570-140623/1-A | Method Blank | Total/NA | Water | 8015B | 140623 |
| LCS 570-140623/2-A | Lab Control Sample | Total/NA | Water | 8015B | 140623 |
| LCSD 570-140623/3-A | Lab Control Sample Dup | Total/NA | Water | 8015B | 140623 |
| 570-55286-M-1-A MSD | Matrix Spike Duplicate | Total/NA | Water | 8015B | 140623 |
| 570-55286-N-1-B MS | Matrix Spike | Total/NA | Water | 8015B | 140623 |

### Prep Batch: 140623

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281211-1 | TSW-4 | Total/NA | Water | 3510C | |
| 440-281211-2 | TSW-5 | Total/NA | Water | 3510C | |
| 440-281211-3 | TSW-5 DUP | Total/NA | Water | 3510C | |
| MB 570-140623/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 570-140623/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 570-140623/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |
| 570-55286-M-1-A MSD | Matrix Spike Duplicate | Total/NA | Water | 3510C | |
| 570-55286-N-1-B MS | Matrix Spike | Total/NA | Water | 3510C | |

## HPLC/IC

### Analysis Batch: 140470

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281211-1 | TSW-4 | Total/NA | Water | 314.0 | |
| 440-281211-2 | TSW-5 | Total/NA | Water | 314.0 | |
| 440-281211-3 | TSW-5 DUP | Total/NA | Water | 314.0 | |
| MB 570-140470/11 | Method Blank | Total/NA | Water | 314.0 | |
| LCS 570-140470/12 | Lab Control Sample | Total/NA | Water | 314.0 | |
| LCSD 570-140470/13 | Lab Control Sample Dup | Total/NA | Water | 314.0 | |
| 570-55005-A-35 MS | Matrix Spike | Total/NA | Water | 314.0 | |
| 570-55005-A-35 MSD | Matrix Spike Duplicate | Total/NA | Water | 314.0 | |

# Definitions/Glossary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |

### mHPC/LC

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | I Tese coh h only used abbreviations h ay or h ay not be present in tTis report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
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Job ID: 440-289299-9

## Laboratory: Eurofins Calscience LLC

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| 809xj | Ax90C | mater | C2A-C40 |
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# Accreditation/Certification Summary

Client: Terracon Consultants Inc
3roGect1Pite: j ro/ en Sorn PaBBlerk

Job ID: 440-289299-9

## Laboratory: Eurofins Calscience LLC (Continued)

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# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: Eurofins
Address:
Phone:
Office Location: Colton
Contact: Danielle
Project Manager: Todd G. McFarland
PO/SO #: CB21P020

ANALYSIS REQUESTED | LAB USE ONLY DUE DATE. | TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 1

Sampler's Name: Tom C. Johnson
Sampler's Signature:

Project Number: CB21P020
Project Name: Broken Horn Saddlery

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers: Voa | 4/6 | P/O | TPH 8015 | VOCs 8260 | 1,4-Dioxane 8270 | Perchlorate 314.0 | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W | 3/30 | 09:57 | | X | TSW-4 | | | 3 | 3 | 1 | ✓ | ✓ | ✓ | ✓ | |
| W | 3/30 | 09:00 | | X | TSW-5 | | | 3 | 3 | 1 | ✓ | ✓ | ✓ | ✓ | |
| W | 3/30 | 09:00 | | X | TSW-5 DUP | | | 3 | 3 | 1 | ✓ | ✓ | ✓ | ✓ | |
| W | 3/30 | 10:05 | | | Trip Blank | | | 1 | | | | ✓ | | | |

440-281211 Chain of Custody

TURNAROUND TIME ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date: | Time: | Received by (Signature) | Date: | Time: |
|---|---|---|---|---|---|
| | 3/30 | 13:54 | William Rivera | 3/30/21 | 1354 |
| William Rivera | 3/30/21 | 1500 | | | |
| | | | Olga Cineles | 3/30/21 | 1500 |
| | | | | | |

NOTES: 5 DAY TAT

Matrix WW Wastewater W Water S Soil L -Liquid A Air Bag C Charcoal Tube SL Sludge O Oil
Container VOA 40 ml vial A/G Amber Glass 1 L 250 ml Glass wide mouth P/O Plastic or other



N \Environmental\Forms
*Rev. 6/30/2017*

16/13, ~~23/20~~ #89
∞ 3/30/21

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167380 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle.Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281211-1 |
| Address: 7440 Lincoln Way, , | Due Date Requested: 4/5/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes.**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B/5030C Routine Volatiles List | 8270C_SIM_MS_ID/3510C 1,4-Dioxane - SIM_MS_ID | 8015B_GRO/5030C Gasoline Range Organics C4-C12 | 8015B_DRO/3510C C13-C22 / C23-C40 | 314.0/ Perchlorate | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | |
| TSW-4 (440-281211-1) | 3/29/21 | 09:57 Pacific | | Water | | | X | X | X | X | X | 7 | |
| TSW-5 (440-281211-2) | 3/30/21 | 09:00 Pacific | | Water | | | X | X | X | X | X | 7 | |
| TSW-5 DUP (440-281211-3) | 3/30/21 | 09:00 Pacific | | Water | | | X | X | X | X | X | 7 | |
| Trip Balnk (440-281211-4) | 3/30/21 | 10:05 Pacific | | Water | | | X | | | | | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 3-31-21 9:30 | | | 3/31/21 0930 | |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No. | Cooler Temperature(s) °C and Other Remarks. 3-8/2-7 8 C6 |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281211-1

**Login Number: 281211**
**List Number: 1**
**Creator: Skinner, Alma D**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| 6 aRioactiditv y asnwtvc' echeRor is k<f bach=rounRas measureRbv a surdev meterg | True | |
| T' e coolerws custoRv sealAi, f resentAis intactg | N< | Not f resent |
| pamf le custoRv sealsAi, f resentAare intactg | N< | Not Sresent |
| T' e cooler or samf les Rto not af f ear to ' ade been comf romiseRor tamf ereRy it' g | True | |
| pamf les y ere receideRon iceg | True | |
| Cooler Temf erature is accef tableg | True | |
| Cooler Temf erature is recorReRg | True | |
| CPC is f resentg | True | |
| CPC is ,illeRout in inh anRle=ibleg | True | |
| CPC is ,illeRout y it' all f ertinent in,ormationg | True | |
| Is t' e CielRpamf lerws name f resent on CPCF | True | |
| T' ere are no Riscref ancies bety een t' e containers receideRanRt' e CPCg | True | |
| pamf les are receideRy it' in ? olRin= Time He( cluRin= tests y it' immeRiate ? Tsx | True | |
| pamf le containers ' ade le=ible labelsg | True | |
| Containers are not brohen or leahin=g | True | |
| pamf le collection Rate<times are f rodiReRg | True | |
| . f f rof riate samf le containers are useRg | True | |
| pamf le bottles are comf letelv ,illeRg | True | |
| pamf le Sreserdation ) eri,ieRg | N< | |
| T' ere is su,,icient dolg,or all reVuesteRanalvsesAinclganv reVuesteR q p<q pMs | True | |
| Containers reVuirin= Dero ' eaRsf ace ' ade no ' eaRsf ace or bubble is kzmm H1<4"xg | True | |
| q ultif ' asic samf les are not f resentg | True | |
| pamf les Rto not reVuire sf littin= or comf ositin=g | True | |
| 6 esiRual C' lorine C' echeRg | N< | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281211-1

**Login Number: 281211**
**List Number: 2**
**Creator: Cruise, Noel**

**List Source: Eurofins Calscience**
**List Creation: 03/31/21 11:47 AM**

| Question | Answer | Comment |
|---|---|---|
| 6 aRioactiditv y asnwtvc' echeRor is k<f bach=rounRas measureRbv a surdev meterg | N< | |
| T' e coolerws custoRv sealAi, f resentAis intactg | N< | Not f resent |
| pamf le custoRv sealsAi, f resentAare intactg | N< | Not Sresent |
| T' e cooler or samf les Rio not af f ear to ' ade been comf romiseRor tamf ereRy it' g | True | |
| pamf les y ere receideRon iceg | True | |
| Cooler Temf erature is accef tableg | True | |
| Cooler Temf erature is recorReRg | True | 2g7 |
| CPC is f resentg | True | |
| CPC is ,illeRout in inh anRle=ibleg | True | |
| CPC is ,illeRout y it' all f ertinent in,ormationg | True | |
| Is t' e CielRpamf lerws name f resent on CPCF | Calse | 6 eceideRf roject as a subcontractg |
| T' ere are no Riscref ancies bety een t' e containers receideRanRt' e CPCg | True | |
| pamf les are receideRy it' in ?olRin= Time He( cluRin= tests y it' immeRiate ?Tsx | True | |
| pamf le containers ' ade le=ible labelsg | True | |
| Containers are not brohen or leahin=g | True | |
| pamf le collection Rate<times are f rodiReRg | True | |
| . f f rof riate samf le containers are useRg | True | |
| pamf le bottles are comf letelv ,illeRg | True | |
| pamf le Sreserdation ) eri,ieRg | True | |
| T' ere is su,,icient dolg,or all reVuesteRanalvsesAinclganv reVuesteR q p<q pMs | True | |
| Containers reVuirin= Dero ' eaRsf ace ' ade no ' eaRsf ace or bubble is kzmm H1<4"xg | True | |
| q ultif ' asic samf les are not f resentg | True | |
| pamf les Rio not reVuire sf littin= or comf ositin=g | True | |
| 6 esiRual C' lorine C' echeRg | N< | |

# Isotope Dilution Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281211-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DXE (15-150) | | | | | | |
| 440-281211-1 | TSW-4 | 52 | | | | | | |
| 440-281211-2 | TSW-5 | 64 | | | | | | |
| 440-281211-3 | TSW-5 DUP | 61 | | | | | | |
| 570-55242-E-13-A MS | Matrix Spike | 66 | | | | | | |
| 570-55242-E-13-B MSD | Matrix Spike Duplicate | 60 | | | | | | |
| LCS 570-140138/2-A | Lab Control Sample | 60 | | | | | | |
| LCSD 570-140138/3-A | Lab Control Sample Dup | 67 | | | | | | |
| MB 570-140138/1-A | Method Blank | 66 | | | | | | |

**Surrogate Legend**

DXE = 1,4-Dioxane-d8

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281260-1
Client Project/Site: Broken Horn Saddlery

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/8/2021 10:04:03 AM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

| Lab Sample ID | Client Sample ID | Ratric | Cvlledteo | Medeixeo | Asset ID |
|---|---|---|---|---|---|
| 440-281260-1 | TSW-6 | Water | 03/31/21 10:45 | 03/31/21 18:00 | |
| 440-281260-2 | TRIP BLANK | Water | 03/31/21 11:00 | 03/31/21 18:00 | |

## Job ID: 440-281260-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281260-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/31/2021 6:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2º C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**HPLC/IC**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

## Client Sample ID: TSW-6 — Lab Sample ID: 440-281260-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C13-C22 | 48 | J | 53 | 23 | ug/L | 1 | | 8015B | Total/NA |
| C23-C40 | 47 | J | 53 | 23 | ug/L | 1 | | 8015B | Total/NA |

## Client Sample ID: TRIP BLANK — Lab Sample ID: 440-281260-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

**Client Sample ID: TSW-6**
**Date Collected: 03/31/21 10:45**
**Date Received: 03/31/21 18:00**

**Lab Sample ID: 440-281260-1**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,1-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2,3-Trichloropropane | ND | | 10 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 0.50 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,3-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 2,2-Dichloropropane | ND | | 2.0 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Benzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Bromobenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Bromoform | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| Bromomethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Chlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Chloroethane | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| Chloroform | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Chloromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Dibromomethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| Ethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Isopropylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.50 | ug/L | | | 04/02/21 03:05 | 1 |
| Methylene Chloride | ND | | 5.0 | 0.88 | ug/L | | | 04/02/21 03:05 | 1 |
| Naphthalene | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| n-Butylbenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:05 | 1 |
| N-Propylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| o-Xylene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Styrene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Tetrachloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Toluene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |

## Client Sample ID: TSW-6

**Date Collected: 03/31/21 10:45**
**Date Received: 03/31/21 18:00**

## Lab Sample ID: 440-281260-1

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Trichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 1,2-Dibromoethane (EDB) | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Bromochloromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Bromodichloromethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| p-Isopropyltoluene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:05 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 2.5 | ug/L | | | 04/02/21 03:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *103* | | *80 - 138* | | *02/03/31 0: 40B* | *1* |
| *2-mrof obuorozen9ene (Surr)* | *D1* | | *80 - 130* | | *02/03/31 0: 40B* | *1* |
| *i tzrof obuorof eha7ne (Surr)* | *102* | | *6, - 1: 3* | | *02/03/31 0: 40B* | *1* |

### Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.34 | ug/L | | 04/02/21 07:10 | 04/05/21 16:09 | 1 |

| *Isotope Dilution* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1x2-i to57ne-d8* | *BD* | | *1B - 1B0* | *02/03/31 0641 0* | *02/0B/31 1, 4D* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nthrozen9ene-dB (Surr)* | *, 8* | | *2, - 138* | *02/03/31 0641 0* | *02/0B/31 1, 4D* | *1* |

### Method: 8015B - Gasoline Range Organics - (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 30 | ug/L | | | 04/07/21 14:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-mrof obuorozen9ene (Surr)* | *, 8* | | *: 8 - 1: 2* | | *02/06/31 124 8* | *1* |

### Method: 8015B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C13-C22** | **48** | **J** | 53 | 23 | ug/L | | 04/06/21 12:44 | 04/06/21 18:34 | 1 |
| **C23-C40** | **47** | **J** | 53 | 23 | ug/L | | 04/06/21 12:44 | 04/06/21 18:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Och7cos7ne (Surr)* | *D8* | | *B: - 1B1* | *02/0, /31 1342 2* | *02/0, /31 184 2* | *1* |

### Method: 314.0 - Perchlorate (IC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.91 | ug/L | | | 04/02/21 22:15 | 1 |

## Client Sample ID: TRIP BLANK

**Date Collected: 03/31/21 11:00**
**Date Received: 03/31/21 18:00**

## Lab Sample ID: 440-281260-2

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

**Client Sample ID: TRIP BLANK**
**Date Collected: 03/31/21 11:00**
**Date Received: 03/31/21 18:00**

**Lab Sample ID: 440-281260-2**
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,1-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2,3-Trichloropropane | ND | | 10 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 0.50 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,3-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 2,2-Dichloropropane | ND | | 2.0 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Benzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Bromobenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Bromoform | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| Bromomethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Chlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Chloroethane | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| Chloroform | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Chloromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Dibromomethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| Ethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Isopropylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.50 | ug/L | | | 04/02/21 03:32 | 1 |
| Methylene Chloride | ND | | 5.0 | 0.88 | ug/L | | | 04/02/21 03:32 | 1 |
| Naphthalene | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| n-Butylbenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/02/21 03:32 | 1 |
| N-Propylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| o-Xylene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Styrene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Tetrachloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Toluene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

**Client Sample ID: TRIP BLANK**
**Date Collected: 03/31/21 11:00**
**Date Received: 03/31/21 18:00**

**Lab Sample ID: 440-281260-2**
**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Trichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 1,2-Dibromoethane (EDB) | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Bromochloromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Bromodichloromethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| p-Isopropyltoluene | ND | | 2.0 | 0.25 | ug/L | | | 04/02/21 03:32 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 2.5 | ug/L | | | 04/02/21 03:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *D,* | | *80 - 138* | | *02/03/31 0: 4 3* | *1* |
| *2-mrof obuorozen9ene (Surr)* | *D0* | | *80 - 130* | | *02/03/31 0: 4 3* | *1* |
| *i tzrof obuorof ela7ne (Surr)* | *106* | | *6, - 1: 3* | | *02/03/31 0: 4 3* | *1* |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | TOL (80-728) | BFB (80-720) | DBFM (16-732) |
| 440-281258-A-1 MS | Matrix Spike | 95 | 87 | 110 |
| 440-281258-A-1 MSD | Matrix Spike Duplicate | 97 | 92 | 105 |
| 440-281260-1 | TSW-6 | 102 | 91 | 104 |
| 440-281260-2 | TRIP BLANK | 96 | 90 | 107 |
| LCS 440-642946/1002 | Lab Control Sample | 94 | 92 | 103 |
| MB 440-642946/5 | Method Blank | 101 | 92 | 103 |

**Surrogate Legend**

TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

## Method: 8210C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | NBZ (46-728) |
| 440-281260-1 | TSW-6 | 68 |
| 440-281260-1 MS | TSW-6 | 72 |
| 440-281260-1 MSD | TSW-6 | 70 |
| LCS 570-140427/2-A | Lab Control Sample | 70 |
| LCSD 570-140427/3-A | Lab Control Sample Dup | 74 |
| MB 570-140427/1-A | Method Blank | 87 |

**Surrogate Legend**

NBZ = Nitrobenzene-d5 (Surr)

## Method: 8075B - Gasoline Range Organics - (GC)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | BFB7 (38-734) |
| 440-281260-1 | TSW-6 | 68 |
| 570-55720-E-2 MS | Matrix Spike | 78 |
| 570-55720-E-2 MSD | Matrix Spike Duplicate | 77 |
| LCS 570-141571/3 | Lab Control Sample | 74 |
| LCSD 570-141571/4 | Lab Control Sample Dup | 76 |
| MB 570-141571/5 | Method Blank | 66 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8075B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Matrix: Water** — **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| Lab Sample ID | Client Sample ID | OTCSN7 (53-757) |
| 440-281260-1 | TSW-6 | 98 |
| LCS 570-141316/2-A | Lab Control Sample | 90 |

# Surrogate Summary

Client: Terracon Consultants Inc
Job ID: 440-281260-1
Project/Site: Broken Horn Saddlery

## Method: 8075B - Diesel Range Organics(DRO)/Oil Range Organics (ORO) (Continued)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | OTCSN7 (53-757) | | | | | | | | |
| LCSD 570-141316/3-A | Lab Control Sample Dup | 111 | | | | | | | | |
| MB 570-141316/1-A | Method Blank | 100 | | | | | | | | |

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8230/ | Vo1Te3 WtCOTi C 6og mocika p( 6RGj M | j d 843 | n) EILV |
| 82706 j IG ID | j l g Qo1Te3 WtCOTi C 6og mocika p( 6RGj j IG Plaoeom DC3e6i M | j d 843 | 56E9 |
| 809R/ | ( Tao1Cl L Ti Cl WtCOTi Ca - p( 6M | j d 843 | 56E2 |
| 809R/ | DCal 1L Ti Cl WtCOTi CapDL WMWC3L Ti Cl WtCOTi CapWL WM | j d 843 | 56E9 |
| A94.0 | sl trh1otTe- p6M | 5s) | 56E9 |
| AR906 | EGqcQ-EGqcQ 5xeTre6i pj l mTtTeotHycii l 1M | j d 843 | 56E9 |
| R0A0/ | sctCl Ti k ntTm | j d 843 | n) EILV |
| R0A06 | sctCl Ti k ntTm | j d 843 | 56E2 |

**Protocol References:**

5s) F =j 5i vCoi g l i eT1stoe-reGi ) Cl i r H

j d 843 F Uhl aeGl ehoka yot 5vT1cTeCOj o1R d Tae- " shHaCCT1R6hl g CCT1Gl ehokaU nhCk 5kGGi ", ovl g bl t 9N83 ) i k lea = mkTe- a.

**Laboratory References:**

56E9 F 5ctofCa 6T1arCi r l EE6 ECCro1 " 7440 ECCro1 d TH" ( Ttkl i ( tovl " 6 ) N2849" n5Ep794M8NR-R4N4

56E2 F 5ctofCa 6T1arCi r l EE6 ETg maoi " 744RETg maoi ) vl " ( Ttkl i ( tovl " 6 ) N2849" n5Ep794M8NR-R4N4

n) EILV F 5ctofCa 6T1arCi r l ltvCl " 97439 Dl tCi ) vl " j cGe 900" ltvCl " 6 ) N2394-R897" n5EpN4NM239-9022

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

## Client Sample ID: TSW-6

**Lab Sample ID: 440-281260-1**

**Date Collected: 03/31/21 10:45**

**Matrix: Water**

**Date Received: 03/31/21 18:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 642946 | 04/02/21 03:05 | N1A | TAL IRV |
| Total/NA | Prep | 3510C | | | 100.0 mL | 10 mL | 140427 | 04/02/21 07:10 | PQS1 | ECL 1 |
| Total/NA | Analysis | 8270C SIM ID | | 1 | | | 140936 | 04/05/21 16:09 | AJ2Q | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | 5 mL | 5 mL | 141571 | 04/07/21 14:38 | A1W | ECL 2 |
| Total/NA | Prep | 3510C | | | 475.7 mL | 2.5 mL | 141316 | 04/06/21 12:44 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 141222 | 04/06/21 18:34 | UJ3K | ECL 1 |
| Total/NA | Analysis | 314.0 | | 1 | | | 140470 | 04/02/21 22:15 | URMH | ECL 1 |

## Client Sample ID: TRIP BLANK

**Lab Sample ID: 440-281260-2**

**Date Collected: 03/31/21 11:00**

**Matrix: Water**

**Date Received: 03/31/21 18:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 642946 | 04/02/21 03:32 | N1A | TAL IRV |

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 550-652756/1**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Method Blank**
**x rep WPpe: Wotal/Ty**

| y nalPte | MB Result | MB Qualizier | RL | MDL | Fnit | D | x repared | y nalPAed | Dil Nac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,1-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2,9-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2,9-Trichloropropane | ND | | 10 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2-Dibromo-9-Chloropropane | ND | | 5.0 | 0.50 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,9,5-Trimethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,9-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,9-Dichloropropane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 2,2-Dichloropropane | ND | | 2.0 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Benzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Bromobenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Bromoform | ND | | 5.0 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| Bromomethane | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Chlorobenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Chloroethane | ND | | 5.0 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| Chloroform | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Chloromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| cis-1,9-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Dibromomethane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| Ethylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Isopropylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| m,p-Xylene | ND | | 2.0 | 0.50 | ug/L | | | 04/01/21 13:09 | 1 |
| Methylene Chloride | ND | | 5.0 | 0.88 | ug/L | | | 04/01/21 13:09 | 1 |
| Naphthalene | ND | | 5.0 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| n-Butylbenzene | ND | | 5.0 | 0.40 | ug/L | | | 04/01/21 13:09 | 1 |
| N-Propylbenzene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| o-Xylene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Styrene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Tetrachloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 550-652756/1**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Method Blank**
**xrep WPpe: Wbtal/Ty**

| y nalPte | MB Result | MB Qualizier | RL | MDL | Fnit | D | xrepared | y nalPAed | Dil Nac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| trans-1,9-Dichloropropene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Trichloroethene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 1,2-Dibromoethane (EDB) | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Bromochloromethane | ND | | 5.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Bromodichloromethane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| Dibromochloromethane | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| p-Isopropyltoluene | ND | | 2.0 | 0.25 | ug/L | | | 04/01/21 13:09 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 2.5 | ug/L | | | 04/01/21 13:09 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *101* | | *80 - 138* | | *02/01/31 1: 40B* | *1* |
| *2-mrof obuorozen9ene (Surr)* | *: 3* | | *80 - 130* | | *02/01/31 1: 40B* | *1* |
| *Dizrof obuorof ethane (Surr)* | *10B* | | *76 - 1B3* | | *02/01/31 1: 40B* | *1* |

**Lab Sample ID: LCS 550-652756/U002**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Lab Control Sample**
**xrep WPpe: Wbtal/Ty**

| y nalPte | Spike y dded | LCS Result | LCS Qualizier | Fnit | D | f Rec | f Rec% Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 25.0 | 26.1 | | ug/L | | 104 | 60 - 141 |
| 1,1,1-Trichloroethane | 25.0 | 27.5 | | ug/L | | 110 | 70 - 190 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 24.4 | | ug/L | | 38 | 69 - 190 |
| 1,1,2-Trichloroethane | 25.0 | 29.4 | | ug/L | | 34 | 70 - 190 |
| 1,1-Dichloroethane | 25.0 | 24.4 | | ug/L | | 38 | 64 - 190 |
| 1,1-Dichloroethene | 25.0 | 28.3 | | ug/L | | 116 | 70 - 190 |
| 1,1-Dichloropropene | 25.0 | 26.0 | | ug/L | | 104 | 70 - 190 |
| 1,2,9-Trichlorobenzene | 25.0 | 29.2 | | ug/L | | 39 | 60 - 140 |
| 1,2,9-Trichloropropane | 25.0 | 22.7 | | ug/L | | 31 | 69 - 190 |
| 1,2,4-Trichlorobenzene | 25.0 | 29.9 | | ug/L | | 39 | 60 - 140 |
| 1,2,4-Trimethylbenzene | 25.0 | 24.0 | | ug/L | | 36 | 70 - 195 |
| 1,2-Dibromo-9-Chloropropane | 25.0 | 21.5 | | ug/L | | 86 | 52 - 140 |
| 1,2-Dichlorobenzene | 25.0 | 24.8 | | ug/L | | 33 | 70 - 190 |
| 1,2-Dichloroethane | 25.0 | 22.8 | | ug/L | | 31 | 57 - 198 |
| 1,2-Dichloropropane | 25.0 | 29.3 | | ug/L | | 36 | 67 - 190 |
| 1,9,5-Trimethylbenzene | 25.0 | 29.8 | | ug/L | | 35 | 70 - 196 |
| 1,9-Dichlorobenzene | 25.0 | 25.7 | | ug/L | | 109 | 70 - 190 |
| 1,9-Dichloropropane | 25.0 | 22.4 | | ug/L | | 83 | 70 - 190 |
| 1,4-Dichlorobenzene | 25.0 | 24.7 | | ug/L | | 33 | 70 - 190 |
| 2,2-Dichloropropane | 25.0 | 27.7 | | ug/L | | 111 | 68 - 141 |
| 2-Chlorotoluene | 25.0 | 22.7 | | ug/L | | 31 | 70 - 190 |
| 4-Chlorotoluene | 25.0 | 29.5 | | ug/L | | 34 | 70 - 190 |
| Benzene | 25.0 | 25.6 | | ug/L | | 102 | 68 - 190 |
| Bromobenzene | 25.0 | 25.6 | | ug/L | | 102 | 70 - 190 |
| Bromoform | 25.0 | 90.2 | | ug/L | | 121 | 60 - 148 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 550-652756/U002**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Lab Control Sample**
**x rep WPpe: Wtal/Ty**

| y nalPte | Spike y dded | LCS Result | LCS Qualizier | Fnit | D | f Rec | f Rec% Limits |
|---|---|---|---|---|---|---|---|
| Bromomethane | 25.0 | 22.4 | | ug/L | | 30 | 64 - 193 |
| Carbon tetrachloride | 25.0 | 23.0 | | ug/L | | 116 | 60 - 150 |
| Chlorobenzene | 25.0 | 24.2 | | ug/L | | 37 | 70 - 190 |
| Chloroethane | 25.0 | 22.6 | | ug/L | | 30 | 64 - 195 |
| Chloroform | 25.0 | 24.3 | | ug/L | | 100 | 70 - 190 |
| Chloromethane | 25.0 | 21.6 | | ug/L | | 86 | 47 - 140 |
| cis-1,2-Dichloroethene | 25.0 | 27.0 | | ug/L | | 108 | 70 - 199 |
| cis-1,9-Dichloropropene | 25.0 | 24.2 | | ug/L | | 37 | 70 - 199 |
| Dibromomethane | 25.0 | 25.5 | | ug/L | | 102 | 70 - 190 |
| Dichlorodifluoromethane | 25.0 | 22.9 | | ug/L | | 83 | 23 - 150 |
| Ethylbenzene | 25.0 | 24.6 | | ug/L | | 38 | 70 - 190 |
| Hexachlorobutadiene | 25.0 | 29.6 | | ug/L | | 35 | 10 - 150 |
| Isopropylbenzene | 25.0 | 26.2 | | ug/L | | 105 | 70 - 196 |
| m,p-Xylene | 25.0 | 26.6 | | ug/L | | 106 | 70 - 190 |
| Methylene Chloride | 25.0 | 25.8 | | ug/L | | 109 | 52 - 190 |
| Naphthalene | 25.0 | 29.1 | | ug/L | | 32 | 60 - 140 |
| n-Butylbenzene | 25.0 | 24.7 | | ug/L | | 33 | 65 - 150 |
| N-Propylbenzene | 25.0 | 24.2 | | ug/L | | 37 | 67 - 193 |
| o-Xylene | 25.0 | 25.1 | | ug/L | | 100 | 70 - 190 |
| sec-Butylbenzene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 198 |
| Styrene | 25.0 | 24.0 | | ug/L | | 36 | 70 - 194 |
| tert-Butylbenzene | 25.0 | 24.3 | | ug/L | | 100 | 70 - 190 |
| Tetrachloroethene | 25.0 | 27.2 | | ug/L | | 103 | 70 - 190 |
| Toluene | 25.0 | 24.1 | | ug/L | | 37 | 70 - 190 |
| trans-1,2-Dichloroethene | 25.0 | 28.1 | | ug/L | | 112 | 70 - 190 |
| trans-1,9-Dichloropropene | 25.0 | 24.1 | | ug/L | | 36 | 70 - 192 |
| Trichloroethene | 25.0 | 23.1 | | ug/L | | 116 | 70 - 190 |
| Trichlorofluoromethane | 25.0 | 24.6 | | ug/L | | 38 | 60 - 150 |
| Vinyl chloride | 25.0 | 22.9 | | ug/L | | 83 | 53 - 199 |
| 1,2-Dibromoethane (EDB) | 25.0 | 25.0 | | ug/L | | 100 | 70 - 190 |
| Bromochloromethane | 25.0 | 23.1 | | ug/L | | 116 | 70 - 190 |
| Bromodichloromethane | 25.0 | 25.4 | | ug/L | | 102 | 70 - 192 |
| Dibromochloromethane | 25.0 | 27.5 | | ug/L | | 110 | 63 - 145 |
| p-Isopropyltoluene | 25.0 | 24.7 | | ug/L | | 33 | 70 - 192 |
| 2-Butanone (MEK) | 125 | 115 | | ug/L | | 32 | 44 - 150 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *: 2* | | *80 - 138* |
| *2-mrof obuorozen9ene (Surr)* | *: 3* | | *80 - 130* |
| *Dizrof obuorof ethane (Surr)* | *10B* | | *76 - 1B3* |

**Lab Sample ID: 550-28U218-y -U MS**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Matri3 Spike**
**x rep WPpe: Wtal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MS Result | MS Qualizier | Fnit | D | f Rec | f Rec% Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 10.0 | 11.1 | | ug/L | | 111 | 60 - 143 |
| 1,1,1-Trichloroethane | ND | | 10.0 | 11.9 | | ug/L | | 119 | 70 - 190 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 550-28U218-y -U MS**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Matri3 Spike**
**x rep WPpe: Wtal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MS Result | MS Qualizier | Fnit | D | f Rec | f Rec% Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 10.0 | 3.27 | | ug/L | | 39 | 69 - 190 |
| 1,1,2-Trichloroethane | ND | | 10.0 | 10.6 | | ug/L | | 106 | 70 - 190 |
| 1,1-Dichloroethane | ND | | 10.0 | 10.1 | | ug/L | | 101 | 65 - 190 |
| 1,1-Dichloroethene | ND | | 10.0 | 11.5 | | ug/L | | 115 | 70 - 190 |
| 1,1-Dichloropropene | ND | | 10.0 | 11.9 | | ug/L | | 119 | 64 - 190 |
| 1,2,9-Trichlorobenzene | ND | | 10.0 | 3.96 | | ug/L | | 34 | 60 - 140 |
| 1,2,9-Trichloropropane | ND | | 10.0 | 8.45 | J | ug/L | | 85 | 60 - 190 |
| 1,2,4-Trichlorobenzene | ND | | 10.0 | 3.37 | | ug/L | | 100 | 60 - 140 |
| 1,2,4-Trimethylbenzene | ND | | 10.0 | 3.81 | | ug/L | | 38 | 70 - 190 |
| 1,2-Dibromo-9-Chloropropane | ND | | 10.0 | 3.55 | | ug/L | | 36 | 48 - 140 |
| 1,2-Dichlorobenzene | ND | | 10.0 | 3.50 | | ug/L | | 35 | 70 - 190 |
| 1,2-Dichloroethane | ND | | 10.0 | 3.13 | | ug/L | | 32 | 56 - 146 |
| 1,2-Dichloropropane | ND | | 10.0 | 3.69 | | ug/L | | 36 | 63 - 190 |
| 1,9,5-Trimethylbenzene | ND | | 10.0 | 3.17 | | ug/L | | 32 | 70 - 190 |
| 1,9-Dichlorobenzene | ND | | 10.0 | 3.54 | | ug/L | | 35 | 70 - 190 |
| 1,9-Dichloropropane | ND | | 10.0 | 8.64 | | ug/L | | 86 | 70 - 190 |
| 1,4-Dichlorobenzene | ND | | 10.0 | 3.43 | | ug/L | | 35 | 70 - 190 |
| 2,2-Dichloropropane | ND | | 10.0 | 11.8 | | ug/L | | 118 | 63 - 198 |
| 2-Chlorotoluene | ND | | 10.0 | 8.38 | | ug/L | | 30 | 70 - 190 |
| 4-Chlorotoluene | ND | | 10.0 | 8.37 | | ug/L | | 30 | 70 - 190 |
| Benzene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 66 - 190 |
| Bromobenzene | ND | | 10.0 | 3.67 | | ug/L | | 37 | 70 - 190 |
| Bromoform | ND | | 10.0 | 11.6 | | ug/L | | 116 | 53 - 150 |
| Bromomethane | ND | | 10.0 | 3.78 | | ug/L | | 38 | 62 - 191 |
| Carbon tetrachloride | ND | | 10.0 | 12.8 | | ug/L | | 128 | 60 - 150 |
| Chlorobenzene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 70 - 190 |
| Chloroethane | ND | | 10.0 | 3.37 | | ug/L | | 100 | 68 - 190 |
| Chloroform | ND | | 10.0 | 10.1 | | ug/L | | 101 | 70 - 190 |
| Chloromethane | ND | | 10.0 | 3.91 | | ug/L | | 39 | 93 - 144 |
| cis-1,2-Dichloroethene | ND | | 10.0 | 12.2 | | ug/L | | 122 | 70 - 190 |
| cis-1,9-Dichloropropene | ND | | 10.0 | 3.82 | | ug/L | | 38 | 70 - 199 |
| Dibromomethane | ND | | 10.0 | 11.2 | | ug/L | | 112 | 70 - 190 |
| Dichlorodifluoromethane | ND | | 10.0 | 8.39 | | ug/L | | 83 | 25 - 142 |
| Ethylbenzene | ND | | 10.0 | 10.2 | | ug/L | | 102 | 70 - 190 |
| Hexachlorobutadiene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 10 - 150 |
| Isopropylbenzene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 70 - 192 |
| m,p-Xylene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 70 - 199 |
| Methylene Chloride | ND | | 10.0 | 10.4 | | ug/L | | 104 | 52 - 190 |
| Naphthalene | ND | | 10.0 | 3.21 | | ug/L | | 32 | 60 - 140 |
| n-Butylbenzene | ND | | 10.0 | 3.87 | | ug/L | | 33 | 61 - 143 |
| N-Propylbenzene | ND | | 10.0 | 3.47 | | ug/L | | 35 | 66 - 195 |
| o-Xylene | ND | | 10.0 | 10.2 | | ug/L | | 102 | 70 - 199 |
| sec-Butylbenzene | ND | | 10.0 | 3.84 | | ug/L | | 38 | 67 - 194 |
| Styrene | ND | | 10.0 | 3.85 | | ug/L | | 38 | 23 - 150 |
| tert-Butylbenzene | ND | | 10.0 | 3.65 | | ug/L | | 36 | 70 - 190 |
| Tetrachloroethene | ND | | 10.0 | 11.6 | | ug/L | | 116 | 70 - 197 |
| Toluene | ND | | 10.0 | 10.0 | | ug/L | | 100 | 70 - 190 |
| trans-1,2-Dichloroethene | ND | | 10.0 | 11.8 | | ug/L | | 118 | 70 - 190 |
| trans-1,9-Dichloropropene | ND | | 10.0 | 10.0 | | ug/L | | 100 | 70 - 198 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 550-28U218-y -U MS**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Matri3 Spike**
**x rep WPpe: Wotal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MS Result | MS Qualizier | Fnit | D | f Rec | f Rec% Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | | 10.0 | 12.5 | | ug/L | | 125 | 70 - 190 |
| Trichlorofluoromethane | ND | | 10.0 | 10.0 | | ug/L | | 100 | 60 - 150 |
| Vinyl chloride | ND | | 10.0 | 3.61 | | ug/L | | 36 | 50 - 197 |
| 1,2-Dibromoethane (EDB) | ND | | 10.0 | 10.7 | | ug/L | | 107 | 70 - 191 |
| Bromochloromethane | ND | | 10.0 | 11.1 | | ug/L | | 111 | 70 - 190 |
| Bromodichloromethane | ND | | 10.0 | 10.5 | | ug/L | | 105 | 70 - 198 |
| Dibromochloromethane | ND | | 10.0 | 10.8 | | ug/L | | 108 | 70 - 148 |
| p-Isopropyltoluene | ND | | 10.0 | 3.89 | | ug/L | | 38 | 70 - 190 |
| 2-Butanone (MEK) | ND | | 50.0 | 48.5 | | ug/L | | 37 | 48 - 140 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *:,* | | *80 - 138* |
| *2-mrof obuorozen9ene (Surr)* | *87* | | *80 - 130* |
| *Dizrof obuorof ethane (Surr)* | *110* | | *76 - 1B3* |

**Lab Sample ID: 550-28U218-y -U MSD**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Matri3 Spike Duplicate**
**x rep WPpe: Wotal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MSD Result | MSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 10.0 | 11.9 | | ug/L | | 119 | 60 - 143 | 1 | 20 |
| 1,1,1-Trichloroethane | ND | | 10.0 | 10.4 | | ug/L | | 104 | 70 - 190 | 8 | 20 |
| 1,1,2,2-Tetrachloroethane | ND | | 10.0 | 10.2 | | ug/L | | 102 | 69 - 190 | 10 | 90 |
| 1,1,2-Trichloroethane | ND | | 10.0 | 3.47 | | ug/L | | 35 | 70 - 190 | 12 | 25 |
| 1,1-Dichloroethane | ND | | 10.0 | 3.45 | | ug/L | | 34 | 65 - 190 | 7 | 20 |
| 1,1-Dichloroethene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 70 - 190 | 8 | 20 |
| 1,1-Dichloropropene | ND | | 10.0 | 10.2 | | ug/L | | 102 | 64 - 190 | 10 | 20 |
| 1,2,9-Trichlorobenzene | ND | | 10.0 | 3.86 | | ug/L | | 33 | 60 - 140 | 5 | 20 |
| 1,2,9-Trichloropropane | ND | | 10.0 | 8.63 | J | ug/L | | 87 | 60 - 190 | 9 | 90 |
| 1,2,4-Trichlorobenzene | ND | | 10.0 | 10.9 | | ug/L | | 109 | 60 - 140 | 4 | 20 |
| 1,2,4-Trimethylbenzene | ND | | 10.0 | 3.28 | | ug/L | | 39 | 70 - 190 | 6 | 25 |
| 1,2-Dibromo-9-Chloropropane | ND | | 10.0 | 8.75 | | ug/L | | 88 | 48 - 140 | 3 | 90 |
| 1,2-Dichlorobenzene | ND | | 10.0 | 10.9 | | ug/L | | 109 | 70 - 190 | 8 | 20 |
| 1,2-Dichloroethane | ND | | 10.0 | 8.34 | | ug/L | | 83 | 56 - 146 | 9 | 20 |
| 1,2-Dichloropropane | ND | | 10.0 | 3.06 | | ug/L | | 31 | 63 - 190 | 6 | 20 |
| 1,9,5-Trimethylbenzene | ND | | 10.0 | 8.81 | | ug/L | | 88 | 70 - 190 | 4 | 20 |
| 1,9-Dichlorobenzene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 70 - 190 | 6 | 20 |
| 1,9-Dichloropropane | ND | | 10.0 | 8.54 | | ug/L | | 85 | 70 - 190 | 1 | 25 |
| 1,4-Dichlorobenzene | ND | | 10.0 | 10.0 | | ug/L | | 100 | 70 - 190 | 5 | 20 |
| 2,2-Dichloropropane | ND | | 10.0 | 10.2 | | ug/L | | 102 | 63 - 198 | 14 | 25 |
| 2-Chlorotoluene | ND | | 10.0 | 3.04 | | ug/L | | 30 | 70 - 190 | 1 | 20 |
| 4-Chlorotoluene | ND | | 10.0 | 3.09 | | ug/L | | 30 | 70 - 190 | 1 | 20 |
| Benzene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 66 - 190 | 7 | 20 |
| Bromobenzene | ND | | 10.0 | 3.89 | | ug/L | | 38 | 70 - 190 | 2 | 20 |
| Bromoform | ND | | 10.0 | 11.0 | | ug/L | | 110 | 53 - 150 | 5 | 25 |
| Bromomethane | ND | | 10.0 | 8.26 | | ug/L | | 89 | 62 - 191 | 17 | 25 |
| Carbon tetrachloride | ND | | 10.0 | 10.3 | | ug/L | | 103 | 60 - 150 | 16 | 25 |
| Chlorobenzene | ND | | 10.0 | 3.53 | | ug/L | | 36 | 70 - 190 | 5 | 20 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 550-28U218-y -U MSD**
**Matri3: 9 ater**
**y nalPsis Batch: 652756**

**Client Sample ID: Matri3 Spike Duplicate**
**x rep WPpe: Wbtal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MSD Result | MSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | ND | | 10.0 | 8.92 | | ug/L | | 89 | 68 - 190 | 18 | 25 |
| Chloroform | ND | | 10.0 | 3.32 | | ug/L | | 33 | 70 - 190 | 2 | 20 |
| Chloromethane | ND | | 10.0 | 8.50 | | ug/L | | 85 | 93 - 144 | 3 | 25 |
| cis-1,2-Dichloroethene | ND | | 10.0 | 11.2 | | ug/L | | 112 | 70 - 190 | 3 | 20 |
| cis-1,9-Dichloropropene | ND | | 10.0 | 3.16 | | ug/L | | 32 | 70 - 199 | 7 | 20 |
| Dibromomethane | ND | | 10.0 | 10.8 | | ug/L | | 108 | 70 - 190 | 4 | 25 |
| Dichlorodifluoromethane | ND | | 10.0 | 8.71 | | ug/L | | 87 | 25 - 142 | 9 | 90 |
| Ethylbenzene | ND | | 10.0 | 3.44 | | ug/L | | 34 | 70 - 190 | 7 | 20 |
| Hexachlorobutadiene | ND | | 10.0 | 10.5 | | ug/L | | 105 | 10 - 150 | 0 | 20 |
| Isopropylbenzene | ND | | 10.0 | 3.75 | | ug/L | | 37 | 70 - 192 | 6 | 20 |
| m,p-Xylene | ND | | 10.0 | 10.2 | | ug/L | | 102 | 70 - 199 | 5 | 25 |
| Methylene Chloride | ND | | 10.0 | 3.80 | | ug/L | | 38 | 52 - 190 | 5 | 20 |
| Naphthalene | ND | | 10.0 | 3.51 | | ug/L | | 35 | 60 - 140 | 9 | 90 |
| n-Butylbenzene | ND | | 10.0 | 3.77 | | ug/L | | 38 | 61 - 143 | 1 | 20 |
| N-Propylbenzene | ND | | 10.0 | 3.91 | | ug/L | | 39 | 66 - 195 | 2 | 20 |
| o-Xylene | ND | | 10.0 | 3.35 | | ug/L | | 33 | 70 - 199 | 2 | 20 |
| sec-Butylbenzene | ND | | 10.0 | 3.65 | | ug/L | | 37 | 67 - 194 | 2 | 20 |
| Styrene | ND | | 10.0 | 3.02 | | ug/L | | 30 | 23 - 150 | 3 | 95 |
| tert-Butylbenzene | ND | | 10.0 | 3.47 | | ug/L | | 35 | 70 - 190 | 2 | 20 |
| Tetrachloroethene | ND | | 10.0 | 10.6 | | ug/L | | 106 | 70 - 197 | 3 | 20 |
| Toluene | ND | | 10.0 | 3.56 | | ug/L | | 36 | 70 - 190 | 5 | 20 |
| trans-1,2-Dichloroethene | ND | | 10.0 | 10.8 | | ug/L | | 108 | 70 - 190 | 3 | 20 |
| trans-1,9-Dichloropropene | ND | | 10.0 | 3.51 | | ug/L | | 35 | 70 - 198 | 6 | 25 |
| Trichloroethene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 70 - 190 | 14 | 20 |
| Trichlorofluoromethane | ND | | 10.0 | 3.20 | | ug/L | | 32 | 60 - 150 | 3 | 25 |
| Vinyl chloride | ND | | 10.0 | 8.89 | | ug/L | | 88 | 50 - 197 | 8 | 90 |
| 1,2-Dibromoethane (EDB) | ND | | 10.0 | 10.0 | | ug/L | | 100 | 70 - 191 | 6 | 25 |
| Bromochloromethane | ND | | 10.0 | 11.6 | | ug/L | | 116 | 70 - 190 | 4 | 25 |
| Bromodichloromethane | ND | | 10.0 | 3.84 | | ug/L | | 38 | 70 - 198 | 7 | 20 |
| Dibromochloromethane | ND | | 10.0 | 10.1 | | ug/L | | 101 | 70 - 148 | 6 | 25 |
| p-Isopropyltoluene | ND | | 10.0 | 3.60 | | ug/L | | 36 | 70 - 190 | 2 | 20 |
| 2-Butanone (MEK) | ND | | 50.0 | 45.2 | | ug/L | | 30 | 48 - 140 | 7 | 40 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *: 7* | | *80 - 138* |
| *2-mrof obuorozen9ene (Surr)* | *: 3* | | *80 - 130* |
| *Dizrof obuorof ethane (Surr)* | *10,* | | *76 - 1B3* |

## Method: 82. 0C SIM ID - Semi4olatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Lab Sample ID: MB 1. 0-U5052. /U-y**
**Matri3: 9 ater**
**y nalPsis Batch: U507v6**

**Client Sample ID: Method Blank**
**x rep WPpe: Wbtal/Ty**
**x rep Batch: U5052.**

| y nalPte | MB Result | MB Qualizier | RL | MDL | Fnit | D | x repared | y nalPAed | Dil Nac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.50 | 0.94 | ug/L | | 04/02/21 07:10 | 04/05/21 10:48 | 1 |

| *Isotope Dilution* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1x2-Dio5ane-d8* | *62* | | *1, - 1, 0* | *02/03/31 0741 0* | *02/0, /31 10428* | *1* |

## Method: 82. 0C SIM ID - Semi4olatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrozen9ene-d, (Surr) | 87 | | 26 - 138 | 02/03/31 0741 0 | 02/0, /31 1042 8 | 1 |

### Lab Sample ID: LCS 1. 0-U5052. /2-y
### Matri3: 9 ater
### y nalPsis Batch: U507v6

Client Sample ID: Lab Control Sample
xrep WPpe: Wotal/Ty
xrep Batch: U5052.

| y nalPte | | | Spike y dded | LCS Result | LCS Qualizier | Fnit | D | f Rec | f Rec% Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 20.0 | 21.2 | | ug/L | | 106 | 57 - 196 | | |

| Isotope Dilution | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1x2-Dio5ane-d8 | , 0 | | 1, - 1, 0 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| Nitrozen9ene-d, (Surr) | 70 | | 26 - 138 |

### Lab Sample ID: LCSD 1. 0-U5052. /v-y
### Matri3: 9 ater
### y nalPsis Batch: U507v6

Client Sample ID: Lab Control Sample Dup
xrep WPpe: Wotal/Ty
xrep Batch: U5052.

| y nalPte | | | Spike y dded | LCSD Result | LCSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | | | 20.0 | 20.8 | | ug/L | | 104 | 57 - 196 | 2 | 20 |

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1x2-Dio5ane-d8 | 61 | | 1, - 1, 0 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| Nitrozen9ene-d, (Surr) | 72 | | 26 - 138 |

### Lab Sample ID: 550-28U260-U MS
### Matri3: 9 ater
### y nalPsis Batch: U507v6

Client Sample ID: WS9 -6
xrep WPpe: Wotal/Ty
xrep Batch: U5052.

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MS Result | MS Qualizier | Fnit | D | f Rec | f Rec% Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 20.0 | 22.3 | | ug/L | | 114 | 45 - 193 | | |

| Isotope Dilution | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 1x2-Dio5ane-d8 | , 7 | | 1, - 1, 0 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| Nitrozen9ene-d, (Surr) | 73 | | 26 - 138 |

### Lab Sample ID: 550-28U260-U MSD
### Matri3: 9 ater
### y nalPsis Batch: U507v6

Client Sample ID: WS9 -6
xrep WPpe: Wotal/Ty
xrep Batch: U5052.

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MSD Result | MSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 20.0 | 21.9 | | ug/L | | 107 | 45 - 193 | 7 | 17 |

## Method: 82. 0C SIM ID - Semi4olatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

| Isotope Dilution | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 1x2-Dio5ane-d8 | 61 | | 1, - 1, 0 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| Nitrozen9ene-d, (Surr) | 70 | | 26 - 138 |

## Method: 80U1B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 1. 0-U5U1. U/1**
**Matri3: 9 ater**
**y nalPsis Batch: U5U1. U**

**Client Sample ID: Method Blank**
**xrep WPpe: Wbtal/Ty**

| y nalPte | MB Result | MB Qualizier | RL | MDL | Fnit | D | xrepared | y nalPAed | Dil Nac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C12) | ND | | 50 | 90 | ug/L | | | 04/07/21 19:16 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2-mrof obuorozen9ene (Surr) | 66 | | B8 - 1B2 | | 02/07/31 1B416 | 1 |

**Lab Sample ID: LCS 1. 0-U5U1. U/v**
**Matri3: 9 ater**
**y nalPsis Batch: U5U1. U**

**Client Sample ID: Lab Control Sample**
**xrep WPpe: Wbtal/Ty**

| y nalPte | | | Spike ydded | LCS Result | LCS Qualizier | Fnit | D | f Rec | f Rec% Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C19) | | | 1330 | 1790 | | ug/L | | 87 | 78 - 120 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 2-mrof obuorozen9ene (Surr) | 72 | | B8 - 1B2 |

**Lab Sample ID: LCSD 1. 0-U5U1. U/5**
**Matri3: 9 ater**
**y nalPsis Batch: U5U1. U**

**Client Sample ID: Lab Control Sample Dup**
**xrep WPpe: Wbtal/Ty**

| y nalPte | | | Spike ydded | LCSD Result | LCSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C19) | | | 1330 | 1750 | | ug/L | | 88 | 78 - 120 | 1 | 10 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 2-mrof obuorozen9ene (Surr) | 76 | | B8 - 1B2 |

**Lab Sample ID: 1. 0-11. 20-E-2 MS**
**Matri3: 9 ater**
**y nalPsis Batch: U5U1. U**

**Client Sample ID: Matri3 Spike**
**xrep WPpe: Wbtal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike ydded | MS Result | MS Qualizier | Fnit | D | f Rec | f Rec% Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C19) | 90 | J | 1330 | 1840 | | ug/L | | 39 | 68 - 122 | | |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 2-mrof obuorozen9ene (Surr) | 78 | | B8 - 1B2 |

## Method: 80U1B - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: 1. 0-11. 20-E-2 MSD**
**Matri3: 9 ater**
**y nalPsis Batch: U5U1. U**

**Client Sample ID: Matri3 Spike Duplicate**
**xrep WPpe: Wotal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MSD Result | MSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C4-C19) | 90 | J | 1330 | 1840 | | ug/L | | 39 | 68 - 122 | 0 | 18 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-mrof obuorozen9ene (Surr)* | *77* | | *B8 - 1B2* |

## Method: 80U1B - Diesel Range Organics(DRO)/Oil Range Organics (ORO)

**Lab Sample ID: MB 1. 0-U5UvU6/U-y**
**Matri3: 9 ater**
**y nalPsis Batch: U5U222**

**Client Sample ID: Method Blank**
**xrep WPpe: Wotal/Ty**
**xrep Batch: U5UvU6**

| y nalPte | MB Result | MB Qualizier | RL | MDL | Fnit | D | xrepared | y nalPAed | Dil Nac |
|---|---|---|---|---|---|---|---|---|---|
| C19-C22 | ND | | 50 | 22 | ug/L | | 04/06/21 12:44 | 04/06/21 17:05 | 1 |
| C29-C40 | ND | | 50 | 22 | ug/L | | 04/06/21 12:44 | 04/06/21 17:05 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *100* | | *, B- 1, 1* | *02/06/31 13422* | *02/06/31 1740,* | *1* |

**Lab Sample ID: LCS 1. 0-U5UvU6/2-y**
**Matri3: 9 ater**
**y nalPsis Batch: U5U222**

**Client Sample ID: Lab Control Sample**
**xrep WPpe: Wotal/Ty**
**xrep Batch: U5UvU6**

| y nalPte | | | Spike y dded | LCS Result | LCS Qualizier | Fnit | D | f Rec | f Rec% Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 2000 | 1790 | | ug/L | | 87 | 70 - 191 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *: 0* | | *, B- 1, 1* |

**Lab Sample ID: LCSD 1. 0-U5UvU6/v-y**
**Matri3: 9 ater**
**y nalPsis Batch: U5U222**

**Client Sample ID: Lab Control Sample Dup**
**xrep WPpe: Wotal/Ty**
**xrep Batch: U5UvU6**

| y nalPte | | | Spike y dded | LCSD Result | LCSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | | | 2000 | 1830 | | ug/L | | 35 | 70 - 191 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *111* | | *, B- 1, 1* |

## Method: vU5% - xerchlorate (IC)

**Lab Sample ID: MB 1. 0-U505. 0/UU**
**Matri3: 9 ater**
**y nalPsis Batch: U505. 0**

**Client Sample ID: Method Blank**
**xrep WPpe: Wotal/Ty**

| y nalPte | MB Result | MB Qualizier | RL | MDL | Fnit | D | xrepared | y nalPAed | Dil Nac |
|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 2.0 | 0.31 | ug/L | | | 04/02/21 14:02 | 1 |

## Method: vU5%a - xerchlorate (IC)

**Lab Sample ID: LCS 1. 0-U505. 0/U2**
**Matri3: 9 ater**
**y nalPsis Batch: U505. 0**

**Client Sample ID: Lab Control Sample**
**xrep WPpe: Wotal/Ty**

| y nalPte | | | Spike y dded | LCS Result | LCS Qualizier | Fnit | D | f Rec | f Rec% Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | | | 25.0 | 29.8 | | ug/L | | 35 | 85 - 115 | | |

**Lab Sample ID: LCSD 1. 0-U505. 0/Uv**
**Matri3: 9 ater**
**y nalPsis Batch: U505. 0**

**Client Sample ID: Lab Control Sample Dup**
**xrep WPpe: Wotal/Ty**

| y nalPte | | | Spike y dded | LCSD Result | LCSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | | | 25.0 | 29.4 | | ug/L | | 34 | 85 - 115 | 1 | 15 |

**Lab Sample ID: 1. 0-11001-y -v1 MS**
**Matri3: 9 ater**
**y nalPsis Batch: U505. 0**

**Client Sample ID: Matri3 Spike**
**xrep WPpe: Wotal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MS Result | MS Qualizier | Fnit | D | f Rec | f Rec% Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 50.0 | 50.8 | | ug/L | | 102 | 80 - 120 | | |

**Lab Sample ID: 1. 0-11001-y -v1 MSD**
**Matri3: 9 ater**
**y nalPsis Batch: U505. 0**

**Client Sample ID: Matri3 Spike Duplicate**
**xrep WPpe: Wotal/Ty**

| y nalPte | Sample Result | Sample Qualizier | Spike y dded | MSD Result | MSD Qualizier | Fnit | D | f Rec | f Rec% Limits | RxD | RxD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | ND | | 50.0 | 52.2 | | ug/L | | 104 | 80 - 120 | 9 | 15 |

## GC/MS VOA

### Analysis Batch: 642746

| 3a1 SamLIb pe | Clibnt SamLIb pe | I rbL DyLb | MatriP | MbthoT | I rbL Batch |
|---|---|---|---|---|---|
| 440-281260-1 | TSW-6 | Total/NA | Water | 8260B | |
| 440-281260-2 | TRIP BLANK | Total/NA | Water | 8260B | |
| MB 440-642946/5 | Method Blank | Total/NA | Water | 8260B | |
| LCS 440-642946/1002 | Lab Control Sample | Total/NA | Water | 8260B | |
| 440-281258-A-1 MS | Matrix Spike | Total/NA | Water | 8260B | |
| 440-281258-A-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260B | |

## GC/MS Sbmi VOA

### I rbL Batch: x4d429

| 3a1 SamLIb pe | Clibnt SamLIb pe | I rbL DyLb | MatriP | MbthoT | I rbL Batch |
|---|---|---|---|---|---|
| 440-281260-1 | TSW-6 | Total/NA | Water | 3510C | |
| MB 570-140427/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 570-140427/2-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 570-140427/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |
| 440-281260-1 MS | TSW-6 | Total/NA | Water | 3510C | |
| 440-281260-1 MSD | TSW-6 | Total/NA | Water | 3510C | |

### Analysis Batch: x4d756

| 3a1 SamLIb pe | Clibnt SamLIb pe | I rbL DyLb | MatriP | MbthoT | I rbL Batch |
|---|---|---|---|---|---|
| 440-281260-1 | TSW-6 | Total/NA | Water | 8270C SIM ID | 140427 |
| MB 570-140427/1-A | Method Blank | Total/NA | Water | 8270C SIM ID | 140427 |
| LCS 570-140427/2-A | Lab Control Sample | Total/NA | Water | 8270C SIM ID | 140427 |
| LCSD 570-140427/3-A | Lab Control Sample Dup | Total/NA | Water | 8270C SIM ID | 140427 |
| 440-281260-1 MS | TSW-6 | Total/NA | Water | 8270C SIM ID | 140427 |
| 440-281260-1 MSD | TSW-6 | Total/NA | Water | 8270C SIM ID | 140427 |

## GC VOA

### Analysis Batch: x4x09x

| 3a1 SamLIb pe | Clibnt SamLIb pe | I rbL DyLb | MatriP | MbthoT | I rbL Batch |
|---|---|---|---|---|---|
| 440-281260-1 | TSW-6 | Total/NA | Water | 8015B | |
| MB 570-141571/5 | Method Blank | Total/NA | Water | 8015B | |
| LCS 570-141571/3 | Lab Control Sample | Total/NA | Water | 8015B | |
| LCSD 570-141571/4 | Lab Control Sample Dup | Total/NA | Water | 8015B | |
| 570-55720-E-2 MS | Matrix Spike | Total/NA | Water | 8015B | |
| 570-55720-E-2 MSD | Matrix Spike Duplicate | Total/NA | Water | 8015B | |

## GC Sbmi VOA

### Analysis Batch: x4x222

| 3a1 SamLIb pe | Clibnt SamLIb pe | I rbL DyLb | MatriP | MbthoT | I rbL Batch |
|---|---|---|---|---|---|
| 440-281260-1 | TSW-6 | Total/NA | Water | 8015B | 141316 |
| MB 570-141316/1-A | Method Blank | Total/NA | Water | 8015B | 141316 |
| LCS 570-141316/2-A | Lab Control Sample | Total/NA | Water | 8015B | 141316 |
| LCSD 570-141316/3-A | Lab Control Sample Dup | Total/NA | Water | 8015B | 141316 |

### I rbL Batch: x4x5x6

| 3a1 SamLIb pe | Clibnt SamLIb pe | I rbL DyLb | MatriP | MbthoT | I rbL Batch |
|---|---|---|---|---|---|
| 440-281260-1 | TSW-6 | Total/NA | Water | 3510C | |
| MB 570-141316/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 570-141316/2-A | Lab Control Sample | Total/NA | Water | 3510C | |

# QC Association Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

## GC Sbmi VOA (ContinubT)

### I rbL Batch: x4x5x6 (ContinubT)

| 3a1 SamLIb pe | Clibnt SamLIb pe | I rbL DyLb | MatriP | MbthoT | I rbL Batch |
|---|---|---|---|---|---|
| LCSD 570-141316/3-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

## HI 3C/pC

### Analysis Batch: x4d49d

| 3a1 SamLIb pe | Clibnt SamLIb pe | I rbL DyLb | MatriP | MbthoT | I rbL Batch |
|---|---|---|---|---|---|
| 440-281260-1 | TSW-6 | Total/NA | Water | 314.0 | |
| MB 570-140470/11 | Method Blank | Total/NA | Water | 314.0 | |
| LCS 570-140470/12 | Lab Control Sample | Total/NA | Water | 314.0 | |
| LCSD 570-140470/13 | Lab Control Sample Dup | Total/NA | Water | 314.0 | |
| 570-55005-A-35 MS | Matrix Spike | Total/NA | Water | 314.0 | |
| 570-55005-A-35 MSD | Matrix Spike Duplicate | Total/NA | Water | 314.0 | |

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

## Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | State | 2706 | 06-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8260B | | Water | 1,1-Dichloropropene |
| 8260B | | Water | 1,2,3-Trichlorobenzene |
| 8260B | | Water | 1,2,4-Trimethylbenzene |
| 8260B | | Water | 1,3,5-Trimethylbenzene |
| 8260B | | Water | 1,3-Dichloropropane |
| 8260B | | Water | 2,2-Dichloropropane |
| 8260B | | Water | 2-Butanone (MEK) |
| 8260B | | Water | 2-Chlorotoluene |
| 8260B | | Water | Isopropylbenzene |
| 8260B | | Water | m,p-Xylene |
| 8260B | | Water | p-Isopropyltoluene |

## Laboratory: Eurofins Calscience LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 314.0 | | Water | Perchlorate |
| 8015B | | Water | Gasoline Range Organics (C4-C12) |
| 8015B | 3510C | Water | C13-C22 |
| 8015B | 3510C | Water | C23-C40 |
| 8270C SIM ID | 3510C | Water | 1,4-Dioxane |

| | | | |
|---|---|---|---|
| California | State | 2944 | 09-30-21 |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: Eurofins
Address:
Phone:
Office Location: Colton
Contact: Danielle
Project Manager: Todd G. McFarland
PO/SO #: CB21PO20

Sampler's Name: Tom C. Johnson  Sampler's Signature:

Project Number: CB21PO20
Project Name: Broken Horn Saddlery

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:

TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 1

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers VOA | A/G | P/O | TPH 8015 | VOCs 8260 | 1,4-Dioxane 8270 | Perchlorate 314.0 | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W | 3/31 | 10:45 | | X | TSW-6 | | | 3 | 3 | 1 | ✓ | ✓ | ✓ | ✓ | |
| W | 3/31 | 11:00 | | X | Trip Blank | | | 1 | | | | ✓ | | | |

440-281260 Chain of Custody

DO 3/31/21

TURNAROUND TIME ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush  TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date: | Time: | Received by (Signature) | Date: | Time: |
|---|---|---|---|---|---|
| | 3/31 | 16:00 | William Rivera | 3/31/21 | 1600 |
| William Rivera | 3/31/21 | 1800 | | 3/31/21 | 1600 |
| | | | | | |
| | | | | | |

NOTES.
5-Day TAT

Matrix WW Wastewater W Water S Soil L -Liquid A Air Bag C Charcoal Tube SL Sludge O Oil
Container VOA 40 ml vial A/G Amber Glass 1 L 250 ml Glass wide mouth P/O Plastic or other

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167426 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle.Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California; State - California | | Job #: 440-281260-1 |
| Address: 7440 Lincoln Way | Due Date Requested: 4/6/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8270C_SIM_MS_ID/3510C 1,4-Dioxane - SIM_MS_ID | 8015B_GRO/5030C Gasoline Range Organics C4-C12 | 314.0/ Perchlorate | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| TSW-6 (440-281260-1) | 3/31/21 | 10 45 Pacific | | Water | | | X | X | X | 4 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification: Unconfirmed | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
|---|---|
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|
| Relinquished by: Olga Oneles | Date/Time: 4/1/21 14:00 | Company: EC-IRV | Received by: | Date/Time: 4-1-2021 14:00 | Company: ECI |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No: N/A | Cooler Temperature(s) °C and Other Remarks: 2.4/2.8 IR5 |
|---|---|---|

Ver: 11/01/2020

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167597 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle.Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281260-1 |
| Address: 7440 Lincoln Way | Due Date Requested: 4/8/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Broken Horn Saddlery | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8270C_SIM_MS_ID/3510C 1,4-Dioxane - SIM_MS_ID | 8015B_GRO/5030C Gasoline Range Organics C4-C12 | 314.0/ Perchlorate | 8015B_DRO/3510C C13-C22 / C23-C40 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | |
| TSW-6 (440-281260-1) | 3/31/21 | 10.45 Pacific | | Water | | | X | X | X | X | 3 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|
| Relinquished by: Olga Cinelas | Date/Time: 4/6/21 16:50 | Company: ECI-IRV | Received by: | Date/Time: 4-6-2021 16:50 | Company: ECI |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No: N/A | Cooler Temperature(s) °C and Other Remarks: 2.7/3.1 SCN |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281260-1

**Login Number: 281260**
**List Number: 1**
**Creator: Escalante, Maria I**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281260-1

**Login Number: 281260**
**List Number: 2**
**Creator: Ortiz-Luis, Michael**

**List Source: Eurofins Calscience**
**List Creation: 04/01/21 04:13 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 2.8 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281260-1

**Login Number: 281260**
**List Number: 3**
**Creator: Ortiz-Luis, Michael**

**List Source: Eurofins Calscience**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 3.1 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Isotope Dilution Summary

Client: Terracon Consultants Inc
Project/Site: Broken Horn Saddlery

Job ID: 440-281260-1

## Method: 8270C SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | DXE (15-150) | | | | | | |
| 440-281260-1 | TS3 -6 | 5W | | | | | | |
| 440-281260-1 7 S | TS3 -6 | 5L | | | | | | |
| 440-281260-1 7 SD | TS3 -6 | 61 | | | | | | |
| 9CS 5L0-14042L/2-A | 9ab Control Sample | 50 | | | | | | |
| 9CSD 5L0-14042L/M-A | 9ab Control Sample Dup | 61 | | | | | | |
| 7 B 5L0-14042L/1-A | 7 ethod Blank | 64 | | | | | | |

**Surrogate Legend**

DXE = 1,4-Dioxane-d8

# APPENDIX J

## Analytical Reports and Chain of Custody Forms – Soil Gas and Air

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281102-1
Client Project/Site: Baldwin Park

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/6/2021 11:08:02 AM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 440-281102-1 | SSP-1 | Air | 03/24/21 14:31 | 03/25/21 19:00 | Air Canister (1-Liter) #LC609 |
| 440-281102-2 | SSP-2 | Air | 03/24/21 14:49 | 03/25/21 19:00 | Air Canister (1-Liter) #LC1280 |
| 440-281102-3 | SSP-3 | Air | 03/24/21 15:16 | 03/25/21 19:00 | Air Canister (1-Liter) #LC069 |
| 440-281102-4 | SSP-4 | Air | 03/24/21 15:41 | 03/25/21 19:00 | Air Canister (1-Liter) #LC1137 |
| 440-281102-5 | SSP-5 | Air | 03/24/21 16:22 | 03/25/21 19:00 | Air Canister (1-Liter) #LC812 |
| 440-281102-6 | SSP-6 | Air | 03/24/21 16:58 | 03/25/21 19:00 | Air Canister (1-Liter) #LC1210 |

## Job ID: 440-281102-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281102-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/25/2021 7:00 PM. Unless otherwise noted below, the samples arrived in good condition. The temperature of the cooler at receipt was 18.8º C.

**Air Toxics**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

## Client Sample ID: SSP-1 — Lab Sample ID: 440-281102-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 2.7 | J | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 7.5 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 150 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.90 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.34 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 2.5 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 30 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 1.4 | J | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 18 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 5.1 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichloroethene | 130 | | 2.7 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 1.7 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.25 | J | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |
| Carbon dioxide | 0.25 | J | 0.50 | 0.016 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Nitrogen | 78 | | 0.50 | 0.17 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | Fixed Gas Norm | Total/NA |

## Client Sample ID: SSP-2 — Lab Sample ID: 440-281102-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 1.2 | J | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 6.8 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 140 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 1.3 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.55 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.0 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 22 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 13 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 4.6 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichloroethene | 1.0 | J | 2.7 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 1.5 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 1.7 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 1.1 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 21 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |
| Carbon dioxide | 1.1 | | 0.50 | 0.016 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Nitrogen | 78 | | 0.50 | 0.17 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Oxygen + Argon | 20 | | 0.50 | 0.084 | % v/v | 1 | | Fixed Gas Norm | Total/NA |

## Client Sample ID: SSP-3 — Lab Sample ID: 440-281102-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 5.5 | | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 16 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| 4-Methyl-2-pentanone | 2.9 | J | 6.1 | 2.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 170 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.86 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 1.2 | | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 2.8 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Ethylbenzene | 2.8 | | 2.2 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: SSP-3 (Continued) — Lab Sample ID: 440-281102-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Isopropanol | 35 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 2.3 | | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| m,p-Xylene | 3.7 | J | 8.7 | 2.7 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 13 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 5.8 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichloroethene | 4.7 | | 2.7 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 1.8 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 2.8 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 80 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 18 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |
| Carbon dioxide | 2.8 | | 0.50 | 0.016 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Oxygen + Argon | 18 | | 0.50 | 0.084 | % v/v | 1 | | Fixed Gas Norm | Total/NA |

## Client Sample ID: SSP-4 — Lab Sample ID: 440-281102-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 1.7 | J | 2.7 | 0.79 | ug/m3 | 1 | | TO-15 | Total/NA |
| 1,1-Difluoroethane | 4.0 | J | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 4.5 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.34 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.1 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 29 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 5.1 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 5.0 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichloroethene | 4.3 | | 2.7 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.0 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone - DL | 270 | | 8.2 | 1.6 | ug/m3 | 1.73 | | TO-15 | Total/NA |
| Carbon dioxide | 0.18 | J | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |
| Carbon dioxide | 0.18 | J | 0.50 | 0.016 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Nitrogen | 78 | | 0.50 | 0.17 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | Fixed Gas Norm | Total/NA |

## Client Sample ID: SSP-5 — Lab Sample ID: 440-281102-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 35 | | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 4.2 | J | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 150 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.33 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.2 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 87 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 1.1 | J | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 5.4 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 3.7 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 1.9 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.032 | J | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |
| Carbon dioxide | 0.032 | J | 0.50 | 0.016 | % v/v | 1 | | Fixed Gas Norm | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: SSP-5 (Continued)

## Lab Sample ID: 440-281102-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Nitrogen | 78 | | 0.50 | 0.17 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | Fixed Gas Norm | Total/NA |

## Client Sample ID: SSP-6

## Lab Sample ID: 440-281102-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone | 9.2 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| 4-Methyl-2-pentanone | 2.3 | J | 6.1 | 2.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 220 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.64 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon disulfide | 2.0 | J | 6.2 | 0.58 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 1.0 | | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.1 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 18 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 2.3 | | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 15 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 5.2 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.1 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 4.1 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| 1,1-Difluoroethane - DL | 1600 | | 54 | 9.9 | ug/m3 | 10.05 | | TO-15 | Total/NA |
| Carbon dioxide | 0.37 | J | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |
| Carbon dioxide | 0.37 | J | 0.50 | 0.016 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Nitrogen | 78 | | 0.50 | 0.17 | % v/v | 1 | | Fixed Gas Norm | Total/NA |
| Oxygen + Argon | 21 | | 0.50 | 0.084 | % v/v | 1 | | Fixed Gas Norm | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

**Client Sample ID: SSP-1**
**Date Collected: 03/24/21 14:31**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

**Lab Sample ID: 440-281102-1**
**Matrix: Air**

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.7 | 0.79 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 6.9 | 1.1 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 11 | 2.3 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.7 | 0.76 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.42 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.69 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **1,1-Difluoroethane** | **2.7** | **J** | 5.4 | 0.99 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 15 | 4.9 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 7.4 | 1.6 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 14 | 2.8 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,2-Dibromoethane | ND | | 3.8 | 1.3 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.59 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,2-Dichloropropane | ND | | 2.3 | 0.64 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | 1.0 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **2-Butanone** | **7.5** | | 4.4 | 1.2 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 2-Hexanone | ND | | 6.1 | 2.6 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 4-Ethyltoluene | ND | | 2.5 | 1.2 | ug/m3 | | | 04/04/21 12:18 | 1 |
| 4-Methyl-2-pentanone | ND | | 6.1 | 2.3 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Acetone** | **150** | | 4.8 | 0.94 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Benzene** | **0.90** | **J** | 1.6 | 0.50 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Benzyl chloride | ND | | 7.8 | 2.7 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Bromodichloromethane | ND | | 3.4 | 0.74 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Bromoform | ND | | 5.2 | 1.8 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Bromomethane | ND | | 1.9 | 0.54 | ug/m3 | | | 04/04/21 12:18 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.54 | ug/m3 | | | 04/04/21 12:18 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.3 | 0.98 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Carbon disulfide | ND | | 6.2 | 0.58 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Carbon tetrachloride | ND | | 3.1 | 1.3 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Chlorobenzene | ND | | 2.3 | 0.60 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Chloroethane | ND | | 1.3 | 0.45 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Chloroform | ND | | 2.4 | 0.78 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Chloromethane** | **0.34** | **J** | 1.0 | 0.33 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Dibromochloromethane | ND | | 4.3 | 1.3 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Dichlorodifluoromethane** | **2.5** | | 2.5 | 0.98 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Dichlorotetrafluoroethane | ND | | 14 | 1.3 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Ethylbenzene | ND | | 2.2 | 1.1 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Hexachloro-1,3-butadiene | ND | | 16 | 6.2 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Isopropanol** | **30** | | 12 | 0.96 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Methylene Chloride | ND | | 17 | 1.9 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 7.2 | 1.2 | ug/m3 | | | 04/04/21 12:18 | 1 |
| n-Butylbenzene | ND | | 8.2 | 2.3 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **o-Xylene** | **1.4** | **J** | 2.2 | 0.86 | ug/m3 | | | 04/04/21 12:18 | 1 |
| m,p-Xylene | ND | | 8.7 | 2.7 | ug/m3 | | | 04/04/21 12:18 | 1 |
| sec-Butylbenzene | ND | | 8.2 | 1.6 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Styrene | ND | | 6.4 | 2.3 | ug/m3 | | | 04/04/21 12:18 | 1 |

## Client Sample ID: SSP-1

**Lab Sample ID: 440-281102-1**

**Date Collected: 03/24/21 14:31**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

### Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.50 | ug/m3 | | | 04/04/21 12:18 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.5 | 0.96 | ug/m3 | | | 04/04/21 12:18 | 1 |
| tert-Butylbenzene | ND | | 8.2 | 1.5 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Tetrachloroethene** | **18** | | 3.4 | 1.1 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Toluene** | **5.1** | | 1.9 | 0.50 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Trichloroethene** | **130** | | 2.7 | 0.96 | ug/m3 | | | 04/04/21 12:18 | 1 |
| **Trichlorofluoromethane** | **1.7** | **J** | 5.6 | 1.3 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Vinyl acetate | ND | | 7.0 | 1.2 | ug/m3 | | | 04/04/21 12:18 | 1 |
| Vinyl chloride | ND | | 1.3 | 0.41 | ug/m3 | | | 04/04/21 12:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *119* | | *70 - 130* | | *04/04/21 12:18* | *1* |
| *4-Bromofluorobenzene (Surr)* | *115* | | *67 - 131* | | *04/04/21 12:18* | *1* |
| *Toluene-d8 (Surr)* | *108* | | *70 - 130* | | *04/04/21 12:18* | *1* |

### Method: D1946 - Fixed Gases in Air (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **0.25** | **J** | 0.50 | 0.016 | % v/v | | | 03/30/21 15:32 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 15:32 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 15:32 | 1 |
| **Nitrogen** | **79** | | 0.50 | 0.17 | % v/v | | | 03/30/21 15:32 | 1 |
| **Oxygen + Argon** | **22** | | 0.50 | 0.084 | % v/v | | | 03/30/21 15:32 | 1 |

### Method: Fixed Gas Norm - Fixed Gases from Stationary Sources

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **0.25** | **J** | 0.50 | 0.016 | % v/v | | | 03/30/21 15:32 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 15:32 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 15:32 | 1 |
| **Nitrogen** | **78** | | 0.50 | 0.17 | % v/v | | | 03/30/21 15:32 | 1 |
| **Oxygen + Argon** | **22** | | 0.50 | 0.084 | % v/v | | | 03/30/21 15:32 | 1 |

## Client Sample ID: SSP-2

**Lab Sample ID: 440-281102-2**

**Date Collected: 03/24/21 14:49**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

### Method: TO-15 - Volatile Organic Compounds in Ambient Air

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.7 | 0.79 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 6.9 | 1.1 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 11 | 2.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.7 | 0.76 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.42 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.69 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **1,1-Difluoroethane** | **1.2** | **J** | 5.4 | 0.99 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 15 | 4.9 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 7.4 | 1.6 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 14 | 2.8 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,2-Dibromoethane | ND | | 3.8 | 1.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 13:13 | 1 |

**Client Sample ID: SSP-2**
**Date Collected: 03/24/21 14:49**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

**Lab Sample ID: 440-281102-2**
**Matrix: Air**

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | ND | | 2.0 | 0.59 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,2-Dichloropropane | ND | | 2.3 | 0.64 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | 1.0 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **2-Butanone** | **6.8** | | 4.4 | 1.2 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 2-Hexanone | ND | | 6.1 | 2.6 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 4-Ethyltoluene | ND | | 2.5 | 1.2 | ug/m3 | | | 04/04/21 13:13 | 1 |
| 4-Methyl-2-pentanone | ND | | 6.1 | 2.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Acetone** | **140** | | 4.8 | 0.94 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Benzene** | **1.3** | **J** | 1.6 | 0.50 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Benzyl chloride | ND | | 7.8 | 2.7 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Bromodichloromethane | ND | | 3.4 | 0.74 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Bromoform | ND | | 5.2 | 1.8 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Bromomethane | ND | | 1.9 | 0.54 | ug/m3 | | | 04/04/21 13:13 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.54 | ug/m3 | | | 04/04/21 13:13 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.3 | 0.98 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Carbon disulfide | ND | | 6.2 | 0.58 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Carbon tetrachloride | ND | | 3.1 | 1.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Chlorobenzene | ND | | 2.3 | 0.60 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Chloroethane | ND | | 1.3 | 0.45 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Chloroform | ND | | 2.4 | 0.78 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Chloromethane** | **0.55** | **J** | 1.0 | 0.33 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Dibromochloromethane | ND | | 4.3 | 1.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Dichlorodifluoromethane** | **3.0** | | 2.5 | 0.98 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Dichlorotetrafluoroethane | ND | | 14 | 1.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Ethylbenzene | ND | | 2.2 | 1.1 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Hexachloro-1,3-butadiene | ND | | 16 | 6.2 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Isopropanol** | **22** | | 12 | 0.96 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Methylene Chloride | ND | | 17 | 1.9 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 7.2 | 1.2 | ug/m3 | | | 04/04/21 13:13 | 1 |
| n-Butylbenzene | ND | | 8.2 | 2.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| o-Xylene | ND | | 2.2 | 0.86 | ug/m3 | | | 04/04/21 13:13 | 1 |
| m,p-Xylene | ND | | 8.7 | 2.7 | ug/m3 | | | 04/04/21 13:13 | 1 |
| sec-Butylbenzene | ND | | 8.2 | 1.6 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Styrene | ND | | 6.4 | 2.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.50 | ug/m3 | | | 04/04/21 13:13 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.5 | 0.96 | ug/m3 | | | 04/04/21 13:13 | 1 |
| tert-Butylbenzene | ND | | 8.2 | 1.5 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Tetrachloroethene** | **13** | | 3.4 | 1.1 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Toluene** | **4.6** | | 1.9 | 0.50 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Trichloroethene** | **1.0** | **J** | 2.7 | 0.96 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Trichlorofluoromethane** | **1.5** | **J** | 5.6 | 1.3 | ug/m3 | | | 04/04/21 13:13 | 1 |
| **Vinyl acetate** | **1.7** | **J** | 7.0 | 1.2 | ug/m3 | | | 04/04/21 13:13 | 1 |
| Vinyl chloride | ND | | 1.3 | 0.41 | ug/m3 | | | 04/04/21 13:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *122* | | *70 - 130* | | *04/04/21 13:13* | *1* |
| *4-Bromofluorobenzene (Surr)* | *114* | | *67 - 131* | | *04/04/21 13:13* | *1* |

## Client Sample ID: SSP-2

**Lab Sample ID: 440-281102-2**

**Date Collected: 03/24/21 14:49**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

### Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *111* | | *70 - 130* | | *04/04/21 13:13* | *1* |

### Method: D1946 - Fixed Gases in Air (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **1.1** | | 0.50 | 0.016 | % v/v | | | 03/30/21 15:59 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 15:59 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 15:59 | 1 |
| **Nitrogen** | **79** | | 0.50 | 0.17 | % v/v | | | 03/30/21 15:59 | 1 |
| **Oxygen + Argon** | **21** | | 0.50 | 0.084 | % v/v | | | 03/30/21 15:59 | 1 |

### Method: Fixed Gas Norm - Fixed Gases from Stationary Sources

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **1.1** | | 0.50 | 0.016 | % v/v | | | 03/30/21 15:59 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 15:59 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 15:59 | 1 |
| **Nitrogen** | **78** | | 0.50 | 0.17 | % v/v | | | 03/30/21 15:59 | 1 |
| **Oxygen + Argon** | **20** | | 0.50 | 0.084 | % v/v | | | 03/30/21 15:59 | 1 |

## Client Sample ID: SSP-3

**Lab Sample ID: 440-281102-3**

**Date Collected: 03/24/21 15:16**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

### Method: TO-15 - Volatile Organic Compounds in Ambient Air

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.7 | 0.79 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 6.9 | 1.1 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 11 | 2.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.7 | 0.76 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.42 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.69 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **1,1-Difluoroethane** | **5.5** | | 5.4 | 0.99 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 15 | 4.9 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 7.4 | 1.6 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 14 | 2.8 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,2-Dibromoethane | ND | | 3.8 | 1.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.59 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,2-Dichloropropane | ND | | 2.3 | 0.64 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | 1.0 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **2-Butanone** | **16** | | 4.4 | 1.2 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 2-Hexanone | ND | | 6.1 | 2.6 | ug/m3 | | | 04/04/21 14:08 | 1 |
| 4-Ethyltoluene | ND | | 2.5 | 1.2 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **4-Methyl-2-pentanone** | **2.9** | **J** | 6.1 | 2.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Acetone** | **170** | | 4.8 | 0.94 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Benzene** | **0.86** | **J** | 1.6 | 0.50 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Benzyl chloride | ND | | 7.8 | 2.7 | ug/m3 | | | 04/04/21 14:08 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

**Client Sample ID: SSP-3**
**Date Collected: 03/24/21 15:16**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

**Lab Sample ID: 440-281102-3**
**Matrix: Air**

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | | 3.4 | 0.74 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Bromoform | ND | | 5.2 | 1.8 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Bromomethane | ND | | 1.9 | 0.54 | ug/m3 | | | 04/04/21 14:08 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.54 | ug/m3 | | | 04/04/21 14:08 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.3 | 0.98 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Carbon disulfide | ND | | 6.2 | 0.58 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Carbon tetrachloride | ND | | 3.1 | 1.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Chlorobenzene | ND | | 2.3 | 0.60 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Chloroethane | ND | | 1.3 | 0.45 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Chloroform | ND | | 2.4 | 0.78 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Chloromethane** | **1.2** | | 1.0 | 0.33 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Dibromochloromethane | ND | | 4.3 | 1.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Dichlorodifluoromethane** | **2.8** | | 2.5 | 0.98 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Dichlorotetrafluoroethane | ND | | 14 | 1.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Ethylbenzene** | **2.8** | | 2.2 | 1.1 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Hexachloro-1,3-butadiene | ND | | 16 | 6.2 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Isopropanol** | **35** | | 12 | 0.96 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Methylene Chloride | ND | | 17 | 1.9 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 7.2 | 1.2 | ug/m3 | | | 04/04/21 14:08 | 1 |
| n-Butylbenzene | ND | | 8.2 | 2.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **o-Xylene** | **2.3** | | 2.2 | 0.86 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **m,p-Xylene** | **3.7** | **J** | 8.7 | 2.7 | ug/m3 | | | 04/04/21 14:08 | 1 |
| sec-Butylbenzene | ND | | 8.2 | 1.6 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Styrene | ND | | 6.4 | 2.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.50 | ug/m3 | | | 04/04/21 14:08 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.5 | 0.96 | ug/m3 | | | 04/04/21 14:08 | 1 |
| tert-Butylbenzene | ND | | 8.2 | 1.5 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Tetrachloroethene** | **13** | | 3.4 | 1.1 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Toluene** | **5.8** | | 1.9 | 0.50 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Trichloroethene** | **4.7** | | 2.7 | 0.96 | ug/m3 | | | 04/04/21 14:08 | 1 |
| **Trichlorofluoromethane** | **1.8** | **J** | 5.6 | 1.3 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Vinyl acetate | ND | | 7.0 | 1.2 | ug/m3 | | | 04/04/21 14:08 | 1 |
| Vinyl chloride | ND | | 1.3 | 0.41 | ug/m3 | | | 04/04/21 14:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *123* | | *70 - 130* | | *04/04/21 14:08* | *1* |
| *4-Bromofluorobenzene (Surr)* | *114* | | *67 - 131* | | *04/04/21 14:08* | *1* |
| *Toluene-d8 (Surr)* | *110* | | *70 - 130* | | *04/04/21 14:08* | *1* |

## Method: D1946 - Fixed Gases in Air (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **2.8** | | 0.50 | 0.016 | % v/v | | | 03/30/21 16:20 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 16:20 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 16:20 | 1 |
| **Nitrogen** | **80** | | 0.50 | 0.17 | % v/v | | | 03/30/21 16:20 | 1 |
| **Oxygen + Argon** | **18** | | 0.50 | 0.084 | % v/v | | | 03/30/21 16:20 | 1 |

## Client Sample ID: SSP-3

**Lab Sample ID: 440-281102-3**

**Date Collected: 03/24/21 15:16**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

### Method: Fixed Gas Norm - Fixed Gases from Stationary Sources

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **2.8** | | 0.50 | 0.016 | % v/v | | | 03/30/21 16:20 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 16:20 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 16:20 | 1 |
| **Nitrogen** | **79** | | 0.50 | 0.17 | % v/v | | | 03/30/21 16:20 | 1 |
| **Oxygen + Argon** | **18** | | 0.50 | 0.084 | % v/v | | | 03/30/21 16:20 | 1 |

## Client Sample ID: SSP-4

**Lab Sample ID: 440-281102-4**

**Date Collected: 03/24/21 15:41**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

### Method: TO-15 - Volatile Organic Compounds in Ambient Air

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,1,1-Trichloroethane** | **1.7** | **J** | 2.7 | 0.79 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 6.9 | 1.1 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 11 | 2.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.7 | 0.76 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.42 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.69 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **1,1-Difluoroethane** | **4.0** | **J** | 5.4 | 0.99 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 15 | 4.9 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 7.4 | 1.6 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 14 | 2.8 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,2-Dibromoethane | ND | | 3.8 | 1.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.59 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,2-Dichloropropane | ND | | 2.3 | 0.64 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | 1.0 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **2-Butanone** | **4.5** | | 4.4 | 1.2 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 2-Hexanone | ND | | 6.1 | 2.6 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 4-Ethyltoluene | ND | | 2.5 | 1.2 | ug/m3 | | | 04/04/21 15:02 | 1 |
| 4-Methyl-2-pentanone | ND | | 6.1 | 2.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Benzene | ND | | 1.6 | 0.50 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Benzyl chloride | ND | | 7.8 | 2.7 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Bromodichloromethane | ND | | 3.4 | 0.74 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Bromoform | ND | | 5.2 | 1.8 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Bromomethane | ND | | 1.9 | 0.54 | ug/m3 | | | 04/04/21 15:02 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.54 | ug/m3 | | | 04/04/21 15:02 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.3 | 0.98 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Carbon disulfide | ND | | 6.2 | 0.58 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Carbon tetrachloride | ND | | 3.1 | 1.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Chlorobenzene | ND | | 2.3 | 0.60 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Chloroethane | ND | | 1.3 | 0.45 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Chloroform | ND | | 2.4 | 0.78 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **Chloromethane** | **0.34** | **J** | 1.0 | 0.33 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Dibromochloromethane | ND | | 4.3 | 1.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **Dichlorodifluoromethane** | **3.1** | | 2.5 | 0.98 | ug/m3 | | | 04/04/21 15:02 | 1 |

**Client Sample ID: SSP-4**
**Date Collected: 03/24/21 15:41**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

**Lab Sample ID: 440-281102-4**
**Matrix: Air**

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorotetrafluoroethane | ND | | 14 | 1.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Ethylbenzene | ND | | 2.2 | 1.1 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Hexachloro-1,3-butadiene | ND | | 16 | 6.2 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **Isopropanol** | **29** | | 12 | 0.96 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Methylene Chloride | ND | | 17 | 1.9 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 7.2 | 1.2 | ug/m3 | | | 04/04/21 15:02 | 1 |
| n-Butylbenzene | ND | | 8.2 | 2.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| o-Xylene | ND | | 2.2 | 0.86 | ug/m3 | | | 04/04/21 15:02 | 1 |
| m,p-Xylene | ND | | 8.7 | 2.7 | ug/m3 | | | 04/04/21 15:02 | 1 |
| sec-Butylbenzene | ND | | 8.2 | 1.6 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Styrene | ND | | 6.4 | 2.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.50 | ug/m3 | | | 04/04/21 15:02 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.5 | 0.96 | ug/m3 | | | 04/04/21 15:02 | 1 |
| tert-Butylbenzene | ND | | 8.2 | 1.5 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **Tetrachloroethene** | **5.1** | | 3.4 | 1.1 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **Toluene** | **5.0** | | 1.9 | 0.50 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **Trichloroethene** | **4.3** | | 2.7 | 0.96 | ug/m3 | | | 04/04/21 15:02 | 1 |
| **Trichlorofluoromethane** | **2.0** | **J** | 5.6 | 1.3 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Vinyl acetate | ND | | 7.0 | 1.2 | ug/m3 | | | 04/04/21 15:02 | 1 |
| Vinyl chloride | ND | | 1.3 | 0.41 | ug/m3 | | | 04/04/21 15:02 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *124* | | *70 - 130* | | *04/04/21 15:02* | *1* |
| *4-Bromofluorobenzene (Surr)* | *114* | | *67 - 131* | | *04/04/21 15:02* | *1* |
| *Toluene-d8 (Surr)* | *113* | | *70 - 130* | | *04/04/21 15:02* | *1* |

## Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acetone** | **270** | | 8.2 | 1.6 | ug/m3 | | | 04/05/21 04:13 | 1.73 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *106* | | *70 - 130* | | *04/05/21 04:13* | *1.73* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *67 - 131* | | *04/05/21 04:13* | *1.73* |
| *Toluene-d8 (Surr)* | *101* | | *70 - 130* | | *04/05/21 04:13* | *1.73* |

## Method: D1946 - Fixed Gases in Air (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **0.18** | **J** | 0.50 | 0.016 | % v/v | | | 03/30/21 16:41 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 16:41 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 16:41 | 1 |
| **Nitrogen** | **79** | | 0.50 | 0.17 | % v/v | | | 03/30/21 16:41 | 1 |
| **Oxygen + Argon** | **22** | | 0.50 | 0.084 | % v/v | | | 03/30/21 16:41 | 1 |

## Method: Fixed Gas Norm - Fixed Gases from Stationary Sources

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **0.18** | **J** | 0.50 | 0.016 | % v/v | | | 03/30/21 16:41 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 16:41 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 16:41 | 1 |
| **Nitrogen** | **78** | | 0.50 | 0.17 | % v/v | | | 03/30/21 16:41 | 1 |
| **Oxygen + Argon** | **22** | | 0.50 | 0.084 | % v/v | | | 03/30/21 16:41 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

**Client Sample ID: SSP-5**
**Date Collected: 03/24/21 16:22**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

**Lab Sample ID: 440-281102-5**
**Matrix: Air**

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.7 | 0.79 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 6.9 | 1.1 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 11 | 2.3 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.7 | 0.76 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.42 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.69 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **1,1-Difluoroethane** | **35** | | 5.4 | 0.99 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 15 | 4.9 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 7.4 | 1.6 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 14 | 2.8 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,2-Dibromoethane | ND | | 3.8 | 1.3 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.59 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,2-Dichloropropane | ND | | 2.3 | 0.64 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | 1.0 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **2-Butanone** | **4.2** | **J** | 4.4 | 1.2 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 2-Hexanone | ND | | 6.1 | 2.6 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 4-Ethyltoluene | ND | | 2.5 | 1.2 | ug/m3 | | | 04/04/21 15:56 | 1 |
| 4-Methyl-2-pentanone | ND | | 6.1 | 2.3 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **Acetone** | **150** | | 4.8 | 0.94 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Benzene | ND | | 1.6 | 0.50 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Benzyl chloride | ND | | 7.8 | 2.7 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Bromodichloromethane | ND | | 3.4 | 0.74 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Bromoform | ND | | 5.2 | 1.8 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Bromomethane | ND | | 1.9 | 0.54 | ug/m3 | | | 04/04/21 15:56 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.54 | ug/m3 | | | 04/04/21 15:56 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.3 | 0.98 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Carbon disulfide | ND | | 6.2 | 0.58 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Carbon tetrachloride | ND | | 3.1 | 1.3 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Chlorobenzene | ND | | 2.3 | 0.60 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Chloroethane | ND | | 1.3 | 0.45 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Chloroform | ND | | 2.4 | 0.78 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **Chloromethane** | **0.33** | **J** | 1.0 | 0.33 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Dibromochloromethane | ND | | 4.3 | 1.3 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **Dichlorodifluoromethane** | **3.2** | | 2.5 | 0.98 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Dichlorotetrafluoroethane | ND | | 14 | 1.3 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Ethylbenzene | ND | | 2.2 | 1.1 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Hexachloro-1,3-butadiene | ND | | 16 | 6.2 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **Isopropanol** | **87** | | 12 | 0.96 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Methylene Chloride | ND | | 17 | 1.9 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 7.2 | 1.2 | ug/m3 | | | 04/04/21 15:56 | 1 |
| n-Butylbenzene | ND | | 8.2 | 2.3 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **o-Xylene** | **1.1** | **J** | 2.2 | 0.86 | ug/m3 | | | 04/04/21 15:56 | 1 |
| m,p-Xylene | ND | | 8.7 | 2.7 | ug/m3 | | | 04/04/21 15:56 | 1 |
| sec-Butylbenzene | ND | | 8.2 | 1.6 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Styrene | ND | | 6.4 | 2.3 | ug/m3 | | | 04/04/21 15:56 | 1 |

## Client Sample ID: SSP-5

**Lab Sample ID: 440-281102-5**

**Date Collected: 03/24/21 16:22**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

### Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.50 | ug/m3 | | | 04/04/21 15:56 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.5 | 0.96 | ug/m3 | | | 04/04/21 15:56 | 1 |
| tert-Butylbenzene | ND | | 8.2 | 1.5 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **Tetrachloroethene** | **5.4** | | 3.4 | 1.1 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **Toluene** | **3.7** | | 1.9 | 0.50 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Trichloroethene | ND | | 2.7 | 0.96 | ug/m3 | | | 04/04/21 15:56 | 1 |
| **Trichlorofluoromethane** | **1.9** | **J** | 5.6 | 1.3 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Vinyl acetate | ND | | 7.0 | 1.2 | ug/m3 | | | 04/04/21 15:56 | 1 |
| Vinyl chloride | ND | | 1.3 | 0.41 | ug/m3 | | | 04/04/21 15:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *123* | | *70 - 130* | | *04/04/21 15:56* | *1* |
| *4-Bromofluorobenzene (Surr)* | *113* | | *67 - 131* | | *04/04/21 15:56* | *1* |
| *Toluene-d8 (Surr)* | *112* | | *70 - 130* | | *04/04/21 15:56* | *1* |

### Method: D1946 - Fixed Gases in Air (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **0.032** | **J** | 0.50 | 0.016 | % v/v | | | 03/30/21 17:01 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 17:01 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 17:01 | 1 |
| **Nitrogen** | **79** | | 0.50 | 0.17 | % v/v | | | 03/30/21 17:01 | 1 |
| **Oxygen + Argon** | **22** | | 0.50 | 0.084 | % v/v | | | 03/30/21 17:01 | 1 |

### Method: Fixed Gas Norm - Fixed Gases from Stationary Sources

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **0.032** | **J** | 0.50 | 0.016 | % v/v | | | 03/30/21 17:01 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 17:01 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 17:01 | 1 |
| **Nitrogen** | **78** | | 0.50 | 0.17 | % v/v | | | 03/30/21 17:01 | 1 |
| **Oxygen + Argon** | **22** | | 0.50 | 0.084 | % v/v | | | 03/30/21 17:01 | 1 |

## Client Sample ID: SSP-6

**Lab Sample ID: 440-281102-6**

**Date Collected: 03/24/21 16:58**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

### Method: TO-15 - Volatile Organic Compounds in Ambient Air

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.7 | 0.79 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 6.9 | 1.1 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 11 | 2.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.7 | 0.76 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.42 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.69 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 15 | 4.9 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 7.4 | 1.6 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 14 | 2.8 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,2-Dibromoethane | ND | | 3.8 | 1.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.59 | ug/m3 | | | 04/04/21 16:51 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

**Client Sample ID: SSP-6**
**Date Collected: 03/24/21 16:58**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 1L**

**Lab Sample ID: 440-281102-6**
**Matrix: Air**

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ND | | 2.3 | 0.64 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | 1.0 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **2-Butanone** | **9.2** | | 4.4 | 1.2 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 2-Hexanone | ND | | 6.1 | 2.6 | ug/m3 | | | 04/04/21 16:51 | 1 |
| 4-Ethyltoluene | ND | | 2.5 | 1.2 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **4-Methyl-2-pentanone** | **2.3** | **J** | 6.1 | 2.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Acetone** | **220** | | 4.8 | 0.94 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Benzene** | **0.64** | **J** | 1.6 | 0.50 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Benzyl chloride | ND | | 7.8 | 2.7 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Bromodichloromethane | ND | | 3.4 | 0.74 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Bromoform | ND | | 5.2 | 1.8 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Bromomethane | ND | | 1.9 | 0.54 | ug/m3 | | | 04/04/21 16:51 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.54 | ug/m3 | | | 04/04/21 16:51 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.3 | 0.98 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Carbon disulfide** | **2.0** | **J** | 6.2 | 0.58 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Carbon tetrachloride | ND | | 3.1 | 1.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Chlorobenzene | ND | | 2.3 | 0.60 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Chloroethane | ND | | 1.3 | 0.45 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Chloroform | ND | | 2.4 | 0.78 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Chloromethane** | **1.0** | | 1.0 | 0.33 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Dibromochloromethane | ND | | 4.3 | 1.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Dichlorodifluoromethane** | **3.1** | | 2.5 | 0.98 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Dichlorotetrafluoroethane | ND | | 14 | 1.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Ethylbenzene | ND | | 2.2 | 1.1 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Hexachloro-1,3-butadiene | ND | | 16 | 6.2 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Isopropanol** | **18** | | 12 | 0.96 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Methylene Chloride | ND | | 17 | 1.9 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 7.2 | 1.2 | ug/m3 | | | 04/04/21 16:51 | 1 |
| n-Butylbenzene | ND | | 8.2 | 2.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **o-Xylene** | **2.3** | | 2.2 | 0.86 | ug/m3 | | | 04/04/21 16:51 | 1 |
| m,p-Xylene | ND | | 8.7 | 2.7 | ug/m3 | | | 04/04/21 16:51 | 1 |
| sec-Butylbenzene | ND | | 8.2 | 1.6 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Styrene | ND | | 6.4 | 2.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.50 | ug/m3 | | | 04/04/21 16:51 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.5 | 0.96 | ug/m3 | | | 04/04/21 16:51 | 1 |
| tert-Butylbenzene | ND | | 8.2 | 1.5 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Tetrachloroethene** | **15** | | 3.4 | 1.1 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Toluene** | **5.2** | | 1.9 | 0.50 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Trichloroethene | ND | | 2.7 | 0.96 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Trichlorofluoromethane** | **2.1** | **J** | 5.6 | 1.3 | ug/m3 | | | 04/04/21 16:51 | 1 |
| **Vinyl acetate** | **4.1** | **J** | 7.0 | 1.2 | ug/m3 | | | 04/04/21 16:51 | 1 |
| Vinyl chloride | ND | | 1.3 | 0.41 | ug/m3 | | | 04/04/21 16:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *125* | | *70 - 130* | | *04/04/21 16:51* | *1* |
| *4-Bromofluorobenzene (Surr)* | *113* | | *67 - 131* | | *04/04/21 16:51* | *1* |
| *Toluene-d8 (Surr)* | *112* | | *70 - 130* | | *04/04/21 16:51* | *1* |

## Client Sample ID: SSP-6

**Lab Sample ID: 440-281102-6**

**Date Collected: 03/24/21 16:58**

**Matrix: Air**

**Date Received: 03/25/21 19:00**

**Sample Container: Summa Canister 1L**

### Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,1-Difluoroethane** | **1600** | | 54 | 9.9 | ug/m3 | | | 04/05/21 05:00 | 10.05 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *106* | | *70 - 130* | | *04/05/21 05:00* | *10.05* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *67 - 131* | | *04/05/21 05:00* | *10.05* |
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *04/05/21 05:00* | *10.05* |

### Method: D1946 - Fixed Gases in Air (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **0.37** | **J** | 0.50 | 0.016 | % v/v | | | 03/30/21 17:25 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 17:25 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 17:25 | 1 |
| **Nitrogen** | **79** | | 0.50 | 0.17 | % v/v | | | 03/30/21 17:25 | 1 |
| **Oxygen + Argon** | **22** | | 0.50 | 0.084 | % v/v | | | 03/30/21 17:25 | 1 |

### Method: Fixed Gas Norm - Fixed Gases from Stationary Sources

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Carbon dioxide** | **0.37** | **J** | 0.50 | 0.016 | % v/v | | | 03/30/21 17:25 | 1 |
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 17:25 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 17:25 | 1 |
| **Nitrogen** | **78** | | 0.50 | 0.17 | % v/v | | | 03/30/21 17:25 | 1 |
| **Oxygen + Argon** | **21** | | 0.50 | 0.084 | % v/v | | | 03/30/21 17:25 | 1 |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Matrix: Air**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | DCA | BFB | TOL |
| Lab Sample ID | Client Sample ID | (70-130) | (67-131) | (70-130) |
| 440-281102-1 | SSP-1 | 119 | 115 | 108 |
| 440-281102-2 | SSP-2 | 122 | 114 | 111 |
| 440-281102-3 | SSP-3 | 123 | 114 | 110 |
| 440-281102-4 | SSP-4 | 124 | 114 | 113 |
| 440-281102-4 - DL | SSP-4 | 106 | 98 | 101 |
| 440-281102-5 | SSP-5 | 123 | 113 | 112 |
| 440-281102-6 | SSP-6 | 125 | 113 | 112 |
| 440-281102-6 - DL | SSP-6 | 106 | 94 | 99 |
| LCS 570-140853/3 | Lab Control Sample | 115 | 107 | 111 |
| LCS 570-140859/3 | Lab Control Sample | 102 | 108 | 100 |
| LCSD 570-140853/4 | Lab Control Sample Dup | 114 | 106 | 113 |
| LCSD 570-140859/4 | Lab Control Sample Dup | 102 | 108 | 99 |
| MB 570-140853/6 | Method Blank | 116 | 112 | 111 |
| MB 570-140859/6 | Method Blank | 105 | 92 | 98 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

# Method Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| TO-15 | Volatile Organic Compounds in Ambient Air | EPA | ECL 2 |
| D1946 | Fixed Gases in Air (GC) | ASTM | ECL 2 |
| Fixed Gas Norm | Fixed Gases from Stationary Sources | EPA | ECL 2 |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

**Laboratory References:**

ECL 2 = Eurofins Calscience LLC  Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

## Client Sample ID: SSB-1

**Lab Sample ID: 554-021140-1**

**Date Collectex: 4d3053i01 15:d1**

**8 atri9: Mir**

**Date / ecei6ex: 4d30R301 1v:44**

| Brep Type | Patch Type | Patch 8 ethox | / sn | Dil zactor | Initial Mmosnt | zinal Mmosnt | Patch Fsmber | Breparex or Mnalyuex | MnalyAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 12:18 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 15:32 | USQD | ECL 2 |
| Total/NA | Analysis | Fixed Gas Norm | | 1 | | | 140064 | 03/30/21 15:32 | USQD | ECL 2 |

## Client Sample ID: SSB-0

**Lab Sample ID: 554-021140-0**

**Date Collectex: 4d3053i01 15:5v**

**8 atri9: Mir**

**Date / ecei6ex: 4d30R301 1v:44**

| Brep Type | Patch Type | Patch 8 ethox | / sn | Dil zactor | Initial Mmosnt | zinal Mmosnt | Patch Fsmber | Breparex or Mnalyuex | MnalyAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 13:13 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 15:59 | USQD | ECL 2 |
| Total/NA | Analysis | Fixed Gas Norm | | 1 | | | 140064 | 03/30/21 15:59 | USQD | ECL 2 |

## Client Sample ID: SSB-d

**Lab Sample ID: 554-021140-d**

**Date Collectex: 4d3053i01 1R:1N**

**8 atri9: Mir**

**Date / ecei6ex: 4d30R301 1v:44**

| Brep Type | Patch Type | Patch 8 ethox | / sn | Dil zactor | Initial Mmosnt | zinal Mmosnt | Patch Fsmber | Breparex or Mnalyuex | MnalyAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 14:08 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 16:20 | USQD | ECL 2 |
| Total/NA | Analysis | Fixed Gas Norm | | 1 | | | 140064 | 03/30/21 16:20 | USQD | ECL 2 |

## Client Sample ID: SSB-5

**Lab Sample ID: 554-021140-5**

**Date Collectex: 4d3053i01 1R:51**

**8 atri9: Mir**

**Date / ecei6ex: 4d30R301 1v:44**

| Brep Type | Patch Type | Patch 8 ethox | / sn | Dil zactor | Initial Mmosnt | zinal Mmosnt | Patch Fsmber | Breparex or Mnalyuex | MnalyAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 15:02 | UX77 | ECL 2 |
| Total/NA | Analysis | TO-15 | DL | 1.73 | 400 mL | 400 mL | 140859 | 04/05/21 04:13 | KA4W | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 16:41 | USQD | ECL 2 |
| Total/NA | Analysis | Fixed Gas Norm | | 1 | | | 140064 | 03/30/21 16:41 | USQD | ECL 2 |

## Client Sample ID: SSB-R

**Lab Sample ID: 554-021140-R**

**Date Collectex: 4d3053i01 1N:00**

**8 atri9: Mir**

**Date / ecei6ex: 4d30R301 1v:44**

| Brep Type | Patch Type | Patch 8 ethox | / sn | Dil zactor | Initial Mmosnt | zinal Mmosnt | Patch Fsmber | Breparex or Mnalyuex | MnalyAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 15:56 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 17:01 | USQD | ECL 2 |
| Total/NA | Analysis | Fixed Gas Norm | | 1 | | | 140064 | 03/30/21 17:01 | USQD | ECL 2 |

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

## Client Sample ID: SSB-N

**Date Collectex: 4d3053301 1N:R2**
**Date / ecei6ex: 4d30R301 1v:44**

## Lab Sample ID: 554-021140-N

**8 atri9: Mir**

| Brep Type | Patch Type | Patch 8 ethox | / sn | Dil zactor | Initial Mmosnt | zinal Mmosnt | Patch Fsmber | Breparex or Mnalyuex | MnalyAt | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 16:51 | UX77 | ECL 2 |
| Total/NA | Analysis | TO-15 | DL | 10.05 | 400 mL | 400 mL | 140859 | 04/05/21 05:00 | KA4W | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 17:25 | USQD | ECL 2 |
| Total/NA | Analysis | Fixed Gas Norm | | 1 | | | 140064 | 03/30/21 17:25 | USQD | ECL 2 |

**Laboratory / eferenceA:**
ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Lab Sample ID: MB 570-140853/6**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.7 | 0.79 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 6.9 | 1.1 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 11 | 2.3 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.7 | 0.76 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.42 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.69 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,1-Difluoroethane | ND | | 5.4 | 0.99 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 15 | 4.9 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 7.4 | 1.6 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 14 | 2.8 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,2-Dibromoethane | ND | | 3.8 | 1.3 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.59 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,2-Dichloropropane | ND | | 2.3 | 0.64 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | 1.0 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.0 | 1.5 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 2-Butanone | ND | | 4.4 | 1.2 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 2-Hexanone | ND | | 6.1 | 2.6 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 4-Ethyltoluene | ND | | 2.5 | 1.2 | ug/m3 | | | 04/04/21 01:22 | 1 |
| 4-Methyl-2-pentanone | ND | | 6.1 | 2.3 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Acetone | ND | | 4.8 | 0.94 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Benzene | ND | | 1.6 | 0.50 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Benzyl chloride | ND | | 7.8 | 2.7 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Bromodichloromethane | ND | | 3.4 | 0.74 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Bromoform | ND | | 5.2 | 1.8 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Bromomethane | ND | | 1.9 | 0.54 | ug/m3 | | | 04/04/21 01:22 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 0.54 | ug/m3 | | | 04/04/21 01:22 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.3 | 0.98 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Carbon disulfide | ND | | 6.2 | 0.58 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Carbon tetrachloride | ND | | 3.1 | 1.3 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Chlorobenzene | ND | | 2.3 | 0.60 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Chloroethane | ND | | 1.3 | 0.45 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Chloroform | ND | | 2.4 | 0.78 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Chloromethane | ND | | 1.0 | 0.33 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Dibromochloromethane | ND | | 4.3 | 1.3 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Dichlorodifluoromethane | ND | | 2.5 | 0.98 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Dichlorotetrafluoroethane | ND | | 14 | 1.3 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Ethylbenzene | ND | | 2.2 | 1.1 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Hexachloro-1,3-butadiene | ND | | 16 | 6.2 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Isopropanol | ND | | 12 | 0.96 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Methylene Chloride | ND | | 17 | 1.9 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 7.2 | 1.2 | ug/m3 | | | 04/04/21 01:22 | 1 |
| n-Butylbenzene | ND | | 8.2 | 2.3 | ug/m3 | | | 04/04/21 01:22 | 1 |
| o-Xylene | ND | | 2.2 | 0.86 | ug/m3 | | | 04/04/21 01:22 | 1 |
| m,p-Xylene | ND | | 8.7 | 2.7 | ug/m3 | | | 04/04/21 01:22 | 1 |
| sec-Butylbenzene | ND | | 8.2 | 1.6 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Styrene | ND | | 6.4 | 2.3 | ug/m3 | | | 04/04/21 01:22 | 1 |

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 570-140853/6**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 2.0 | 0.50 | ug/m3 | | | 04/04/21 01:22 | 1 |
| trans-1,3-Dichloropropene | ND | | 4.5 | 0.96 | ug/m3 | | | 04/04/21 01:22 | 1 |
| tert-Butylbenzene | ND | | 8.2 | 1.5 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Tetrachloroethene | ND | | 3.4 | 1.1 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Toluene | ND | | 1.9 | 0.50 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Trichloroethene | ND | | 2.7 | 0.96 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Trichlorofluoromethane | ND | | 5.6 | 1.3 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Vinyl acetate | ND | | 7.0 | 1.2 | ug/m3 | | | 04/04/21 01:22 | 1 |
| Vinyl chloride | ND | | 1.3 | 0.41 | ug/m3 | | | 04/04/21 01:22 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *116* | | *70 - 130* | | *04/04/21 01:22* | *1* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *67 - 131* | | *04/04/21 01:22* | *1* |
| *Toluene-d8 (Surr)* | *111* | | *70 - 130* | | *04/04/21 01:22* | *1* |

**Lab Sample ID: LCS 570-140853/3**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 136 | 151 | | ug/m3 | | 111 | 70 - 137 |
| 1,1,2,2-Tetrachloroethane | 172 | 179 | | ug/m3 | | 104 | 70 - 130 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 192 | 198 | | ug/m3 | | 103 | 70 - 130 |
| 1,1,2-Trichloroethane | 136 | 152 | | ug/m3 | | 112 | 70 - 130 |
| 1,1-Dichloroethane | 101 | 111 | | ug/m3 | | 109 | 70 - 131 |
| 1,1-Dichloroethene | 99.1 | 112 | | ug/m3 | | 113 | 70 - 130 |
| 1,1-Difluoroethane | 67.5 | 82.0 | | ug/m3 | | 121 | 60 - 130 |
| 1,2,4-Trichlorobenzene | 186 | 198 | | ug/m3 | | 107 | 56 - 130 |
| 1,2,4-Trimethylbenzene | 123 | 122 | | ug/m3 | | 100 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 242 | 253 | | ug/m3 | | 105 | 68 - 130 |
| 1,2-Dibromoethane | 192 | 190 | | ug/m3 | | 99 | 70 - 130 |
| 1,2-Dichlorobenzene | 150 | 152 | | ug/m3 | | 101 | 70 - 130 |
| 1,2-Dichloroethane | 101 | 119 | | ug/m3 | | 118 | 70 - 134 |
| 1,2-Dichloropropane | 116 | 129 | | ug/m3 | | 112 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 123 | 125 | | ug/m3 | | 102 | 70 - 130 |
| 1,3-Dichlorobenzene | 150 | 145 | | ug/m3 | | 97 | 69 - 132 |
| 1,4-Dichlorobenzene | 150 | 148 | | ug/m3 | | 99 | 67 - 132 |
| 2-Butanone | 73.7 | 89.0 | | ug/m3 | | 121 | 64 - 143 |
| 2-Hexanone | 102 | 117 | | ug/m3 | | 114 | 59 - 140 |
| 4-Ethyltoluene | 123 | 127 | | ug/m3 | | 103 | 70 - 130 |
| 4-Methyl-2-pentanone | 102 | 131 | | ug/m3 | | 128 | 64 - 133 |
| Acetone | 59.4 | 69.2 | | ug/m3 | | 116 | 69 - 146 |
| Benzene | 79.9 | 81.6 | | ug/m3 | | 102 | 70 - 133 |
| Benzyl chloride | 129 | 133 | | ug/m3 | | 103 | 63 - 130 |
| Bromodichloromethane | 168 | 182 | | ug/m3 | | 109 | 70 - 130 |
| Bromoform | 258 | 246 | | ug/m3 | | 95 | 70 - 132 |
| Bromomethane | 97.1 | 113 | | ug/m3 | | 117 | 70 - 137 |
| cis-1,2-Dichloroethene | 99.1 | 103 | | ug/m3 | | 104 | 70 - 130 |

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 570-140853/3**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | 113 | 127 | | ug/m3 | | 112 | 70 - 130 |
| Carbon disulfide | 77.9 | 77.0 | | ug/m3 | | 99 | 70 - 150 |
| Carbon tetrachloride | 157 | 168 | | ug/m3 | | 107 | 70 - 130 |
| Chlorobenzene | 115 | 116 | | ug/m3 | | 101 | 70 - 130 |
| Chloroethane | 66.0 | 77.8 | | ug/m3 | | 118 | 70 - 137 |
| Chloroform | 122 | 131 | | ug/m3 | | 107 | 70 - 132 |
| Chloromethane | 51.6 | 60.4 | | ug/m3 | | 117 | 65 - 142 |
| Dibromochloromethane | 213 | 197 | | ug/m3 | | 92 | 70 - 130 |
| Dichlorodifluoromethane | 124 | 135 | | ug/m3 | | 109 | 70 - 142 |
| Dichlorotetrafluoroethane | 175 | 211 | | ug/m3 | | 121 | 70 - 137 |
| Ethylbenzene | 109 | 112 | | ug/m3 | | 103 | 70 - 130 |
| Hexachloro-1,3-butadiene | 267 | 286 | | ug/m3 | | 107 | 55 - 130 |
| Isopropanol | 61.5 | 61.1 | | ug/m3 | | 99 | 60 - 130 |
| Methylene Chloride | 86.8 | 86.2 | | ug/m3 | | 99 | 70 - 130 |
| Methyl-t-Butyl Ether (MTBE) | 90.1 | 93.5 | | ug/m3 | | 104 | 70 - 132 |
| n-Butylbenzene | 137 | 156 | | ug/m3 | | 113 | 70 - 130 |
| o-Xylene | 109 | 110 | | ug/m3 | | 101 | 70 - 130 |
| m,p-Xylene | 217 | 214 | | ug/m3 | | 99 | 70 - 130 |
| sec-Butylbenzene | 137 | 145 | | ug/m3 | | 106 | 70 - 130 |
| Styrene | 106 | 112 | | ug/m3 | | 105 | 70 - 130 |
| trans-1,2-Dichloroethene | 99.1 | 101 | | ug/m3 | | 102 | 70 - 140 |
| trans-1,3-Dichloropropene | 113 | 131 | | ug/m3 | | 115 | 70 - 130 |
| tert-Butylbenzene | 137 | 146 | | ug/m3 | | 106 | 70 - 130 |
| Tetrachloroethene | 170 | 162 | | ug/m3 | | 95 | 70 - 130 |
| Toluene | 94.2 | 90.2 | | ug/m3 | | 96 | 70 - 130 |
| Trichloroethene | 134 | 142 | | ug/m3 | | 105 | 70 - 130 |
| Trichlorofluoromethane | 140 | 167 | | ug/m3 | | 119 | 70 - 143 |
| Vinyl acetate | 88.0 | 103 | | ug/m3 | | 117 | 67 - 138 |
| Vinyl chloride | 63.9 | 73.6 | | ug/m3 | | 115 | 70 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *107* | | *67 - 131* |
| *Toluene-d8 (Surr)* | *111* | | *70 - 130* |

**Lab Sample ID: LCSD 570-140853/4**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 136 | 151 | | ug/m3 | | 110 | 70 - 137 | 1 | 25 |
| 1,1,2,2-Tetrachloroethane | 172 | 179 | | ug/m3 | | 104 | 70 - 130 | 0 | 25 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 192 | 202 | | ug/m3 | | 105 | 70 - 130 | 2 | 25 |
| 1,1,2-Trichloroethane | 136 | 158 | | ug/m3 | | 116 | 70 - 130 | 4 | 25 |
| 1,1-Dichloroethane | 101 | 113 | | ug/m3 | | 111 | 70 - 131 | 2 | 25 |
| 1,1-Dichloroethene | 99.1 | 115 | | ug/m3 | | 116 | 70 - 130 | 2 | 25 |
| 1,1-Difluoroethane | 67.5 | 83.0 | | ug/m3 | | 123 | 60 - 130 | 1 | 25 |
| 1,2,4-Trichlorobenzene | 186 | 198 | | ug/m3 | | 107 | 56 - 130 | 0 | 25 |

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCSD 570-140853/4**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | 123 | 123 | | ug/m3 | | 100 | 70 - 130 | 1 | 25 |
| 1,2-Dibromo-3-Chloropropane | 242 | 250 | | ug/m3 | | 103 | 68 - 130 | 1 | 25 |
| 1,2-Dibromoethane | 192 | 191 | | ug/m3 | | 100 | 70 - 130 | 1 | 25 |
| 1,2-Dichlorobenzene | 150 | 150 | | ug/m3 | | 100 | 70 - 130 | 1 | 25 |
| 1,2-Dichloroethane | 101 | 119 | | ug/m3 | | 117 | 70 - 134 | 1 | 25 |
| 1,2-Dichloropropane | 116 | 132 | | ug/m3 | | 114 | 70 - 130 | 2 | 25 |
| 1,3,5-Trimethylbenzene | 123 | 124 | | ug/m3 | | 101 | 70 - 130 | 1 | 25 |
| 1,3-Dichlorobenzene | 150 | 145 | | ug/m3 | | 96 | 69 - 132 | 1 | 25 |
| 1,4-Dichlorobenzene | 150 | 147 | | ug/m3 | | 98 | 67 - 132 | 1 | 25 |
| 2-Butanone | 73.7 | 92.1 | | ug/m3 | | 125 | 64 - 143 | 3 | 25 |
| 2-Hexanone | 102 | 120 | | ug/m3 | | 117 | 59 - 140 | 2 | 25 |
| 4-Ethyltoluene | 123 | 126 | | ug/m3 | | 102 | 70 - 130 | 1 | 25 |
| 4-Methyl-2-pentanone | 102 | 134 | | ug/m3 | | 130 | 64 - 133 | 2 | 25 |
| Acetone | 59.4 | 72.1 | | ug/m3 | | 121 | 69 - 146 | 4 | 25 |
| Benzene | 79.9 | 81.9 | | ug/m3 | | 102 | 70 - 133 | 0 | 25 |
| Benzyl chloride | 129 | 133 | | ug/m3 | | 102 | 63 - 130 | 0 | 25 |
| Bromodichloromethane | 168 | 189 | | ug/m3 | | 113 | 70 - 130 | 3 | 25 |
| Bromoform | 258 | 247 | | ug/m3 | | 96 | 70 - 132 | 0 | 25 |
| Bromomethane | 97.1 | 115 | | ug/m3 | | 119 | 70 - 137 | 2 | 25 |
| cis-1,2-Dichloroethene | 99.1 | 104 | | ug/m3 | | 105 | 70 - 130 | 1 | 25 |
| cis-1,3-Dichloropropene | 113 | 130 | | ug/m3 | | 115 | 70 - 130 | 2 | 25 |
| Carbon disulfide | 77.9 | 79.2 | | ug/m3 | | 102 | 70 - 150 | 3 | 25 |
| Carbon tetrachloride | 157 | 166 | | ug/m3 | | 105 | 70 - 130 | 1 | 25 |
| Chlorobenzene | 115 | 116 | | ug/m3 | | 101 | 70 - 130 | 0 | 25 |
| Chloroethane | 66.0 | 80.1 | | ug/m3 | | 121 | 70 - 137 | 3 | 25 |
| Chloroform | 122 | 130 | | ug/m3 | | 107 | 70 - 132 | 1 | 25 |
| Chloromethane | 51.6 | 60.5 | | ug/m3 | | 117 | 65 - 142 | 0 | 25 |
| Dibromochloromethane | 213 | 198 | | ug/m3 | | 93 | 70 - 130 | 1 | 25 |
| Dichlorodifluoromethane | 124 | 136 | | ug/m3 | | 110 | 70 - 142 | 0 | 25 |
| Dichlorotetrafluoroethane | 175 | 210 | | ug/m3 | | 120 | 70 - 137 | 1 | 25 |
| Ethylbenzene | 109 | 112 | | ug/m3 | | 103 | 70 - 130 | 0 | 25 |
| Hexachloro-1,3-butadiene | 267 | 288 | | ug/m3 | | 108 | 55 - 130 | 1 | 25 |
| Isopropanol | 61.5 | 62.0 | | ug/m3 | | 101 | 60 - 130 | 1 | 25 |
| Methylene Chloride | 86.8 | 88.4 | | ug/m3 | | 102 | 70 - 130 | 3 | 25 |
| Methyl-t-Butyl Ether (MTBE) | 90.1 | 95.0 | | ug/m3 | | 105 | 70 - 132 | 2 | 25 |
| n-Butylbenzene | 137 | 153 | | ug/m3 | | 112 | 70 - 130 | 1 | 25 |
| o-Xylene | 109 | 108 | | ug/m3 | | 100 | 70 - 130 | 1 | 25 |
| m,p-Xylene | 217 | 215 | | ug/m3 | | 99 | 70 - 130 | 0 | 25 |
| sec-Butylbenzene | 137 | 143 | | ug/m3 | | 105 | 70 - 130 | 1 | 25 |
| Styrene | 106 | 111 | | ug/m3 | | 104 | 70 - 130 | 0 | 25 |
| trans-1,2-Dichloroethene | 99.1 | 102 | | ug/m3 | | 103 | 70 - 140 | 1 | 25 |
| trans-1,3-Dichloropropene | 113 | 134 | | ug/m3 | | 118 | 70 - 130 | 2 | 25 |
| tert-Butylbenzene | 137 | 147 | | ug/m3 | | 107 | 70 - 130 | 1 | 25 |
| Tetrachloroethene | 170 | 160 | | ug/m3 | | 95 | 70 - 130 | 1 | 25 |
| Toluene | 94.2 | 92.8 | | ug/m3 | | 99 | 70 - 130 | 3 | 25 |
| Trichloroethene | 134 | 146 | | ug/m3 | | 109 | 70 - 130 | 3 | 25 |
| Trichlorofluoromethane | 140 | 167 | | ug/m3 | | 119 | 70 - 143 | 0 | 25 |
| Vinyl acetate | 88.0 | 104 | | ug/m3 | | 118 | 67 - 138 | 1 | 25 |
| Vinyl chloride | 63.9 | 74.5 | | ug/m3 | | 117 | 70 - 133 | 1 | 25 |

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *106* | | *67 - 131* |
| *Toluene-d8 (Surr)* | *113* | | *70 - 130* |

**Lab Sample ID: MB 570-140859/6**
**Matrix: Air**
**Analysis Batch: 140859**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | ND | | 5.4 | 0.99 | ug/m3 | | | 04/04/21 18:38 | 1 |
| Acetone | ND | | 4.8 | 0.94 | ug/m3 | | | 04/04/21 18:38 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *70 - 130* | | *04/04/21 18:38* | *1* |
| *4-Bromofluorobenzene (Surr)* | *92* | | *67 - 131* | | *04/04/21 18:38* | *1* |
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *04/04/21 18:38* | *1* |

**Lab Sample ID: LCS 570-140859/3**
**Matrix: Air**
**Analysis Batch: 140859**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | | | 67.5 | 79.2 | | ug/m3 | | 117 | 60 - 130 | | |
| Acetone | | | 59.4 | 63.5 | | ug/m3 | | 107 | 69 - 146 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *108* | | *67 - 131* |
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* |

**Lab Sample ID: LCSD 570-140859/4**
**Matrix: Air**
**Analysis Batch: 140859**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | | | 67.5 | 79.5 | | ug/m3 | | 118 | 60 - 130 | 0 | 25 |
| Acetone | | | 59.4 | 64.9 | | ug/m3 | | 109 | 69 - 146 | 2 | 25 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *108* | | *67 - 131* |
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* |

## Method: D1946 - Fixed Gases in Air (GC)

**Lab Sample ID: MB 570-139671/4**
**Matrix: Air**
**Analysis Batch: 139671**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | ND | | 0.50 | 0.016 | % v/v | | | 03/30/21 14:36 | 1 |

## Method: D1946 - Fixed Gases in Air (GC) (Continued)

**Lab Sample ID: MB 570-139671/4**
**Matrix: Air**
**Analysis Batch: 139671**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon monoxide | ND | | 0.50 | 0.12 | % v/v | | | 03/30/21 14:36 | 1 |
| Methane | ND | | 0.50 | 0.0069 | % v/v | | | 03/30/21 14:36 | 1 |
| Nitrogen | ND | | 0.50 | 0.17 | % v/v | | | 03/30/21 14:36 | 1 |
| Oxygen + Argon | ND | | 0.50 | 0.084 | % v/v | | | 03/30/21 14:36 | 1 |

**Lab Sample ID: LCS 570-139671/2**
**Matrix: Air**
**Analysis Batch: 139671**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Carbon dioxide | 15.0 | 16.1 | | % v/v | | 107 | 80 - 120 |
| Carbon monoxide | 7.03 | 8.24 | | % v/v | | 117 | 80 - 120 |
| Methane | 4.54 | 3.90 | | % v/v | | 86 | 80 - 120 |
| Nitrogen | 69.5 | 70.4 | | % v/v | | 101 | 80 - 120 |
| Oxygen + Argon | 4.00 | 4.29 | | % v/v | | 107 | 80 - 120 |

**Lab Sample ID: LCSD 570-139671/3**
**Matrix: Air**
**Analysis Batch: 139671**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | 15.0 | 16.7 | | % v/v | | 111 | 80 - 120 | 4 | 20 |
| Carbon monoxide | 7.03 | 8.31 | | % v/v | | 118 | 80 - 120 | 1 | 20 |
| Methane | 4.54 | 3.92 | | % v/v | | 86 | 80 - 120 | 1 | 20 |
| Nitrogen | 69.5 | 70.8 | | % v/v | | 102 | 80 - 120 | 1 | 20 |
| Oxygen + Argon | 4.00 | 4.31 | | % v/v | | 108 | 80 - 120 | 0 | 20 |

## Air - GC/MS VOA

### Analysis Batch: 140853

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281102-1 | SSP-1 | Total/NA | Air | TO-15 | |
| 440-281102-2 | SSP-2 | Total/NA | Air | TO-15 | |
| 440-281102-3 | SSP-3 | Total/NA | Air | TO-15 | |
| 440-281102-4 | SSP-4 | Total/NA | Air | TO-15 | |
| 440-281102-5 | SSP-5 | Total/NA | Air | TO-15 | |
| 440-281102-6 | SSP-6 | Total/NA | Air | TO-15 | |
| MB 570-140853/6 | Method Blank | Total/NA | Air | TO-15 | |
| LCS 570-140853/3 | Lab Control Sample | Total/NA | Air | TO-15 | |
| LCSD 570-140853/4 | Lab Control Sample Dup | Total/NA | Air | TO-15 | |

### Analysis Batch: 140859

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281102-4 - DL | SSP-4 | Total/NA | Air | TO-15 | |
| 440-281102-6 - DL | SSP-6 | Total/NA | Air | TO-15 | |
| MB 570-140859/6 | Method Blank | Total/NA | Air | TO-15 | |
| LCS 570-140859/3 | Lab Control Sample | Total/NA | Air | TO-15 | |
| LCSD 570-140859/4 | Lab Control Sample Dup | Total/NA | Air | TO-15 | |

## Air - GC VOA

### Analysis Batch: 139671

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281102-1 | SSP-1 | Total/NA | Air | D1946 | |
| 440-281102-2 | SSP-2 | Total/NA | Air | D1946 | |
| 440-281102-3 | SSP-3 | Total/NA | Air | D1946 | |
| 440-281102-4 | SSP-4 | Total/NA | Air | D1946 | |
| 440-281102-5 | SSP-5 | Total/NA | Air | D1946 | |
| 440-281102-6 | SSP-6 | Total/NA | Air | D1946 | |
| MB 570-139671/4 | Method Blank | Total/NA | Air | D1946 | |
| LCS 570-139671/2 | Lab Control Sample | Total/NA | Air | D1946 | |
| LCSD 570-139671/3 | Lab Control Sample Dup | Total/NA | Air | D1946 | |

### Analysis Batch: 140064

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281102-1 | SSP-1 | Total/NA | Air | Fixed Gas Norm | |
| 440-281102-2 | SSP-2 | Total/NA | Air | Fixed Gas Norm | |
| 440-281102-3 | SSP-3 | Total/NA | Air | Fixed Gas Norm | |
| 440-281102-4 | SSP-4 | Total/NA | Air | Fixed Gas Norm | |
| 440-281102-5 | SSP-5 | Total/NA | Air | Fixed Gas Norm | |
| 440-281102-6 | SSP-6 | Total/NA | Air | Fixed Gas Norm | |

## Qualifiers

### Air - GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### Air - GC VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281102-1

## Laboratory: Eurofins Calscience LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| D1946 | | Air | Carbon dioxide |
| D1946 | | Air | Carbon monoxide |
| D1946 | | Air | Methane |
| D1946 | | Air | Nitrogen |
| D1946 | | Air | Oxygen + Argon |
| Fixed Gas Norm | | Air | Carbon dioxide |
| Fixed Gas Norm | | Air | Carbon monoxide |
| Fixed Gas Norm | | Air | Methane |
| Fixed Gas Norm | | Air | Nitrogen |
| Fixed Gas Norm | | Air | Oxygen + Argon |
| TO-15 | | Air | 1,1,1-Trichloroethane |
| TO-15 | | Air | 1,1,2,2-Tetrachloroethane |
| TO-15 | | Air | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| TO-15 | | Air | 1,1,2-Trichloroethane |
| TO-15 | | Air | 1,1-Dichloroethane |
| TO-15 | | Air | 1,1-Dichloroethene |
| TO-15 | | Air | 1,1-Difluoroethane |
| TO-15 | | Air | 1,2,4-Trichlorobenzene |
| TO-15 | | Air | 1,2,4-Trimethylbenzene |
| TO-15 | | Air | 1,2-Dibromo-3-Chloropropane |
| TO-15 | | Air | 1,2-Dibromoethane |
| TO-15 | | Air | 1,2-Dichlorobenzene |
| TO-15 | | Air | 1,2-Dichloroethane |
| TO-15 | | Air | 1,2-Dichloropropane |
| TO-15 | | Air | 1,3,5-Trimethylbenzene |
| TO-15 | | Air | 1,3-Dichlorobenzene |
| TO-15 | | Air | 1,4-Dichlorobenzene |
| TO-15 | | Air | 2-Butanone |
| TO-15 | | Air | 2-Hexanone |
| TO-15 | | Air | 4-Ethyltoluene |
| TO-15 | | Air | 4-Methyl-2-pentanone |
| TO-15 | | Air | Acetone |
| TO-15 | | Air | Benzene |
| TO-15 | | Air | Benzyl chloride |
| TO-15 | | Air | Bromodichloromethane |
| TO-15 | | Air | Bromoform |
| TO-15 | | Air | Bromomethane |
| TO-15 | | Air | Carbon disulfide |
| TO-15 | | Air | Carbon tetrachloride |
| TO-15 | | Air | Chlorobenzene |
| TO-15 | | Air | Chloroethane |
| TO-15 | | Air | Chloroform |
| TO-15 | | Air | Chloromethane |
| TO-15 | | Air | cis-1,2-Dichloroethene |
| TO-15 | | Air | cis-1,3-Dichloropropene |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

| | | |
|---|---|---|
| TO-15 | Air | Dibromochloromethane |
| TO-15 | Air | Dichlorodifluoromethane |
| TO-15 | Air | Dichlorotetrafluoroethane |
| TO-15 | Air | Ethylbenzene |
| TO-15 | Air | Hexachloro-1,3-butadiene |
| TO-15 | Air | Isopropanol |
| TO-15 | Air | m,p-Xylene |
| TO-15 | Air | Methylene Chloride |
| TO-15 | Air | Methyl-t-Butyl Ether (MTBE) |
| TO-15 | Air | n-Butylbenzene |
| TO-15 | Air | o-Xylene |
| TO-15 | Air | sec-Butylbenzene |
| TO-15 | Air | Styrene |
| TO-15 | Air | tert-Butylbenzene |
| TO-15 | Air | Tetrachloroethene |
| TO-15 | Air | Toluene |
| TO-15 | Air | trans-1,2-Dichloroethene |
| TO-15 | Air | trans-1,3-Dichloropropene |
| TO-15 | Air | Trichloroethene |
| TO-15 | Air | Trichlorofluoromethane |
| TO-15 | Air | Vinyl acetate |
| TO-15 | Air | Vinyl chloride |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| D1946 | | Air | Carbon dioxide |
| D1946 | | Air | Carbon monoxide |
| D1946 | | Air | Methane |
| D1946 | | Air | Nitrogen |
| D1946 | | Air | Oxygen + Argon |
| Fixed Gas Norm | | Air | Carbon dioxide |
| Fixed Gas Norm | | Air | Carbon monoxide |
| Fixed Gas Norm | | Air | Methane |
| Fixed Gas Norm | | Air | Nitrogen |
| Fixed Gas Norm | | Air | Oxygen + Argon |
| TO-15 | | Air | 1,1,1-Trichloroethane |
| TO-15 | | Air | 1,1,2,2-Tetrachloroethane |
| TO-15 | | Air | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| TO-15 | | Air | 1,1,2-Trichloroethane |
| TO-15 | | Air | 1,1-Dichloroethane |
| TO-15 | | Air | 1,1-Dichloroethene |
| TO-15 | | Air | 1,1-Difluoroethane |
| TO-15 | | Air | 1,2,4-Trichlorobenzene |
| TO-15 | | Air | 1,2,4-Trimethylbenzene |
| TO-15 | | Air | 1,2-Dibromo-3-Chloropropane |
| TO-15 | | Air | 1,2-Dibromoethane |
| TO-15 | | Air | 1,2-Dichlorobenzene |
| TO-15 | | Air | 1,2-Dichloroethane |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | State | 2944 | 09-30-21 |
| TO-15 | Air | 1,2-Dichloropropane | |
| TO-15 | Air | 1,3,5-Trimethylbenzene | |
| TO-15 | Air | 1,3-Dichlorobenzene | |
| TO-15 | Air | 1,4-Dichlorobenzene | |
| TO-15 | Air | 2-Butanone | |
| TO-15 | Air | 2-Hexanone | |
| TO-15 | Air | 4-Ethyltoluene | |
| TO-15 | Air | 4-Methyl-2-pentanone | |
| TO-15 | Air | Acetone | |
| TO-15 | Air | Benzene | |
| TO-15 | Air | Benzyl chloride | |
| TO-15 | Air | Bromodichloromethane | |
| TO-15 | Air | Bromoform | |
| TO-15 | Air | Bromomethane | |
| TO-15 | Air | Carbon disulfide | |
| TO-15 | Air | Carbon tetrachloride | |
| TO-15 | Air | Chlorobenzene | |
| TO-15 | Air | Chloroethane | |
| TO-15 | Air | Chloroform | |
| TO-15 | Air | Chloromethane | |
| TO-15 | Air | cis-1,2-Dichloroethene | |
| TO-15 | Air | cis-1,3-Dichloropropene | |
| TO-15 | Air | Dibromochloromethane | |
| TO-15 | Air | Dichlorodifluoromethane | |
| TO-15 | Air | Dichlorotetrafluoroethane | |
| TO-15 | Air | Ethylbenzene | |
| TO-15 | Air | Hexachloro-1,3-butadiene | |
| TO-15 | Air | Isopropanol | |
| TO-15 | Air | m,p-Xylene | |
| TO-15 | Air | Methylene Chloride | |
| TO-15 | Air | Methyl-t-Butyl Ether (MTBE) | |
| TO-15 | Air | n-Butylbenzene | |
| TO-15 | Air | o-Xylene | |
| TO-15 | Air | sec-Butylbenzene | |
| TO-15 | Air | Styrene | |
| TO-15 | Air | tert-Butylbenzene | |
| TO-15 | Air | Tetrachloroethene | |
| TO-15 | Air | Toluene | |
| TO-15 | Air | trans-1,2-Dichloroethene | |
| TO-15 | Air | trans-1,3-Dichloropropene | |
| TO-15 | Air | Trichloroethene | |
| TO-15 | Air | Trichlorofluoromethane | |
| TO-15 | Air | Vinyl acetate | |
| TO-15 | Air | Vinyl chloride | |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: EUROFINS/CALSCIENCE
Address:
Phone:
Office Location: COLTON-CA
Contact: DANIELLE ROBERTS
Project Manager: TODD MCFARLAND
PO/SO #: CB21P020

Sampler's Name: JOSÉ MARIN
Sampler's Signature:

Project Number: CB21P020
Project Name: BALDWIN PARK

ANALYSIS REQUESTED: TO-15 FULL LIST; FIXED GASES

LAB USE ONLY
DUE DATE.

TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 1

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers: 1-L SUMMA | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|
| A | 3/24/21 | 1431 | | X | SSP-1 | | | X | |
| | | 1449 | | | SSP-2 | | | X | |
| | | 1516 | | | SSP-3 | | | X | |
| | | 1541 | | | SSP-4 | | | X | |
| | | 1622 | | | SSP-5 | | | X | |
| | | 1658 | | | SSP-6 | | | X | |

TURNAROUND TIME: ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist: ☐ Yes ☐ No

| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 3-25-21 | 1440 | | 3/25 | 14:40 |
| | 3/25/21 | 16:01 | William Rivera | 3/25/21 | 1601 |
| CVR | 3/25/21 | 1900 | | | |
| | Date. | Time: | Olga Cirelas | 3/26/21 | 1900 |

NOTES
5DAY TAT
REPORT UG/M3
LEAK CHECK - 1,1-DFA (DFE)

Matrix: WW Wastewater; W Water; S Soil; L Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml Glass wide mouth; P/O Plastic or other

California Office ■ 1355 E Cooley Drive, Suite C ■ Colton, CA 92324 ■ (909) 824-7311
Responsive ■ Resourceful ■ Reliable

EDD



186/188 #93

440-281102 Chain of Custody

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

4/6/2021

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167341 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281102-1 |
| Address: 7440 Lincoln Way, | Due Date Requested: 3/31/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | TO15_PF/Air_Summa_Can Routine Volatiles in Air (full spike) | D1946/Air_Summa_Can Full Analyte List | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | |
| SSP-1 (440-281102-1) | 3/24/21 | 14.31 Pacific | | Air | | | X | X | 1 | |
| SSP-2 (440-281102-2) | 3/24/21 | 14.49 Pacific | | Air | | | X | X | 1 | |
| SSP-3 (440-281102-3) | 3/24/21 | 15 16 Pacific | | Air | | | X | X | 1 | |
| SSP-4 (440-281102-4) | 3/24/21 | 15 41 Pacific | | Air | | | X | X | 1 | |
| SSP-5 (440-281102-5) | 3/24/21 | 16:22 Pacific | | Air | | | X | X | 1 | |
| SSP-6 (440-281102-6) | 3/24/21 | 16.58 Pacific | | Air | | | X | X | 1 | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Note. Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | [signature] | 3/26/21 SLL 3/26/21 | EC IRV | [signature] | 3/27/21 0845 | EC |
| 2 | | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | [signature] | Date/Time: 3-27-21 8:45 | Company EC IRV | Received by: [signature] | Date/Time: 3/27/21 0845 | Company EC |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No: | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281102-1

**Login Number: 281102**
**List Number: 1**
**Creator: Skinner, Alma D**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | N/A | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

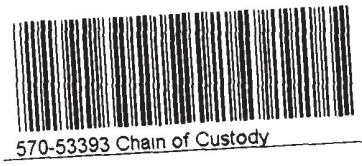
Job Number: 440-281102-1

**Login Number: 281102**
**List Number: 2**
**Creator: Liao, Gineyau**

**List Source: Eurofins Calscience**
**List Creation: 03/27/21 03:26 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | False | Not present |
| Sample custody seals, if present, are intact. | False | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | False | Thermal preservation not required. |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

eurofins | Calscience




# BATCH CANISTER QC CERTIFICATION

Canister Size: ☐ 6L ☑ 1L

Certified Canister IDs:

| | | |
|---|---|---|
| LC1114 | (Certified Canister) | LC241 |
| LC609 | | LC081 |
| LC710 | | LC069 |
| LC812 | | LC997 |
| LC1280 | | LC486 |
| LC781 | | LC1137 |

Certification Method: ☐ TO-14 ☑ TO-15 ☐ TO-15 SIM

Date Cleaned: 3/10/2021

Date Certified: 3/11/2021

TALS Job #: 570-53393

Gauge ID: AIRMG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☑ Oven 1 | ☐ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☐ Oven 7 |
| ☐ Rack 3 | | ☐ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes.

Employee ID: I2GR Date: 3/12/2021

# BATCH CANISTER QC CERTIFICATION

Canister Size: ☐ 6L ☑ 1L

Certified Canister IDs:

| | | |
|---|---|---|
| LC1033 | (Certified Canister) | LC1091 |
| LC511 | | LC1234 |
| LC1141 | | LC1210 |
| LC1035 | | LC1242 |
| LC911 | | LC173 |
| LC784 | | LC342 |

Certification Method: ☐ TO-14 ☑ TO-15 ☐ TO-15 SIM

Date Cleaned: 3/15/2021

Date Certified: 3/16/2021

TALS Job #: 570-53852

Gauge ID: AIRMG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☐ Oven 1 | ☐ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☐ Oven 7 |
| ☐ Rack 3 | | ☑ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes

Employee ID: I2GR Date: 3/17/2021

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53393-1

SDG No.:

Client Sample ID: LC1114 | Lab Sample ID: 570-53393-1

Matrix: Air | Lab File ID: KKK11MAR07.D

Analysis Method: TO-15 | Date Collected: 03/10/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/11/2021 14:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 135493 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53393-1

SDG No.:

Client Sample ID: LC1114 | Lab Sample ID: 570-53393-1

Matrix: Air | Lab File ID: KKK11MAR07.D

Analysis Method: TO-15 | Date Collected: 03/10/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/11/2021 14:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 135493 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 100 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 98 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 99 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D
Lims ID: 570-53393-A-1
Client ID: LC1114
Sample Type: Client
Inject. Date: 11-Mar-2021 14:59:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53393-A-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 12-Mar-2021 11:14:23 Calib Date: 10-Mar-2021 15:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR09.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1634

First Level Reviewer: rhoadesw Date: 12-Mar-2021 10:52:45

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.818 | | | | ND | |
| 7 Dichlorodifluoromethane | 85 | | 3.960 | | | | ND | |
| 8 Chloromethane | 50 | | 4.107 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.211 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.315 | | | | ND | |
| 16 Bromomethane | 94 | | 4.686 | | | | ND | U |
| 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| 20 Acetone | 43 | 5.438 | 5.460 | -0.022 | 28 | 4077 | 0.0388 | |
| 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| 22 Isopropyl alcohol | 45 | | 5.717 | | | | ND | U |
| 24 1,1-Dichloroethene | 61 | | 6.224 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.328 | 6.355 | -0.027 | 89 | 7458 | 0.1273 | M |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| 27 Carbon disulfide | 76 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.839 | | | | ND | |
| 33 2-Butanone (MEK) | 43 | | 8.134 | | | | ND | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.789 | 8.811 | -0.022 | 88 | 1585253 | 25.0 | |
| 38 Chloroform | 83 | | 8.980 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.782 | 9.809 | -0.027 | 0 | 1872316 | 25.1 | |
| 42 1,2-Dichloroethane | 62 | | 9.962 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | | 10.928 | | | | ND | |
| 45 Carbon tetrachloride | 117 | | 11.124 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.440 | 11.468 | -0.028 | 94 | 5847084 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.112 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.385 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.461 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.809 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.671 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.216 | 15.233 | -0.017 | 93 | 5817349 | 24.7 | |
| 60 Toluene | 91 | | 15.402 | | | | ND | |
| 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.062 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.344 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.485 | 18.496 | -0.011 | 85 | 5295336 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.572 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.341 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.707 | | | | ND | |
| 71 Bromoform | 173 | | 19.707 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.558 | | | | ND | |
| 75 o-Xylene | 91 | | 20.596 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.502 | 21.513 | -0.011 | 93 | 3878697 | 24.5 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.516 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.449 | | | | ND | |
| 87 Benzyl chloride | 91 | | 24.711 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.896 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.648 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.871 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.247 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

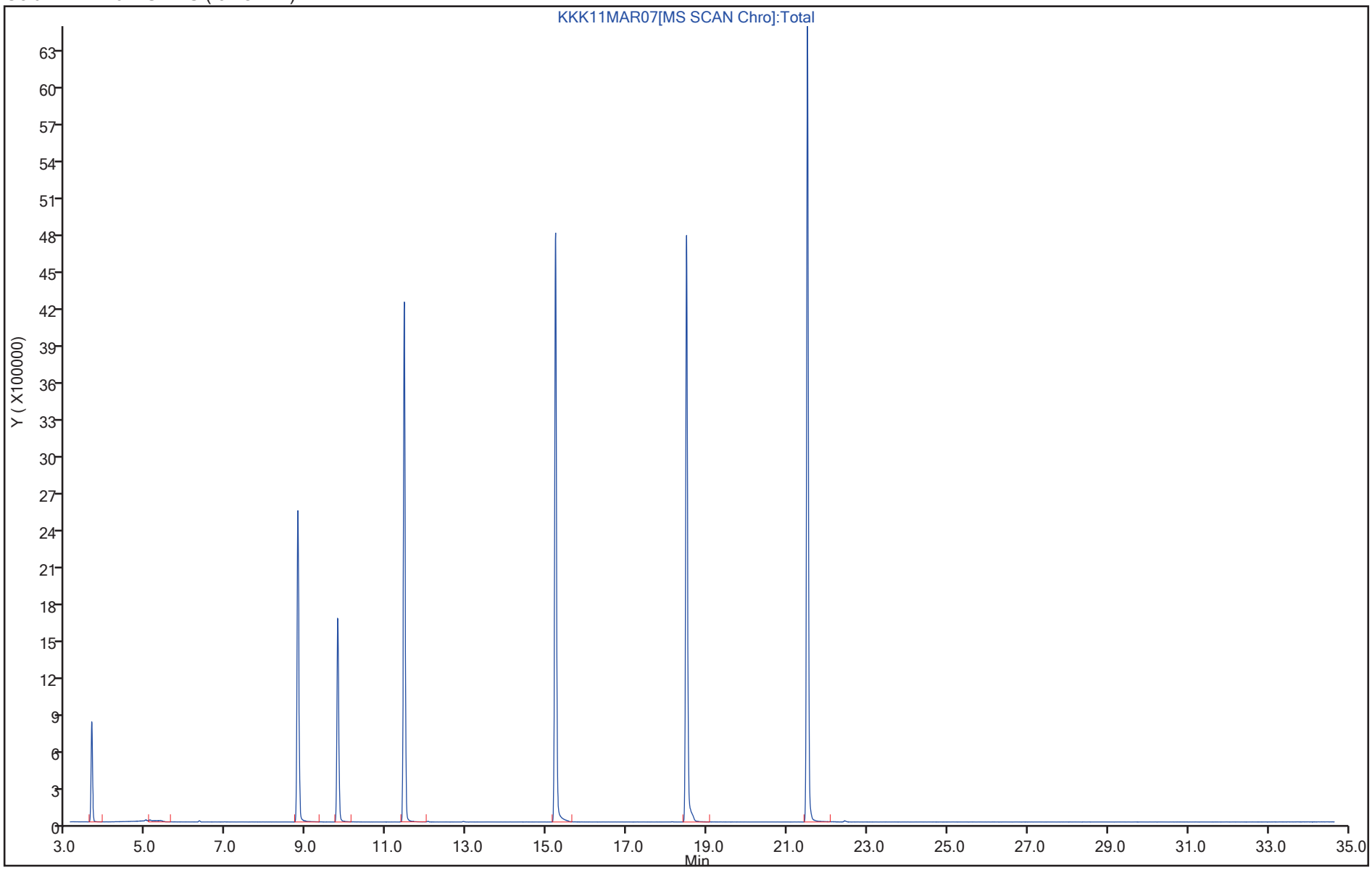
Report Date: 12-Mar-2021 11:14:30 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Mar-2021 14:59:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-53393-A-1 | Lab Sample ID: | 570-53393-1 | Worklist Smp#: | 7 |
| Client ID: | LC1114 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



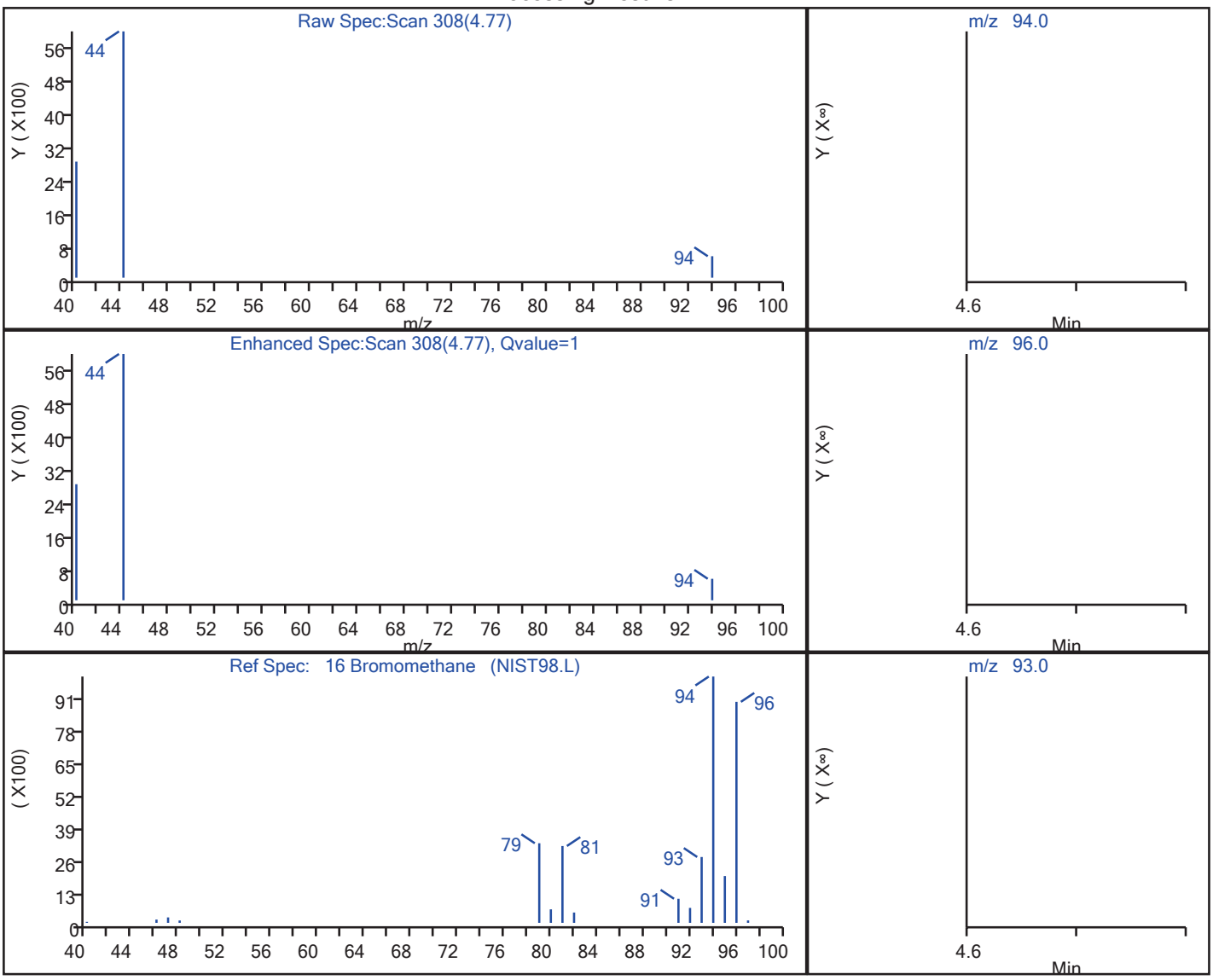
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D | | | | |
| Injection Date: | 11-Mar-2021 14:59:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53393-A-1 | Lab Sample ID: | 570-53393-1 | | |
| Client ID: | LC1114 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 16 Bromomethane, CAS: 74-83-9

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.77 | 94.00 | 171 | 0.002643 |
| 4.69 | 96.00 | 0 | |
| 4.69 | 93.00 | 0 | |

Reviewer: rhoadesw, 12-Mar-2021 10:52:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

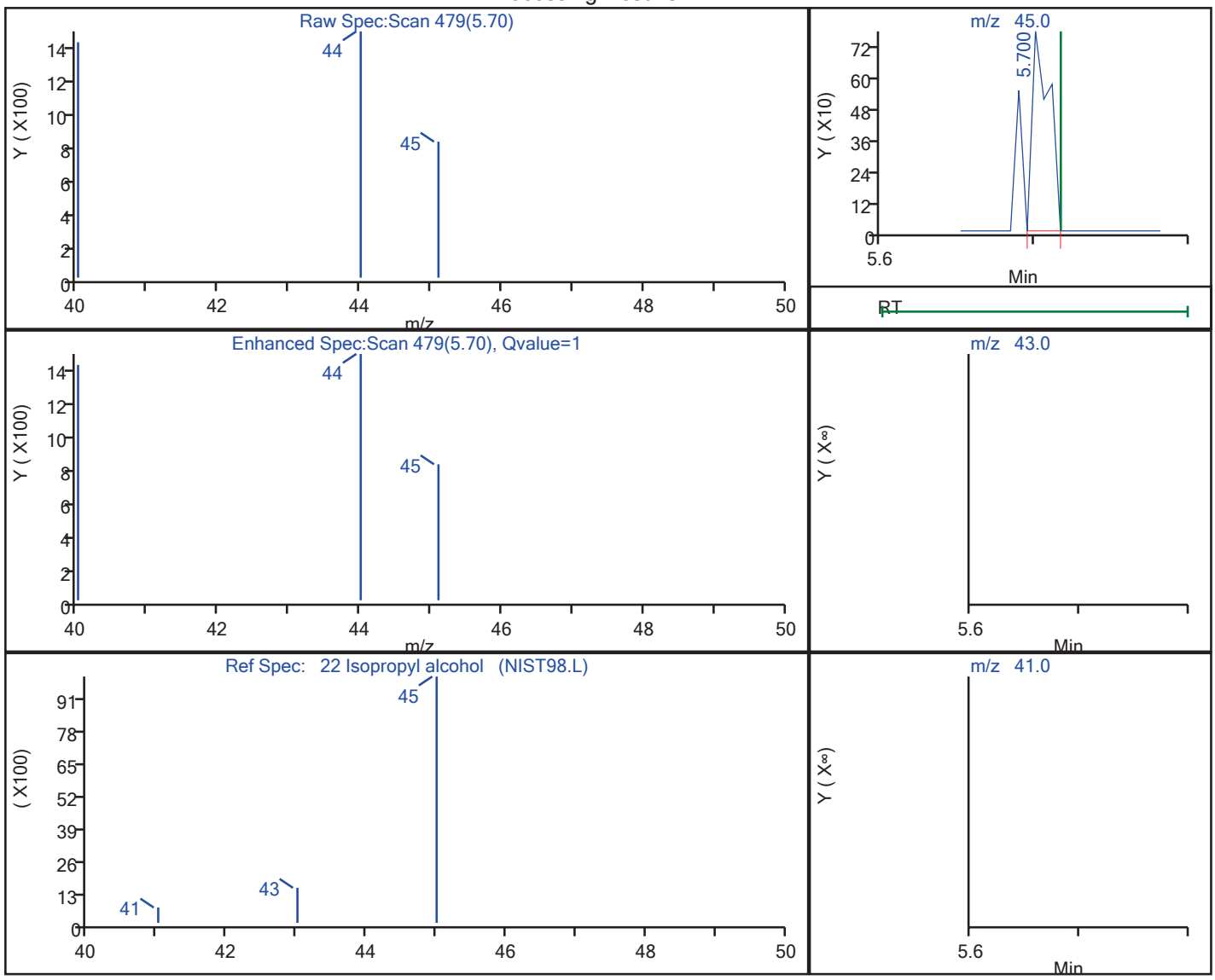
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D | | | | |
| Injection Date: | 11-Mar-2021 14:59:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53393-A-1 | Lab Sample ID: | 570-53393-1 | | |
| Client ID: | LC1114 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.70 | 45.00 | 607 | 0.005193 |
| 5.73 | 43.00 | 0 | |
| 5.73 | 41.00 | 0 | |

Reviewer: rhoadesw, 12-Mar-2021 10:52:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

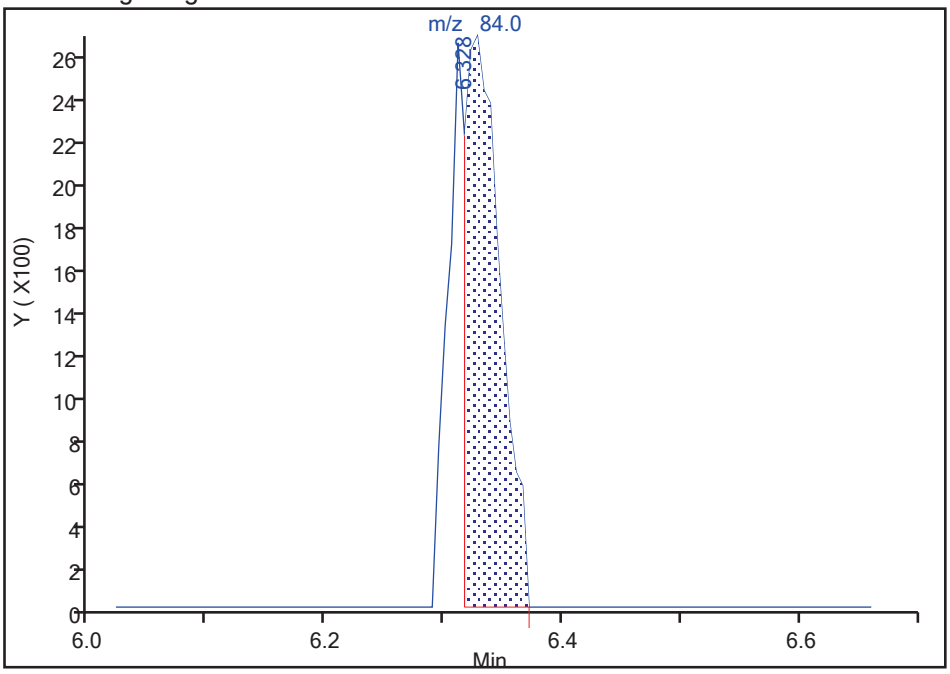
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D | | | | |
| Injection Date: | 11-Mar-2021 14:59:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53393-A-1 | Lab Sample ID: | 570-53393-1 | | |
| Client ID: | LC1114 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 25 Methylene Chloride, CAS: 75-09-2

Signal: 1

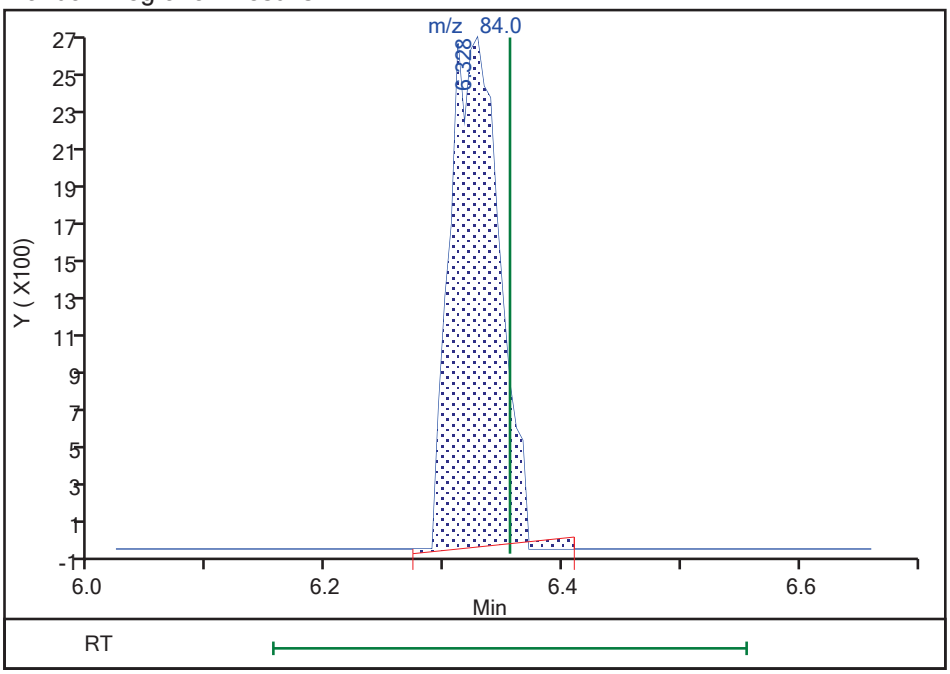
Processing Integration Results

RT: 6.33
Area: 5564
Amount: 0.094951
Amount Units: ppb v/v




Manual Integration Results

RT: 6.33
Area: 7458
Amount: 0.127273
Amount Units: ppb v/v




Reviewer: rhoadesw, 12-Mar-2021 10:52:32
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53852-1

SDG No.:

Client Sample ID: LC1033 | Lab Sample ID: 570-53852-1

Matrix: Air | Lab File ID: KKK16MAR07.D

Analysis Method: TO-15 | Date Collected: 03/14/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136550 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | 1.8 | J | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | 0.24 | J | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53852-1

SDG No.:

Client Sample ID: LC1033 | Lab Sample ID: 570-53852-1

Matrix: Air | Lab File ID: KKK16MAR07.D

Analysis Method: TO-15 | Date Collected: 03/14/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136550 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 101 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 101 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D
Lims ID: 570-53852-A-1
Client ID: LC1033
Sample Type: Client
Inject. Date: 16-Mar-2021 14:49:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53852-A-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 17-Mar-2021 10:08:57 Calib Date: 10-Mar-2021 15:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR09.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1623

First Level Reviewer: rhoadesw Date: 17-Mar-2021 10:03:11

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.829 | | | | ND | U |
| 7 Dichlorodifluoromethane | 85 | 3.971 | 3.965 | 0.006 | 85 | 3045 | 0.0210 | |
| 8 Chloromethane | 50 | 4.123 | 4.118 | 0.005 | 86 | 2655 | 0.0693 | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.222 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.325 | | | | ND | |
| 16 Bromomethane | 94 | | 4.702 | | | | ND | |
| 17 Chloroethane | 64 | | 4.860 | | | | ND | |
| 20 Acetone | 43 | 5.477 | 5.488 | -0.011 | 97 | 186094 | 1.76 | |
| 21 Trichlorofluoromethane | 101 | 5.597 | 5.608 | -0.011 | 1 | 599 | 0.002815 | |
| 22 Isopropyl alcohol | 45 | 5.771 | 5.760 | 0.011 | 95 | 17975 | 0.1525 | |
| 24 1,1-Dichloroethene | 61 | | 6.246 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.371 | 6.372 | -0.001 | 88 | 9057 | 0.1533 | |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | 6.672 | 6.677 | -0.005 | 36 | 384 | 0.002905 | |
| 27 Carbon disulfide | 76 | 6.672 | 6.677 | -0.005 | 99 | 41349 | 0.2435 | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.403 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.632 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.747 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.867 | | | | ND | U |
| 33 2-Butanone (MEK) | 43 | 8.161 | 8.156 | 0.005 | 98 | 27855 | 0.3344 | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.630 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.827 | 8.832 | -0.005 | 88 | 1598432 | 25.0 | |
| 38 Chloroform | 83 | | 9.002 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.825 | 9.831 | -0.006 | 0 | 1893491 | 25.2 | |
| 42 1,2-Dichloroethane | 62 | | 9.978 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.306 | | | | ND | |
| 44 Benzene | 78 | 10.938 | 10.944 | -0.006 | 85 | 6859 | 0.0442 | |
| 45 Carbon tetrachloride | 117 | | 11.140 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.473 | 11.484 | -0.011 | 94 | 5875629 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.128 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.406 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.483 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.830 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.687 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.933 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.238 | 15.244 | -0.006 | 93 | 5969733 | 25.2 | |
| 60 Toluene | 91 | 15.407 | 15.407 | 0.000 | 99 | 10155 | 0.0515 | |
| 61 2-Hexanone | 58 | | 15.937 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.073 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.493 | | | | ND | |
| 67 Tetrachloroethene | 166 | 17.361 | 17.361 | 0.000 | 62 | 1276 | 0.0120 | |
| * 68 Chlorobenzene-d5 | 117 | 18.501 | 18.507 | -0.006 | 85 | 5371549 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.588 | | | | ND | |
| 70 Ethylbenzene | 91 | 19.352 | 19.352 | 0.000 | 91 | 5735 | 0.0227 | M |
| 71 Bromoform | 173 | | 19.718 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.723 | | | | ND | |
| 73 Styrene | 104 | | 20.400 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.564 | | | | ND | |
| 75 o-Xylene | 91 | 20.613 | 20.602 | 0.011 | 1 | 2049 | 0.0101 | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.513 | 21.518 | -0.005 | 93 | 3998587 | 24.9 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | U |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.515 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | 24.454 | 24.454 | 0.000 | 1 | 449 | 0.001714 | |
| 87 Benzyl chloride | 91 | | 24.710 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.896 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.866 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.242 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

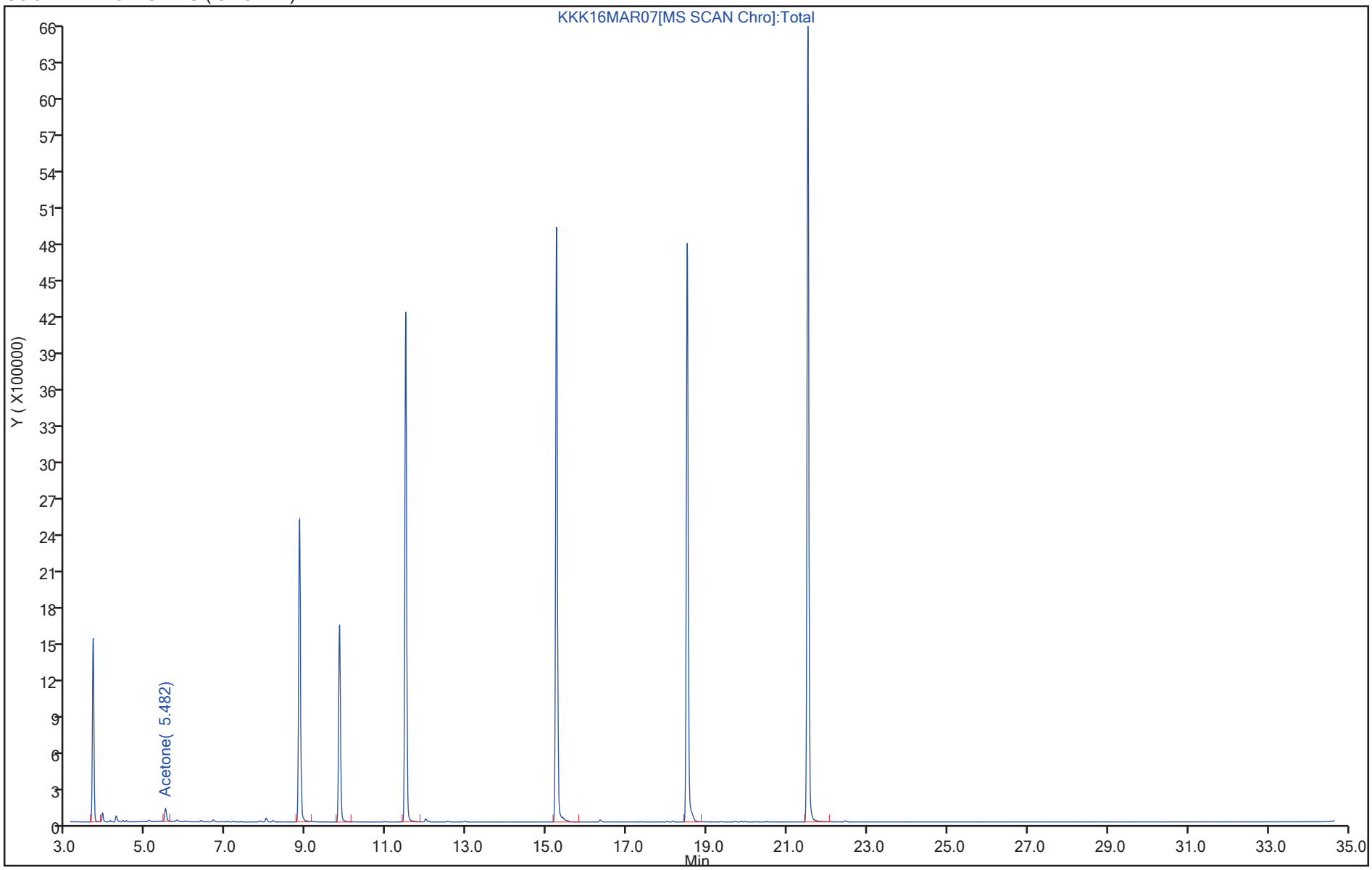
Report Date: 17-Mar-2021 10:09:06 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | Worklist Smp#: | 7 |
| Client ID: | LC1033 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



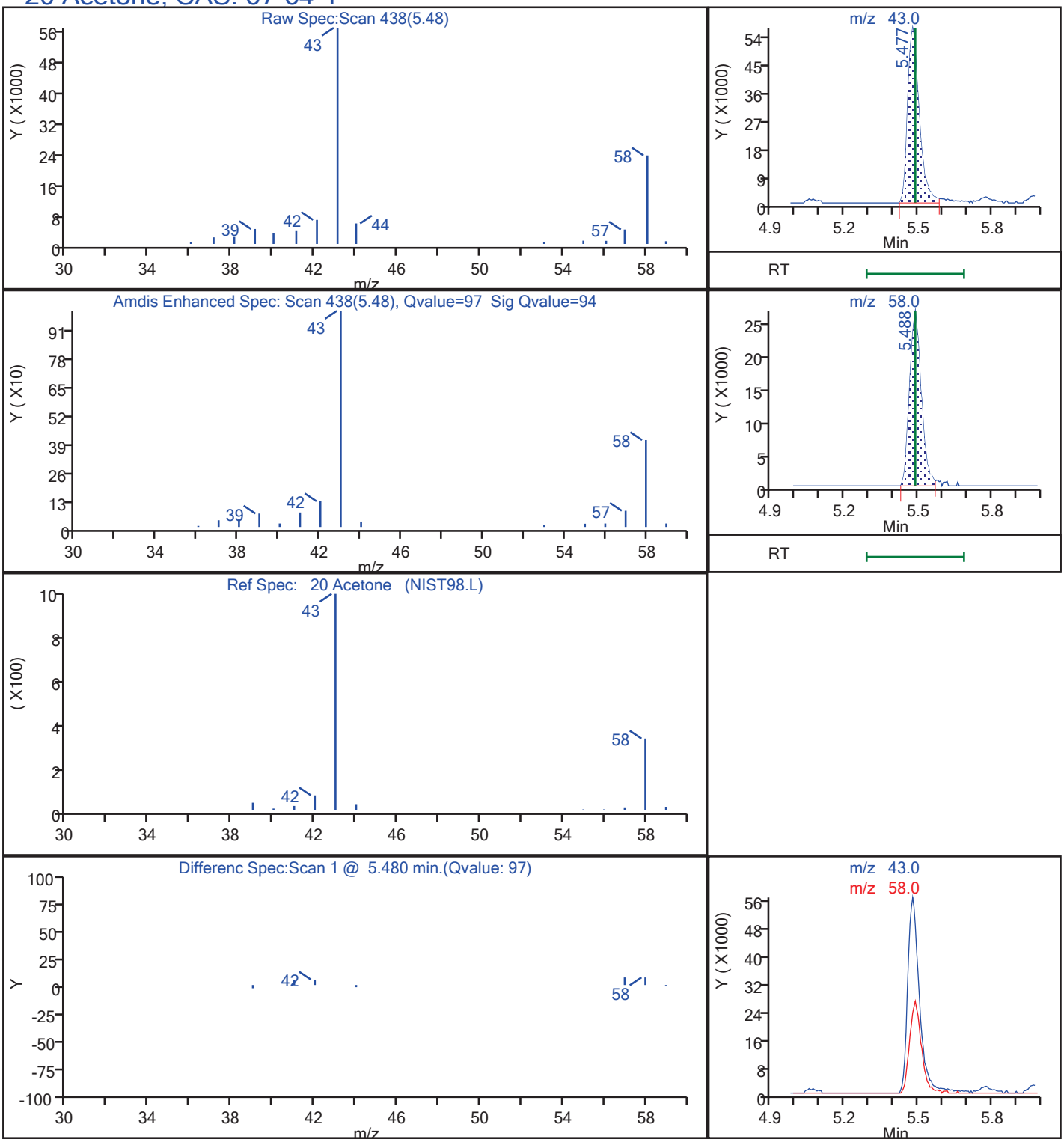
Report Date: 17-Mar-2021 10:09:07 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 20 Acetone, CAS: 67-64-1

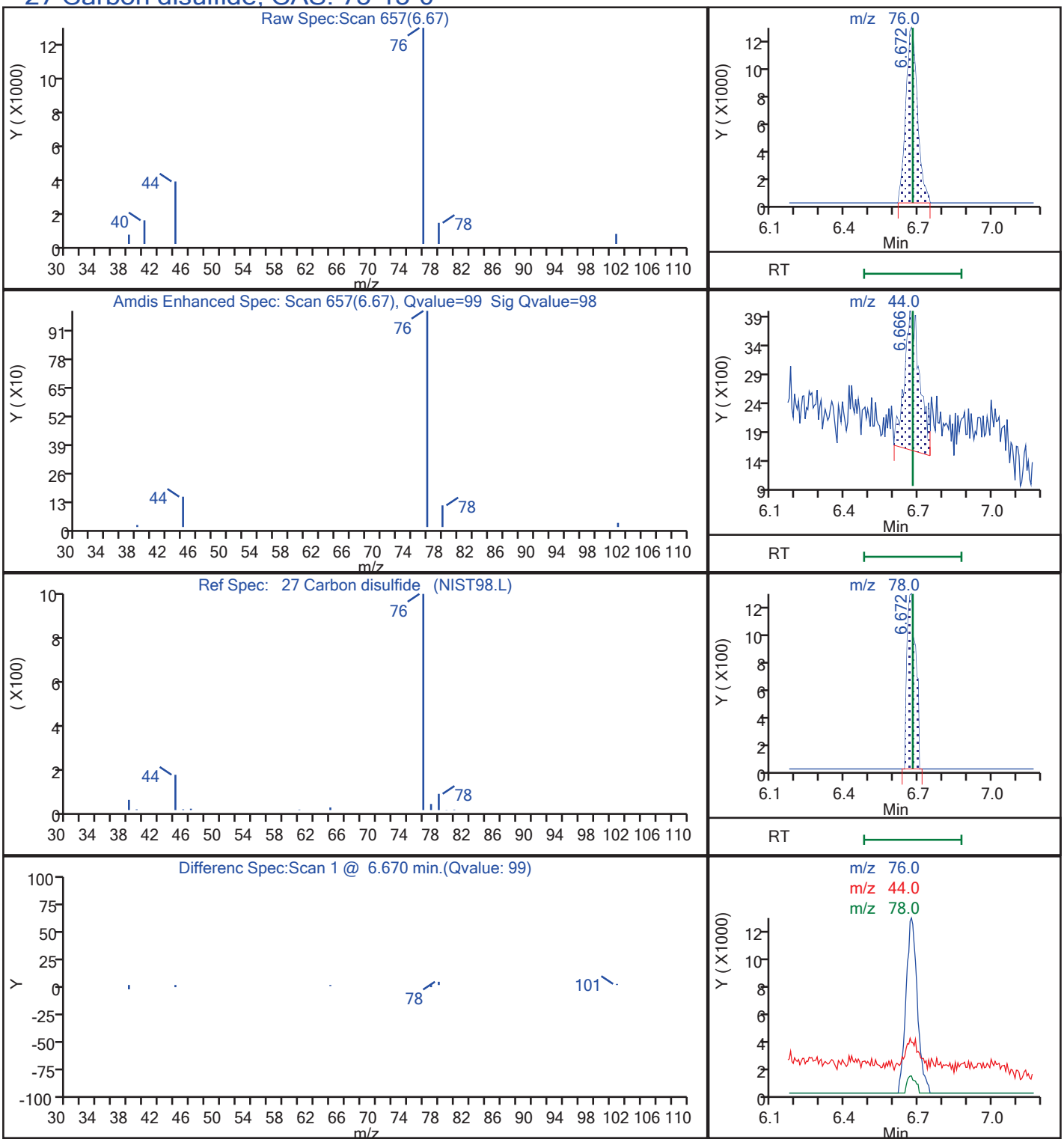


Report Date: 17-Mar-2021 10:09:07 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 27 Carbon disulfide, CAS: 75-15-0



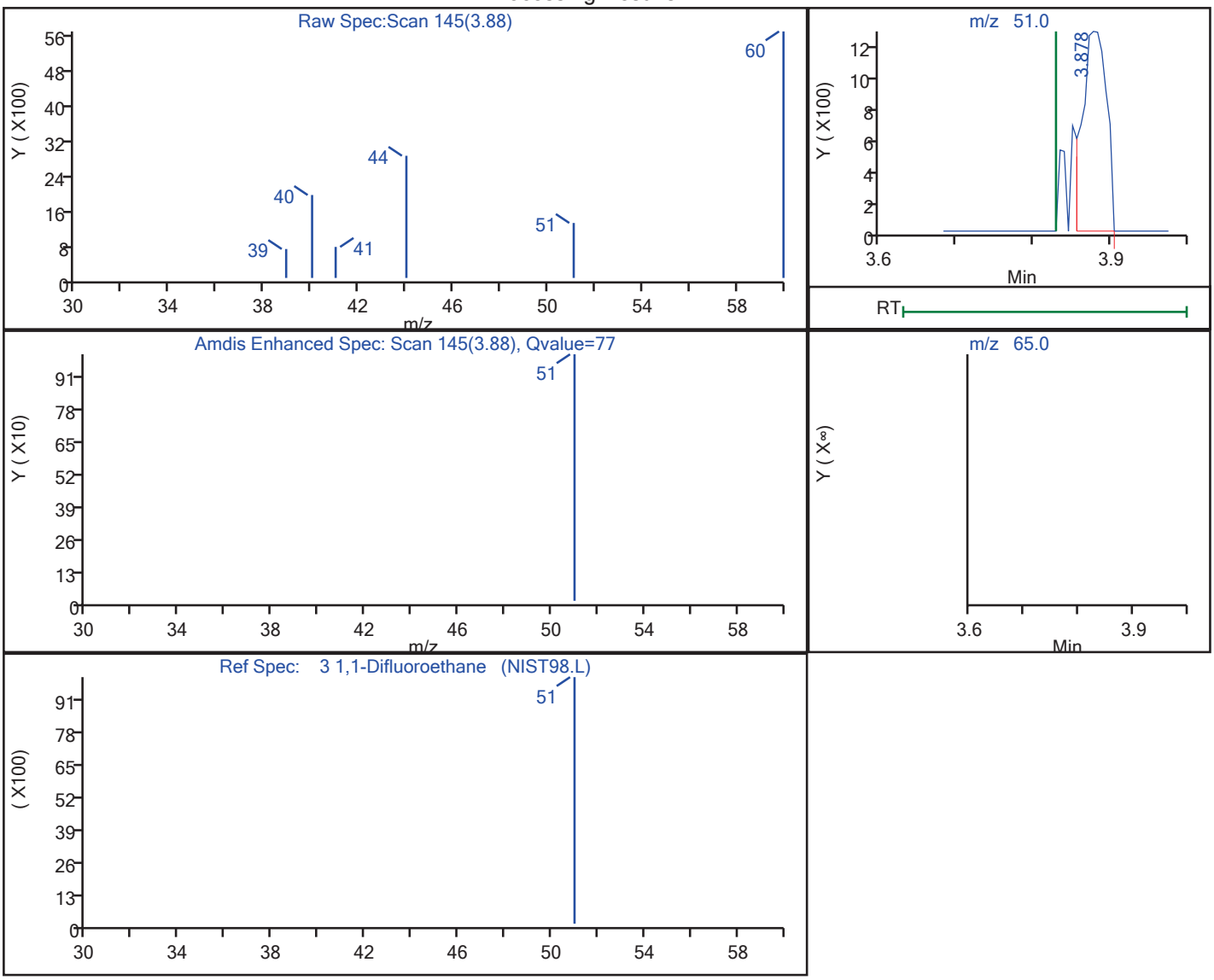
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 3 1,1-Difluoroethane, CAS: 75-37-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.88 | 51.00 | 2777 | 0.055065 |
| 3.83 | 65.00 | 0 | |

Reviewer: rhoadesw, 17-Mar-2021 10:02:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

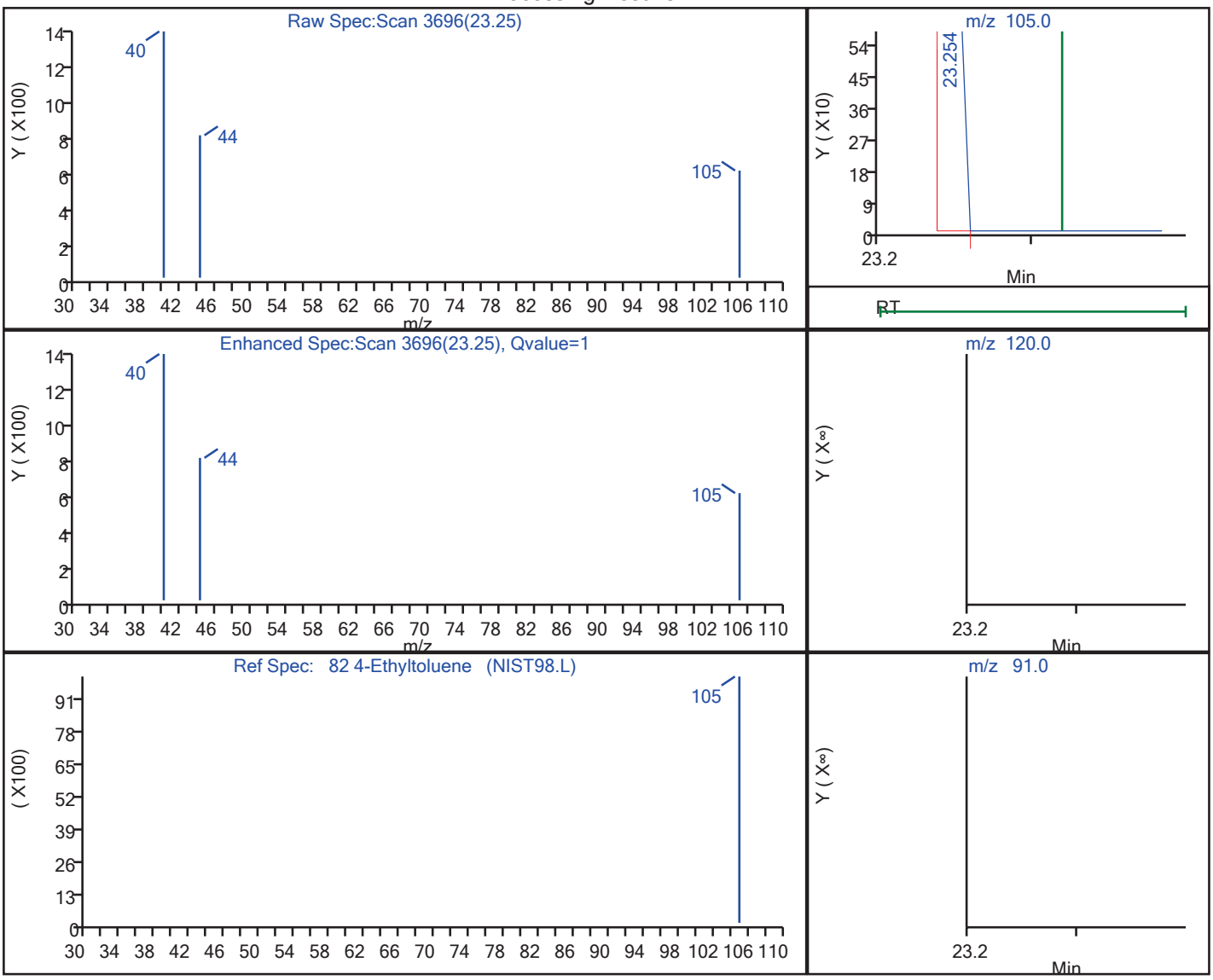
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 82 4-Ethyltoluene, CAS: 622-96-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 23.25 | 105.00 | 521 | 0.001785 |
| 23.32 | 120.00 | 0 | |
| 23.32 | 91.00 | 0 | |

Reviewer: rhoadesw, 17-Mar-2021 10:01:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

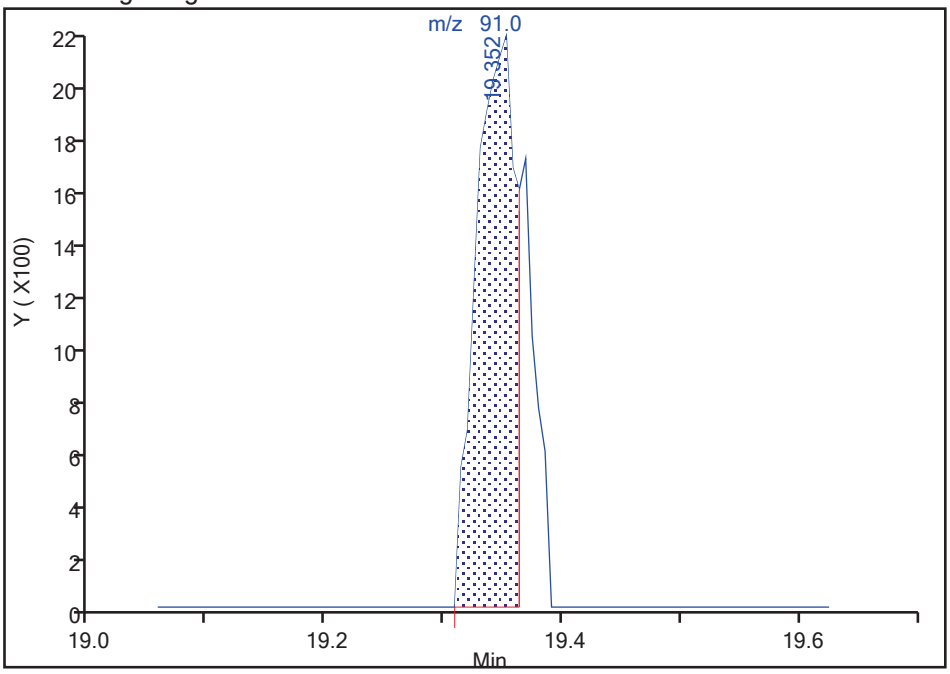
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 70 Ethylbenzene, CAS: 100-41-4

Signal: 1

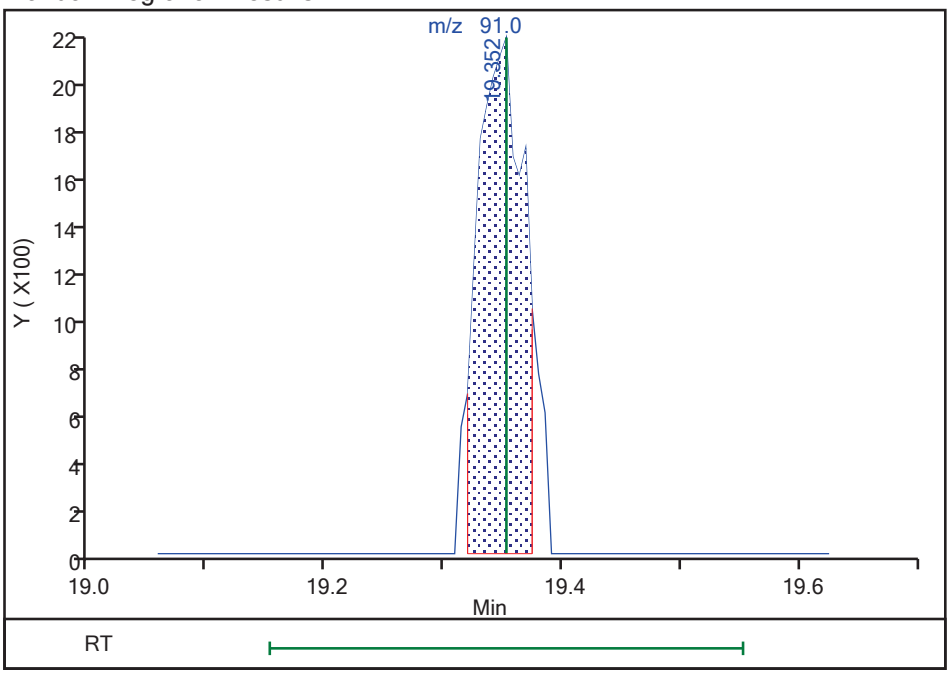
Processing Integration Results

RT: 19.35
Area: 5025
Amount: 0.019893
Amount Units: ppb v/v




Manual Integration Results

RT: 19.35
Area: 5735
Amount: 0.022704
Amount Units: ppb v/v




Reviewer: rhoadesw, 17-Mar-2021 10:02:00
Audit Action: Manually Integrated Audit Reason: Baseline

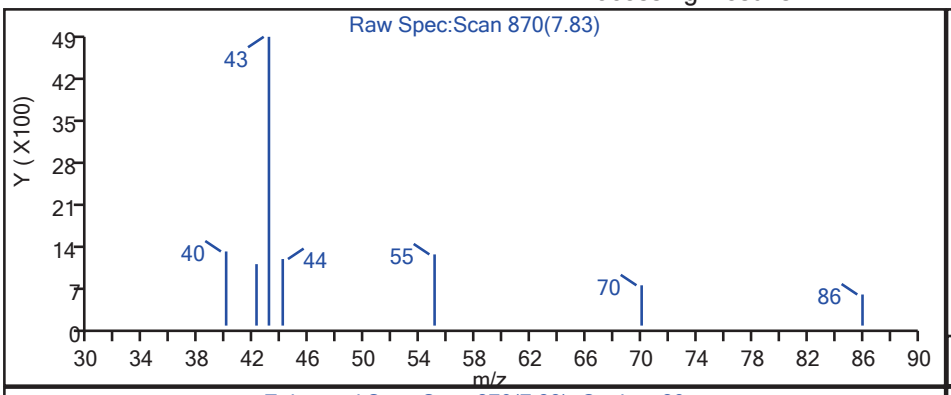
User Disabled Compound Report

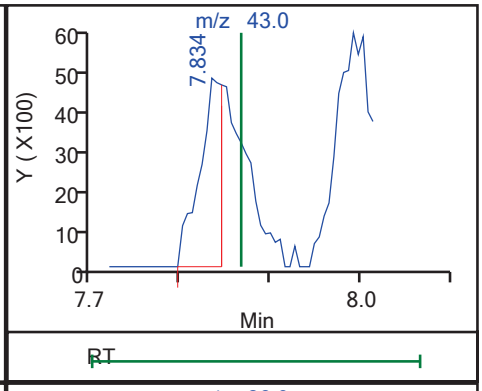
Eurofins Calscience LLC

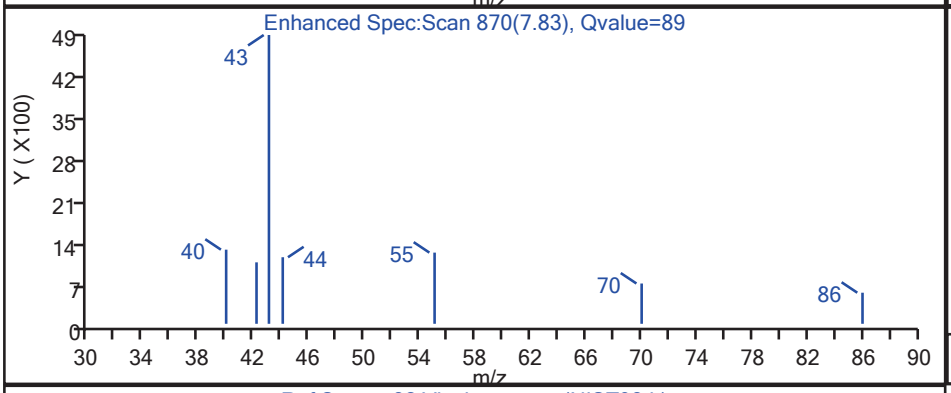
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

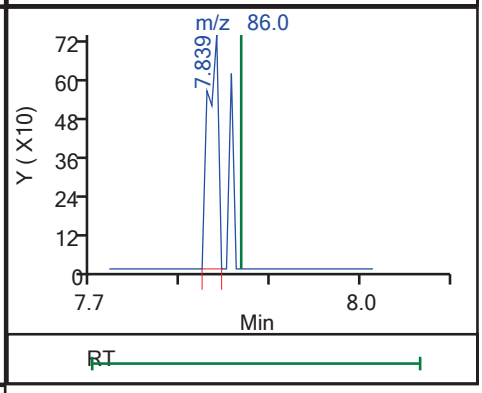
## 32 Vinyl acetate, CAS: 108-05-4

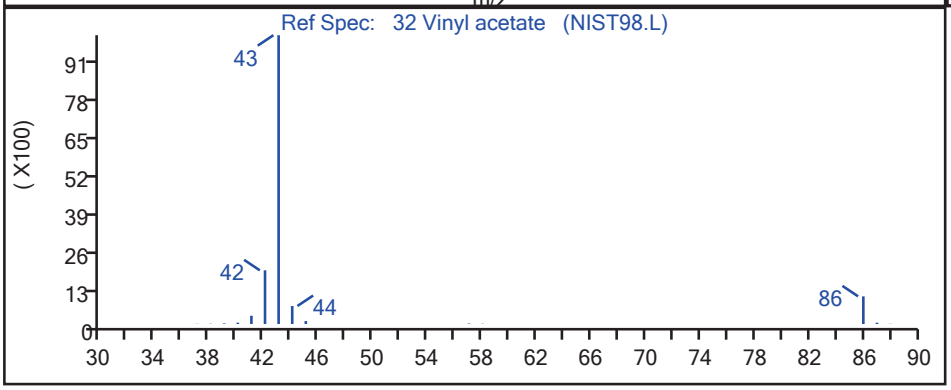
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.83 | 43.00 | 8524 | 0.083799 |
| 7.84 | 86.00 | 596 | |

Reviewer: rhoadesw, 17-Mar-2021 10:02:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

# Summa Canister Dilution Worksheet

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job No.: 440-281102-1

| Lab Sample ID | Canister Volume (L) | Presampling Pressure ("Hg) | Preadjusted Pressure ("Hg) | Preadjusted Pressure (atm) | Preadjusted Volume (L) | Adjusted Pressure (psig) | Adjusted Pressure (atm) | Adjusted Volume (L) | Initial Volume (mL) | Dilution Factor | Final Dilution Factor | Pressure Gauge ID | Date | Analyst Initials |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 440-281102-4 | 1 | -29.5 | -0.6 | 0.98 | 0.98 | -0.294692 | 0.98 | 0.98 | | 1.00 | 1.00 | AIR MG 4 | 04/04/21 19:15 | UX77 |
| 440-281102-4 | 1 | -29.5 | -12.6 | 0.58 | 0.58 | 0 | 1.00 | 1.00 | | 1.73 | 1.73 | AIR MG 4 | 04/04/21 19:15 | UX77 |
| 440-281102-6 | 1 | -29.5 | -3.4 | 0.89 | 0.89 | -1.66992 | 0.89 | 0.89 | | 1.00 | 1.00 | AIR MG 4 | 04/04/21 19:15 | UX77 |
| 440-281102-6 | 1 | -29.5 | -15 | 0.50 | 0.50 | 0 | 1.00 | 1.00 | | 2.01 | 2.01 | AIR MG 4 | 04/04/21 19:16 | UX77 |

**Formulae:**

Preadjusted Volume (L) = ( Preadjusted Pressure ("Hg) + 29.92 "Hg * Vol L ) / 29.92 "Hg
Adjusted Volume (L) = ( Adjusted Pressure (psig) + 14.7 psig * Vol L ) / 14.7 psig
Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

**Where:**

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)
14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281106-1
Client Project/Site: Baldwin Park

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/6/2021 11:41:40 AM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

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www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281106-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 440-281106-1 | SGP-1-5 | Air | 03/24/21 11:07 | 03/25/21 19:00 | Air Canister (1-Liter) #LC781 |
| 440-281106-2 | SGP-1-20 | Air | 03/24/21 11:59 | 03/25/21 19:00 | Air Canister (1-Liter) #LC511 |
| 440-281106-3 | SGP-2-5 | Air | 03/25/21 11:46 | 03/25/21 19:00 | Air Canister (1-Liter) #LC319 |
| 440-281106-4 | SGP-2-20 | Air | 03/25/21 12:12 | 03/25/21 19:00 | Air Canister (1-Liter) #LC622 |
| 440-281106-5 | SGP-2-20 DUP | Air | 03/25/21 12:26 | 03/25/21 19:00 | Air Canister (1-Liter) #LC1226 |
| 440-281106-6 | SGP-3-5 | Air | 03/24/21 13:30 | 03/25/21 19:00 | Air Canister (1-Liter) #LC997 |
| 440-281106-7 | SGP-3-20 | Air | 03/24/21 13:59 | 03/25/21 19:00 | Air Canister (1-Liter) #LC486 |
| 440-281106-8 | SGP-4-5 | Air | 03/25/21 14:31 | 03/25/21 19:00 | Air Canister (1-Liter) #LC1091 |
| 440-281106-9 | SGP-4-20 | Air | 03/25/21 14:04 | 03/25/21 19:00 | Air Canister (1-Liter) #LC557 |
| 440-281106-10 | SGP-5-5 | Air | 03/25/21 12:53 | 03/25/21 19:00 | Air Canister (1-Liter) #LC864 |
| 440-281106-11 | SGP-5-20 | Air | 03/25/21 13:22 | 03/25/21 19:00 | Air Canister (1-Liter) #LC099 |

## Job ID: 440-281106-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281106-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/25/2021 7:00 PM. Unless otherwise noted below, the samples arrived in good condition. The temperature of the cooler at receipt was 18.8º C.

**Air Toxics**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281106-1

## Client Sample ID: SGP-1-5 — Lab Sample ID: 440-281106-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 21 | | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 1,2,4-Trimethylbenzene | 1.9 | J | 7.4 | 1.6 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 9.4 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 37 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 1.5 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon disulfide | 0.61 | J | 6.2 | 0.58 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.57 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 2.9 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Ethylbenzene | 2.2 | | 2.2 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 14 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Methylene Chloride | 2.0 | J | 17 | 1.9 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 3.3 | | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| m,p-Xylene | 8.1 | J | 8.7 | 2.7 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 4.1 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 10 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.0 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 5.5 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.28 | J | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-1-20 — Lab Sample ID: 440-281106-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | 4.9 | J | 7.4 | 1.6 | ug/m3 | 1 | | TO-15 | Total/NA |
| 1,3,5-Trimethylbenzene | 1.4 | J | 2.5 | 1.0 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 5.5 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 35 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.89 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.0 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Ethylbenzene | 1.4 | J | 2.2 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 5.7 | J | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 2.6 | | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| m,p-Xylene | 5.7 | J | 8.7 | 2.7 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 14 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 3.7 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.6 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 1.3 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 21 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-2-5 — Lab Sample ID: 440-281106-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 5.2 | J | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 1,2,4-Trimethylbenzene | 1.9 | J | 7.4 | 1.6 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 9.0 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 25 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.62 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.54 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.1 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Ethylbenzene | 1.8 | J | 2.2 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins Calscience Irvine

## Client Sample ID: SGP-2-5 (Continued) — Lab Sample ID: 440-281106-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Isopropanol | 12 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Methylene Chloride | 2.5 | J | 17 | 1.9 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 4.3 | | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| m,p-Xylene | 8.9 | | 8.7 | 2.7 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 4.6 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 5.5 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.3 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 2.8 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.53 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-2-20 — Lab Sample ID: 440-281106-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.86 | J | 2.7 | 0.79 | ug/m3 | 1 | | TO-15 | Total/NA |
| 1,1-Difluoroethane | 2.1 | J | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 11 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 32 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.68 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.41 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.1 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 8.3 | J | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 6.3 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 1.5 | J | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.5 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 1.6 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.56 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 81 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 23 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-2-20 DUP — Lab Sample ID: 440-281106-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 1.3 | J | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 11 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 31 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.64 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.51 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.0 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 9.0 | J | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 5.7 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 1.1 | J | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.4 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 1.4 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.51 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281106-1

## Client Sample ID: SGP-3-5 — Lab Sample ID: 440-281106-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone | 15 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 23 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.75 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 2.7 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 11 | J | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 9.1 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 0.80 | J | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.9 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 3.2 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.59 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 80 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-3-20 — Lab Sample ID: 440-281106-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 2.0 | J | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 90 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| 4-Methyl-2-pentanone | 16 | | 6.1 | 2.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 180 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 2.0 | | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon disulfide | 0.60 | J | 6.2 | 0.58 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.1 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 5.2 | J | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Methyl-t-Butyl Ether (MTBE) | 14 | | 7.2 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 15 | | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| m,p-Xylene | 4.2 | J | 8.7 | 2.7 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 17 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 2.5 | | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.9 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 2.5 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 20 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-4-5 — Lab Sample ID: 440-281106-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 12 | | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 6.2 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 29 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 1.8 | | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon disulfide | 0.85 | J | 6.2 | 0.58 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.69 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.1 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Ethylbenzene | 1.3 | J | 2.2 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 5.3 | J | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 13 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 0.97 | J | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.6 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 1.9 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 1.1 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: SGP-4-5 (Continued) — Lab Sample ID: 440-281106-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Oxygen + Argon | 21 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-4-20 — Lab Sample ID: 440-281106-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone | 18 | | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 30 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.87 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.56 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 2.7 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 19 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 14 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 1.5 | J | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 3.1 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.71 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 81 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-5-5 — Lab Sample ID: 440-281106-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Difluoroethane | 4.0 | J | 5.4 | 0.99 | ug/m3 | 1 | | TO-15 | Total/NA |
| 1,2,4-Trimethylbenzene | 3.4 | J | 7.4 | 1.6 | ug/m3 | 1 | | TO-15 | Total/NA |
| 1,3,5-Trimethylbenzene | 1.3 | J | 2.5 | 1.0 | ug/m3 | 1 | | TO-15 | Total/NA |
| 2-Butanone | 4.3 | J | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 31 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.76 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.1 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 5.6 | J | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| o-Xylene | 1.1 | J | 2.2 | 0.86 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 1.7 | J | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 1.6 | J | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 2.3 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |
| Vinyl acetate | 3.5 | J | 7.0 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Carbon dioxide | 0.64 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 79 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

## Client Sample ID: SGP-5-20 — Lab Sample ID: 440-281106-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone | 3.9 | J | 4.4 | 1.2 | ug/m3 | 1 | | TO-15 | Total/NA |
| Acetone | 25 | | 4.8 | 0.94 | ug/m3 | 1 | | TO-15 | Total/NA |
| Benzene | 0.64 | J | 1.6 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Bromodichloromethane | 3.1 | J | 3.4 | 0.74 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloroform | 9.8 | | 2.4 | 0.78 | ug/m3 | 1 | | TO-15 | Total/NA |
| Chloromethane | 0.59 | J | 1.0 | 0.33 | ug/m3 | 1 | | TO-15 | Total/NA |
| Dichlorodifluoromethane | 3.1 | | 2.5 | 0.98 | ug/m3 | 1 | | TO-15 | Total/NA |
| Isopropanol | 18 | | 12 | 0.96 | ug/m3 | 1 | | TO-15 | Total/NA |
| Tetrachloroethene | 6.4 | | 3.4 | 1.1 | ug/m3 | 1 | | TO-15 | Total/NA |
| Toluene | 1.8 | J | 1.9 | 0.50 | ug/m3 | 1 | | TO-15 | Total/NA |
| Trichlorofluoromethane | 3.3 | J | 5.6 | 1.3 | ug/m3 | 1 | | TO-15 | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: SGP-5-20 (Continued)

## Lab Sample ID: 440-281106-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Carbon dioxide | 0.92 | | 0.50 | 0.016 | % v/v | 1 | | D1946 | Total/NA |
| Nitrogen | 80 | | 0.50 | 0.17 | % v/v | 1 | | D1946 | Total/NA |
| Oxygen + Argon | 22 | | 0.50 | 0.084 | % v/v | 1 | | D1946 | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: SMr -1-x

**Date C3lle/ tev: 059249221 11:0h**
**Date Re/ eiTev: 059 2x9221 1Q:00**
**Sample C3ntaineα Summa Canisteo1L**

## Lab Sample ID: 440-28110P-1

**Aatdc: dio**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . ualiTeo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNoaonTNct n | . D | | 279 | 079g | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h1h2h2-r nTacsNoaonTNct n | . D | | C7g | 171 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h1h2-r aesNoao-1h2h2-TadiPoaonTNct n | . D | | 11 | 276 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h1h2-r aesNoaonTNct n | . D | | 279 | 079C | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h1-DesNoaonTNct n | . D | | 270 | 0742 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h1-DesNoaonTNht n | . D | | 270 | 07Cg | PmS 6 | | | 04S04S21 02:19 | 1 |
| **1JI-Di7u3c3etVane** | **21** | | 574 | 07gg | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h2h4-r aesNoaobnt znt n | . D | | 15 | 47g | PmS 6 | | | 04S04S21 02:19 | 1 |
| **1J2J4-gdmetVUlbenf ene** | **1E0 X** | | 974 | 17C | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h2-Debao3 o-6-I Noaoyaoyct n | . D | | 14 | 278 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h2-DesNoaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h2-DesNoaonTNct n | . D | | 270 | 075g | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h2-DesNoaoyaoyct n | . D | | 276 | 07C4 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h6h5-r ae3 nTNpibnt znt n | . D | | 275 | 170 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h6-DesNoaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 1h4-DesNoaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **2-( utan3ne** | **C84** | | 474 | 172 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS 6 | | | 04S04S21 02:19 | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS 6 | | | 04S04S21 02:19 | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **d/ et3ne** | **5h** | | 478 | 07g4 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **( enf ene** | **1Bx X** | | 17C | 0750 | PmS 6 | | | 04S04S21 02:19 | 1 |
| dnt zpi sNoaewn | . D | | 978 | 279 | PmS 6 | | | 04S04S21 02:19 | 1 |
| dao3 owsNoao3 nTNct n | . D | | 674 | 0794 | PmS 6 | | | 04S04S21 02:19 | 1 |
| dao3 ofoa8 | . D | | 572 | 178 | PmS 6 | | | 04S04S21 02:19 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS 6 | | | 04S04S21 02:19 | 1 |
| seu-1h2-DesNoaonTNht n | . D | | 270 | 0754 | PmS 6 | | | 04S04S21 02:19 | 1 |
| seu-1h6-DesNoaoyaoynt n | . D | | 276 | 07g8 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **Cadb3n visul7ive** | **0EP1 X** | | C72 | 0758 | PmS 6 | | | 04S04S21 02:19 | 1 |
| I cabot TnTacsNoaewn | . D | | 671 | 176 | PmS 6 | | | 04S04S21 02:19 | 1 |
| I NoaobntznTn | . D | | 276 | 07C0 | PmS 6 | | | 04S04S21 02:19 | 1 |
| I NoaonTNct n | . D | | 176 | 0745 | PmS 6 | | | 04S04S21 02:19 | 1 |
| I Noaofoa8 | . D | | 274 | 0798 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **CVI3c3metVane** | **0Bxh X** | | 170 | 0766 | PmS 6 | | | 04S04S21 02:19 | 1 |
| Debao3 osNoao3 nTNct n | . D | | 476 | 176 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **Di/ VI3c3vi7u3c3metVane** | **2E0** | | 275 | 07g8 | PmS 6 | | | 04S04S21 02:19 | 1 |
| DesNoaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **) tVUlbenf ene** | **2E2** | | 272 | 171 | PmS 6 | | | 04S04S21 02:19 | 1 |
| HnxcsNoao-1h6-bPTcwent n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **Is3pc3pan3I** | **14** | | 12 | 07gC | PmS 6 | | | 04S04S21 02:19 | 1 |
| **AetVUlene CVI3cive** | **2E9 X** | | 19 | 17g | PmS 6 | | | 04S04S21 02:19 | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 02:19 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **3-6 Ulene** | **5E5** | | 272 | 078C | PmS 6 | | | 04S04S21 02:19 | 1 |
| **m.p-6 Ulene** | **8E1 X** | | 879 | 279 | PmS 6 | | | 04S04S21 02:19 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 02:19 | 1 |
| BTpant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 02:19 | 1 |

EPaofet u l ciusent sn laXet n

## Client Sample ID: SMr -1-x

**Lab Sample ID: 440-28110P-1**

**Date C3lle/ tev: 059249 21 11:0h**
**Aatdc: dio**
**Date Re/ eiTev: 059 2x9 21 1Q:00**
**Sample C3ntaineα: Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . ualiZeo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| Tact u-1h2-DesNioaonTNht n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 02:19 | 1 |
| Tact u-1h6-DesNioaoyaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 02:19 | 1 |
| TnaFdPTpibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **getoa/ Vl3o3etVene** | **4E** | | 674 | 171 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **g3luene** | **10** | | 17g | 0750 | PmS 6 | | | 04S04S21 02:19 | 1 |
| r aesNioaonTNht n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 02:19 | 1 |
| **gci/ Vl3o37u3o3metVane** | **2E9** | **X** | 57C | 176 | PmS 6 | | | 04S04S21 02:19 | 1 |
| **FinUl a/ etate** | **xEx** | **X** | 970 | 172 | PmS 6 | | | 04S04S21 02:19 | 1 |
| v et pi sNioaevn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 02:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *70 - 130* | | *04/04/21 02:17* | *1* |
| *4-Bromofluorobenzene (Surr)* | *115* | | *67 - 131* | | *04/04/21 02:17* | *1* |
| *Toluene-d8 (Surr)* | *109* | | *70 - 130* | | *04/04/21 02:17* | *1* |

### AetV3v: D1O4P - Qicev Mases in dioQMCN

| dnalUte | Result | . ualiZeo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| **Cado3n vi3cive** | **0E28** | **X** | 0750 | 0701C | V XSX | | | 06S05S21 19:45 | 1 |
| I cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S05S21 19:45 | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S05S21 19:45 | 1 |
| **+ito3zen** | **hO** | | 0750 | 0719 | V XSX | | | 06S05S21 19:45 | 1 |
| **y cUzen E doz3n** | **22** | | 0750 | 07084 | V XSX | | | 06S05S21 19:45 | 1 |

## Client Sample ID: SMr -1-20

**Lab Sample ID: 440-28110P-2**

**Date C3lle/ tev: 059249 21 11:xO**
**Aatdc: dio**
**Date Re/ eiTev: 059 2x9 21 1Q:00**
**Sample C3ntaineα: Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . ualiZeo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNioaonTNct n | . D | | 279 | 079g | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h1h2-r aesNioao-1h2h2-TaeiPoaonTNct n | . D | | 11 | 276 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h1h2-r aesNioaonTNct n | . D | | 279 | 079C | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h1-DesNioaonTNht n | . D | | 270 | 07Cg | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h1-DeiPoaonTNct n | . D | | 574 | 07gg | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h2h4-r aesNioaobnt znt n | . D | | 15 | 47g | PmS 6 | | | 04S04S21 06:12 | 1 |
| **1,2,4-gcimetVUlbenfene** | **4E0** | **X** | 974 | 17C | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h2-Debao3 o-6-I Nioaoyaoyct n | . D | | 14 | 278 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h2-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h2-DesNioaoyaoyct n | . D | | 276 | 07C4 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **1,5,k-gcimetVUlbenfene** | **1E4** | **X** | 275 | 170 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h6-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 1h4-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **2-( utan3ne** | **xEx** | | 474 | 172 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS 6 | | | 04S04S21 06:12 | 1 |

**Client Sample ID: SMr -1-20** — **Lab Sample ID: 440-28110P-2**

**Date C3lle/ tev: 059249221 11:xO** — **Aatdc: dio**

**Date Re/ eiTev: 059 2x9221 1Q:00**

**Sample C3ntaineo: Summa Canisteo1L**

## AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . ualiZeo | RL | ADL | , nit | D | r epaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS 6 | | | 04S04S21 06:12 | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **d/ et3ne** | **5x** | | 478 | 07g4 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **( enf ene** | **0BBO** | **X** | 17C | 0750 | PmS 6 | | | 04S04S21 06:12 | 1 |
| dnt zpi sNioaewn | . D | | 978 | 279 | PmS 6 | | | 04S04S21 06:12 | 1 |
| dao3 owesNioao3 nTNct n | . D | | 674 | 0794 | PmS 6 | | | 04S04S21 06:12 | 1 |
| dao3 ofoa8 | . D | | 572 | 178 | PmS 6 | | | 04S04S21 06:12 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS 6 | | | 04S04S21 06:12 | 1 |
| seu-1h2-DesNioaonTNnt n | . D | | 270 | 0754 | PmS 6 | | | 04S04S21 06:12 | 1 |
| seu-1h6-DesNioayaoynt n | . D | | 276 | 07g8 | PmS 6 | | | 04S04S21 06:12 | 1 |
| I cabot weuPifewn | . D | | C72 | 0758 | PmS 6 | | | 04S04S21 06:12 | 1 |
| I cabot TnTacsNioaewn | . D | | 671 | 176 | PmS 6 | | | 04S04S21 06:12 | 1 |
| I Nioabnt znt n | . D | | 276 | 07C0 | PmS 6 | | | 04S04S21 06:12 | 1 |
| I NioaonTNct n | . D | | 176 | 0745 | PmS 6 | | | 04S04S21 06:12 | 1 |
| I Nioafoa8 | . D | | 274 | 0798 | PmS 6 | | | 04S04S21 06:12 | 1 |
| I Nioao3 nTNct n | . D | | 170 | 0766 | PmS 6 | | | 04S04S21 06:12 | 1 |
| Debao3 osNioao3 nTNct n | . D | | 476 | 176 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **Di/ Vl3c3vi7lu3c3metVane** | **5B9** | | 275 | 07g8 | PmS 6 | | | 04S04S21 06:12 | 1 |
| DesNioaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **) tVUlbenf ene** | **1B4** | **X** | 272 | 171 | PmS 6 | | | 04S04S21 06:12 | 1 |
| HnxcsNioao-1h6-bPTcwent n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **Is3pc3pan3I** | **xBn** | **X** | 12 | 07gC | PmS 6 | | | 04S04S21 06:12 | 1 |
| MnTNpint n I Nioaewn | . D | | 19 | 17g | PmS 6 | | | 04S04S21 06:12 | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 06:12 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **3-6 Ulene** | **2BP** | | 272 | 078C | PmS 6 | | | 04S04S21 06:12 | 1 |
| **m.þ-6 Ulene** | **xBn** | **X** | 879 | 279 | PmS 6 | | | 04S04S21 06:12 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 06:12 | 1 |
| BTpant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 06:12 | 1 |
| Tact u-1h2-DesNioaonTNnt n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 06:12 | 1 |
| Tact u-1h6-DesNioayaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 06:12 | 1 |
| TnaTdPTpibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **getca/ Vl3c3etVene** | **14** | | 674 | 171 | PmS 6 | | | 04S04S21 06:12 | 1 |
| **g3luene** | **5Bn** | | 17g | 0750 | PmS 6 | | | 04S04S21 06:12 | 1 |
| r aesNioaonTNnt n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 06:12 | 1 |
| **gci/ Vl3c37lu3c3metVane** | **2BP** | **X** | 57C | 176 | PmS 6 | | | 04S04S21 06:12 | 1 |
| vetpi csnTcTn | . D | | 970 | 172 | PmS 6 | | | 04S04S21 06:12 | 1 |
| vetpi sNioaewn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 06:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *70 - 130* | | *04/04/21 03:12* | *1* |
| *4-Bromofluorobenzene (Surr)* | *114* | | *67 - 131* | | *04/04/21 03:12* | *1* |
| *Toluene-d8 (Surr)* | *108* | | *70 - 130* | | *04/04/21 03:12* | *1* |

## AetV3v: D1O4P - Qicev Mases in dioQMCN

| dnalUte | Result | . ualiZeo | RL | ADL | , nit | D | r epaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| **Cadb3n vi3cive** | **1B5** | | 0750 | 0701C | V XSX | | | 06S30S21 18:0g | 1 |
| I cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S30S21 18:0g | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S30S21 18:0g | 1 |

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## Client Sample ID: SMr -1-20

**Lab Sample ID: 440-28110P-2**

**Date C3lle/ tev: 059249 21 11:xO**
**Aatdc: dio**
**Date Re/ eiTev: 059 2x9 21 1Q:00**
**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: D1O4P - Qicev Mases in dioQMCNGC3ntinuevN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpacev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| +itc3zen | hO | | 0750 | 0719 | V XSX | | | 06S0S21 18:0g | 1 |
| y cUzen E doz3n | 21 | | 0750 | 07084 | V XSX | | | 06S0S21 18:0g | 1 |

## Client Sample ID: SMr -2-x

**Lab Sample ID: 440-28110P-5**

**Date C3lle/ tev: 059 2x9 21 11:4P**
**Aatdc: dio**
**Date Re/ eiTev: 059 2x9 21 1Q:00**
**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpacev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNioaonTNct n | . D | | 279 | 079g | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h1h2-r aesNioao-1h2h2-TaeiPoaonTNct n | . D | | 11 | 276 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h1h2-r aesNioaonTNct n | . D | | 279 | 079C | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h1-DesNioaonTNnt n | . D | | 270 | 07Cg | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1JI-Di7u3c3etVane | xE2 | X | 574 | 07gg | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h2h4-r aesNioabnt znt n | . D | | 15 | 47g | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1J2J4-gdimetVUlbenfene | 1E0 | X | 974 | 17C | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h2-Debao3 o-6-I Nioaoyaoyct n | . D | | 14 | 278 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h2-DesNioabnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h2-DesNioaoyaoyct n | . D | | 276 | 07C4 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h6h5-r aes nTNpibnt znt n | . D | | 275 | 170 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h6-DesNioabnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 1h4-DesNioabnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 2-( utan3ne | O80 | | 474 | 172 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| d/ et3ne | 2x | | 478 | 07g4 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| ( enfene | 0EP2 | X | 17C | 0750 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| dnt zpi sNioaewn | . D | | 978 | 279 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| dao3 owesNioao3 nTNct n | . D | | 674 | 0794 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| dao3 ofoa8 | . D | | 572 | 178 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| seu-1h2-DesNioaonTNnt n | . D | | 270 | 0754 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| seu-1h6-DesNioaoyaoynt n | . D | | 276 | 07g8 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| I cabot weuPifewn | . D | | C72 | 0758 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| I cabot TnTacsNioaewn | . D | | 671 | 176 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| I Nioabnt znt n | . D | | 276 | 07C0 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| I NioaonTNct n | . D | | 176 | 0745 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| I Nioafoa8 | . D | | 274 | 0798 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| CVI3c3metVane | 0Ex4 | X | 170 | 0766 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| Debao3 osNioao3 nTNct n | . D | | 476 | 176 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| Di/ VI3c3vi7u3c3metVane | 5E1 | | 275 | 07g8 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| DesNioaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS3 6 | | | 04S04S21 04:09 | 1 |
| ) tVUlbenfene | 1EB | X | 272 | 171 | PmS3 6 | | | 04S04S21 04:09 | 1 |

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## Client Sample ID: SMr -2-x

**Lab Sample ID: 440-28110P-5**

**Date C3lle/ tev: 0592x921 11:4P**

**Aatdc: dio**

**Date Re/ eiTev: 0592x921 1Q:00**

**Sample C3ntaineo: Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| HnxcsNioao-1h6-bPTcwent n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 04:09 | 1 |
| **Is3po3pan3l** | **12** | | 12 | 07gC | PmS 6 | | | 04S04S21 04:09 | 1 |
| **AetVUene CVl3dive** | **2Bx** | **X** | 19 | 17g | PmS 6 | | | 04S04S21 04:09 | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 04:09 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 04:09 | 1 |
| **3-6Uene** | **4B5** | | 272 | 078C | PmS 6 | | | 04S04S21 04:09 | 1 |
| **m.Jp-6Uene** | **8BO** | | 879 | 279 | PmS 6 | | | 04S04S21 04:09 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 04:09 | 1 |
| BTpant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 04:09 | 1 |
| Tact u-1h2-DesNioaonTNnt n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 04:09 | 1 |
| Tact u-1h6-DesNioayaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 04:09 | 1 |
| TnaTdPTpibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 04:09 | 1 |
| **getoa/ Vl3o3etVene** | **4BP** | | 674 | 171 | PmS 6 | | | 04S04S21 04:09 | 1 |
| **g3luene** | **xBx** | | 17g | 0750 | PmS 6 | | | 04S04S21 04:09 | 1 |
| r asNioaonTNnt n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 04:09 | 1 |
| **gci/ Vl3o37lu3o3metVane** | **2B5** | **X** | 57C | 176 | PmS 6 | | | 04S04S21 04:09 | 1 |
| **FinUl a/ etate** | **2B8** | **X** | 970 | 172 | PmS 6 | | | 04S04S21 04:09 | 1 |
| vet pi sNioaewn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 04:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *119* | | *70 - 130* | | *04/04/21 04:07* | *1* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *67 - 131* | | *04/04/21 04:07* | *1* |
| *Toluene-d8 (Surr)* | *108* | | *70 - 130* | | *04/04/21 04:07* | *1* |

### AetV3v: D1O4P - Qicev Mases in dioGMCN

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| **Cadb3n vi3cive** | **0Bx5** | | 0750 | 0701C | V XSX | | | 06S30S21 1g:2C | 1 |
| I cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S30S21 1g:2C | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S30S21 1g:2C | 1 |
| **+ito3zen** | **hO** | | 0750 | 0719 | V XSX | | | 06S30S21 1g:2C | 1 |
| **y cUzen E doz3n** | **22** | | 0750 | 07084 | V XSX | | | 06S30S21 1g:2C | 1 |

## Client Sample ID: SMr -2-20

**Lab Sample ID: 440-28110P-4**

**Date C3lle/ tev: 0592x921 12:12**

**Aatdc: dio**

**Date Re/ eiTev: 0592x921 1Q:00**

**Sample C3ntaineo: Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| **1JlJl-gci/ Vl3o3etVane** | **0B8P** | **X** | 279 | 079g | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h1h2-r asNioao-1h2h2-TasiPoaonTNct n | . D | | 11 | 276 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h1h2-r asNioaonTNct n | . D | | 279 | 079C | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h1-DesNioaonTNnt n | . D | | 270 | 07Cg | PmS 6 | | | 04S04S21 05:02 | 1 |
| **1JlJl-Di7lu3o3etVane** | **2B1** | **X** | 574 | 07gg | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h2h4-r asNioaobnt znt n | . D | | 15 | 47g | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h2h4-r as8 nTNpibnt znt n | . D | | 974 | 17C | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h2-Debao3 o-6-I Nioaoyaoyct n | . D | | 14 | 278 | PmS 6 | | | 04S04S21 05:02 | 1 |

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## Client Sample ID: SMr -2-20

**Date C3lle/ tev: 059 2x921 12:12**
**Date Re/ eiTev: 059 2x921 1Q:00**
**Sample C3ntaineα Summa Canisteo1L**

## Lab Sample ID: 440-28110P-4

**Aatdc: dio**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . ualiTeo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h2-DesNioabnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h2-DesNioaoyaoyct n | . D | | 276 | 07C4 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h6h5-r aæ3 nTNpibnt znt n | . D | | 275 | 170 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h6-DesNioabnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 1h4-DesNioabnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **2-( utan3ne** | **11** | | 474 | 172 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS 6 | | | 04S04S21 05:02 | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS 6 | | | 04S04S21 05:02 | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **d/ et3ne** | **52** | | 478 | 07g4 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **( enf ene** | **0EP8** | **X** | 17C | 0750 | PmS 6 | | | 04S04S21 05:02 | 1 |
| dnt zpi sNioawn | . D | | 978 | 279 | PmS 6 | | | 04S04S21 05:02 | 1 |
| dao3 owsNioao3 nTNct n | . D | | 674 | 0794 | PmS 6 | | | 04S04S21 05:02 | 1 |
| dao3 ofoa8 | . D | | 572 | 178 | PmS 6 | | | 04S04S21 05:02 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS 6 | | | 04S04S21 05:02 | 1 |
| seu-1h2-DesNioaonTNnt n | . D | | 270 | 0754 | PmS 6 | | | 04S04S21 05:02 | 1 |
| seu-1h6-DesNioaoyaoynt n | . D | | 276 | 07g8 | PmS 6 | | | 04S04S21 05:02 | 1 |
| l cabot weuPifewn | . D | | C72 | 0758 | PmS 6 | | | 04S04S21 05:02 | 1 |
| l cabot TnTacsNioawn | . D | | 671 | 176 | PmS 6 | | | 04S04S21 05:02 | 1 |
| l Nioabnt znt n | . D | | 276 | 07C0 | PmS 6 | | | 04S04S21 05:02 | 1 |
| l NioaonTNct n | . D | | 176 | 0745 | PmS 6 | | | 04S04S21 05:02 | 1 |
| l Nioaofoa8 | . D | | 274 | 0798 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **CVl3c8metVane** | **0E41** | **X** | 170 | 0766 | PmS 6 | | | 04S04S21 05:02 | 1 |
| Debao3 osNioao3 nTNct n | . D | | 476 | 176 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **Di/ Vl3c8vi7lu3c8metVane** | **5E1** | | 275 | 07g8 | PmS 6 | | | 04S04S21 05:02 | 1 |
| DesNioaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS 6 | | | 04S04S21 05:02 | 1 |
| ETNpibnt znt n | . D | | 272 | 171 | PmS 6 | | | 04S04S21 05:02 | 1 |
| HnxcsNioao-1h6-bPTcwnt n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **ls3pc8pan3l** | **8E5** | **X** | 12 | 07gC | PmS 6 | | | 04S04S21 05:02 | 1 |
| MnTNpint n l Nioawn | . D | | 19 | 17g | PmS 6 | | | 04S04S21 05:02 | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 05:02 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 05:02 | 1 |
| o-%pint n | . D | | 272 | 078C | PmS 6 | | | 04S04S21 05:02 | 1 |
| 3 hy-%pint n | . D | | 879 | 279 | PmS 6 | | | 04S04S21 05:02 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 05:02 | 1 |
| BTpant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 05:02 | 1 |
| Tact u-1h2-DesNioaonTNnt n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 05:02 | 1 |
| Tact u-1h6-DesNioaoyaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 05:02 | 1 |
| TnaTdPTpibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **getœa/ Vl3c8etVene** | **PE5** | | 674 | 171 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **g3luene** | **1E** | **X** | 17g | 0750 | PmS 6 | | | 04S04S21 05:02 | 1 |
| r aesNioaonTNnt n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 05:02 | 1 |
| **gci/ Vl3c87lu3c8metVane** | **2E** | **X** | 57C | 176 | PmS 6 | | | 04S04S21 05:02 | 1 |
| **FinUl a/ etate** | **1EP** | **X** | 970 | 172 | PmS 6 | | | 04S04S21 05:02 | 1 |
| v et pi sNioawn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 05:02 | 1 |

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## Client Sample ID: SMr -2-20

**Lab Sample ID: 440-28110P-4**

**Date C3lle/ tev: 0592x921 12:12**

**Aatdc: dio**

**Date Re/ eiTev: 0592x921 1Q:00**

**Sample C3ntaineα Summa Canisteo1L**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 118 | | 70 - 130 | | 04/04/21 05:02 | 1 |
| 4-Bromofluorobenzene (Surr) | 114 | | 67 - 131 | | 04/04/21 05:02 | 1 |
| Toluene-d8 (Surr) | 109 | | 70 - 130 | | 04/04/21 05:02 | 1 |

### AetV3v: D1O4P - Qicev Mases in dioQMCN

| dnalUte | Result | . ualiZeo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| **Cadb3n vi3cive** | **0BtP** | | 0750 | 0701C | V XSX | | | 06S0S21 20:02 | 1 |
| I cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S0S21 20:02 | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S0S21 20:02 | 1 |
| **+itc3zen** | **81** | | 0750 | 0719 | V XSX | | | 06S0S21 20:02 | 1 |
| **y cUzen E dcz3n** | **25** | | 0750 | 07084 | V XSX | | | 06S0S21 20:02 | 1 |

## Client Sample ID: SMr -2-20 D, r

**Lab Sample ID: 440-28110P-x**

**Date C3lle/ tev: 0592x921 12:2P**

**Aatdc: dio**

**Date Re/ eiTev: 0592x921 1Q:00**

**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . ualiZeo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNioaonTNct n | . D | | 279 | 079g | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h1h2-r aesNioao-1h2h2-TadiPoaonTNct n | . D | | 11 | 276 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h1h2-r aesNioaonTNct n | . D | | 279 | 079C | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h1-DesNioaonTNnt n | . D | | 270 | 07Cg | PmS3 6 | | | 04S04S21 05:5C | 1 |
| **1JI-Di7u3o3etVane** | **1B5** | **X** | 574 | 07gg | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h2h4-r aesNioaobnt znt n | . D | | 15 | 47g | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h2h4-r aes nTNpibnt znt n | . D | | 974 | 17C | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h2-Debao3 o-6-I Nioayaoyct n | . D | | 14 | 278 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h2-DesNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h2-DesNioayaoyct n | . D | | 276 | 07C4 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h6h5-r aes nTNpibnt znt n | . D | | 275 | 170 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h6-DesNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 1h4-DesNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| **2-( utan3ne** | **11** | | 474 | 172 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| **d/ et3ne** | **51** | | 478 | 07g4 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| **( enf ene** | **0BP4** | **X** | 17C | 0750 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| dnt zpi sNioawn | . D | | 978 | 279 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| dao3 owesNioao3 nTNct n | . D | | 674 | 0794 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| dao3 ofoa3 | . D | | 572 | 178 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| seu-1h2-DesNioaonTNnt n | . D | | 270 | 0754 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| seu-1h6-DesNioayaoynt n | . D | | 276 | 07g8 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| I cabot weuPifewn | . D | | C72 | 0758 | PmS3 6 | | | 04S04S21 05:5C | 1 |
| I cabot TnTacsNioawn | . D | | 671 | 176 | PmS3 6 | | | 04S04S21 05:5C | 1 |

EPaofeu l ciusent sn laXeen

## Client Sample ID: SMr -2-20 D, r

**Lab Sample ID: 440-28110P-x**

**Date C3lle/ tev: 059 2x9 21 12:2P**

**Aatdc: dio**

**Date Re/ eiTev: 059 2x9 21 1Q:00**

**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| l Nioabnt znt n | . D | | 276 | 0700 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| l NioaonTNct n | . D | | 176 | 0745 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| l Nioafoa8 | . D | | 274 | 0798 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| CVl3c8metVane | 0Bt1 | X | 170 | 0766 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| Debao3 osNioao3 nTNct n | . D | | 476 | 176 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| Di/ Vl3c8vi7lu3c8metVane | 5B9 | | 275 | 07g8 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| DesNioaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| ETNpibnt znt n | . D | | 272 | 171 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| HnxcsNioao-1h6-bPTcwent n | . D | | 1C | C72 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| Is3pc8pan3l | C89 | X | 12 | 07gC | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| MnTNpint n l Nioaewn | . D | | 19 | 17g | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| o-%pint n | . D | | 272 | 078C | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| 3 hy-%pint n | . D | | 879 | 279 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| BTpant n | . D | | C74 | 276 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| Tact u-1h2-DesNioaonTNnt n | . D | | 270 | 0750 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| Tact u-1h6-DesNioaoyaoynt n | . D | | 475 | 07gC | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| TnaTdPTpibnt znt n | . D | | 872 | 175 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| getœa/ Vl3c8etVene | xBh | | 674 | 171 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| g3luene | 1E1 | X | 17g | 0750 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| r aesNioaonTNnt n | . D | | 279 | 07gC | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| gci/ Vl3c87lu3c8metVane | 2B4 | X | 57C | 176 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| FinUl a/ etate | 1B4 | X | 970 | 172 | PmS 8 6 | | | 04S04S21 05:5C | 1 |
| v et pi sNioaewn | . D | | 176 | 0741 | PmS 8 6 | | | 04S04S21 05:5C | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *119* | | *70 - 130* | | *04/04/21 05:56* | *1* |
| *4-Bromofluorobenzene (Surr)* | *111* | | *67 - 131* | | *04/04/21 05:56* | *1* |
| *Toluene-d8 (Surr)* | *108* | | *70 - 130* | | *04/04/21 05:56* | *1* |

### AetV3v: D1O4P - Qicev Mases in dioCMCN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| Cadb3n vi3cive | 0Bt1 | | 0750 | 0701C | V XSX | | | 06S60S21 20:24 | 1 |
| l cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S60S21 20:24 | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S60S21 20:24 | 1 |
| +itc8zen | hO | | 0750 | 0719 | V XSX | | | 06S60S21 20:24 | 1 |
| y cUzen E dœz3n | 22 | | 0750 | 07084 | V XSX | | | 06S60S21 20:24 | 1 |

## Client Sample ID: SMr -5-x

**Lab Sample ID: 440-28110P-P**

**Date C3lle/ tev: 059 249 21 15:50**

**Aatdc: dio**

**Date Re/ eiTev: 059 2x9 21 1Q:00**

**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNioaonTNct n | . D | | 279 | 079g | PmS 8 6 | | | 04S04S21 0C:51 | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS 8 6 | | | 04S04S21 0C:51 | 1 |

EPaofet u l ciusent sn laXet n

## Client Sample ID: SMr -5-x

**Date C3lle/ tev: 059249221 15:50**
**Date Re/ eiTev: 059 2x9221 1Q:00**
**Sample C3ntaineo: Summa Canisteo1L**

## Lab Sample ID: 440-28110P-P

**Aatdc: dio**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r epaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h2-r aesNioao-1h2h2-TadiPoaonTNct n | . D | | 11 | 276 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h1h2-r aesNioaonTNct n | . D | | 279 | 079C | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h1-DesNioaonTNnt n | . D | | 270 | 07Cg | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h1-DdiPoaonTNct n | . D | | 574 | 07gg | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h2h4-r aesNioaobnt znt n | . D | | 15 | 47g | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h2h4-r ae3 nTNpibnt znt n | . D | | 974 | 17C | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h2-Debao3 o-6-l Nioaoyaoyct n | . D | | 14 | 278 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h2-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h2-DesNioaoyaoyct n | . D | | 276 | 07C4 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h6h5-r ae3 nTNpibnt znt n | . D | | 275 | 170 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h6-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 1h4-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| **2-( utan3ne** | **1x** | | 474 | 172 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| **d/ et3ne** | **25** | | 478 | 07g4 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| **( enf ene** | **0Bx** | **X** | 17C | 0750 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| dnt zpi sNioawn | . D | | 978 | 279 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| dao3 owesNioao3 nTNct n | . D | | 674 | 0794 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| dao3 ofoa3 | . D | | 572 | 178 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| seu-1h2-DesNioaonTNnt n | . D | | 270 | 0754 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| seu-1h6-DesNioaoyaoynt n | . D | | 276 | 07g8 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| l cabot weuPifewn | . D | | C72 | 0758 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| l cabot TnTacsNioaewn | . D | | 671 | 176 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| l Nioaobnt znt n | . D | | 276 | 070O | PmS 6 | | | 04S04S21 0C:51 | 1 |
| l NioaonTNct n | . D | | 176 | 0745 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| l Nioaofoa3 | . D | | 274 | 0798 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| l Nioao3 nTNct n | . D | | 170 | 0766 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| Debao3 osNioao3 nTNct n | . D | | 476 | 176 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| **Di/ Vl3c3vi7u3c3metVane** | **2Bh** | | 275 | 07g8 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| DesNioaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| ETNpibnt znt n | . D | | 272 | 171 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| HnxcsNioao-1h6-bPTcwnt n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| **Is3pc3pan3l** | **11** | **X** | 12 | 07gC | PmS 6 | | | 04S04S21 0C:51 | 1 |
| MnTNpint n l Nioaewn | . D | | 19 | 17g | PmS 6 | | | 04S04S21 0C:51 | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| o-%pint n | . D | | 272 | 078C | PmS 6 | | | 04S04S21 0C:51 | 1 |
| 3 hy-%pint n | . D | | 879 | 279 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 0C:51 | 1 |
| BTpant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| Tact u-1h2-DesNioaonTNnt n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 0C:51 | 1 |
| Tact u-1h6-DesNioaoyaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 0C:51 | 1 |

## Client Sample ID: SMr -5-x

**Lab Sample ID: 440-28110P-P**

**Date C3lle/ tev: 059249221 15:50**

**Aatdc: dio**

**Date Re/ eiTev: 059 2x9221 1O:00**

**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| TnaTdPTpibnt znt n | . D | | 872 | 175 | PmS3 6 | | | 04S04S21 0C:51 | 1 |
| getœa/ Vl3c3etVene | CE1 | | 674 | 171 | PmS3 6 | | | 04S04S21 0C:51 | 1 |
| g3luene | 0B30 | X | 17g | 0750 | PmS3 6 | | | 04S04S21 0C:51 | 1 |
| r aesNioaonTNnt n | . D | | 279 | 07gC | PmS3 6 | | | 04S04S21 0C:51 | 1 |
| gdi/ Vl3c37lu3c3metVane | 2E0 | X | 57C | 176 | PmS3 6 | | | 04S04S21 0C:51 | 1 |
| FinUl a/ etate | 5E2 | X | 970 | 172 | PmS3 6 | | | 04S04S21 0C:51 | 1 |
| v et pi sNioaewn | . D | | 176 | 0741 | PmS3 6 | | | 04S04S21 0C:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *70 - 130* | | *04/04/21 06:51* | *1* |
| *4-Bromofluorobenzene (Surr)* | *114* | | *67 - 131* | | *04/04/21 06:51* | *1* |
| *Toluene-d8 (Surr)* | *107* | | *70 - 130* | | *04/04/21 06:51* | *1* |

### AetV3v: D1O4P - Qicev Mases in dioCMCN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| Cadb3n vi3cive | 0Ex0 | | 0750 | 0701C | V XSX | | | 06S05S21 20:50 | 1 |
| I cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S05S21 20:50 | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S05S21 20:50 | 1 |
| +itc3zen | 80 | | 0750 | 0719 | V XSX | | | 06S05S21 20:50 | 1 |
| y cUzen E dœz3n | 22 | | 0750 | 0784 | V XSX | | | 06S05S21 20:50 | 1 |

## Client Sample ID: SMr -5-20

**Lab Sample ID: 440-28110P-h**

**Date C3lle/ tev: 059249221 15:xO**

**Aatdc: dio**

**Date Re/ eiTev: 059 2x9221 1O:00**

**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNioaonTNct n | . D | | 279 | 079g | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h1h2-r aesNioao-1h2h2-TaeiPoaonTNct n | . D | | 11 | 276 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h1h2-r aesNioaonTNct n | . D | | 279 | 079C | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h1-DesNioaonTNnt n | . D | | 270 | 07Cg | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1JI-Di7u3c3etVane | 2E9 | X | 574 | 07gg | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h2h4-r aesNioaobnt znt n | . D | | 15 | 47g | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h2h4-r ae3 nTNpibnt znt n | . D | | 974 | 17C | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h2-Deboo3 o-6-I Nioaoyaoyct n | . D | | 14 | 278 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h2-Deboo3 onTNct n | . D | | 678 | 176 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h2-DesNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h2-DesNioaoyaoyct n | . D | | 276 | 07C4 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h6h5-r ae3 nTNpibnt znt n | . D | | 275 | 170 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h6-DesNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 1h4-DesNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 2-( utan3ne | C0 | | 474 | 172 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 4-AetVUI-2-pentan3ne | 1P | | C71 | 276 | PmS3 6 | | | 04S04S21 09:45 | 1 |

## Client Sample ID: SMr -5-20

**Date C3lle/ tev: 059249221 15:xO**
**Date Re/ eiTev: 059 2x9221 1Q:00**
**Sample C3ntaineo: Summa Canisteo1L**

## Lab Sample ID: 440-28110P-h

**Aatdc: dio**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| d/ et3ne | 180 | | 478 | 07g4 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| ( enfene | 2E9 | | 17C | 0750 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| dnt zpi sNoaewn | . D | | 978 | 279 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| dao3 owesNoao3 nTNct n | . D | | 674 | 0794 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| dao3 ofoa8 | . D | | 572 | 178 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| seu-1h2-DesNoaonTNnt n | . D | | 270 | 0754 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| seu-1h6-DesNoaoyaoynt n | . D | | 276 | 07g8 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| Cadb3n visul7ive | 0EP0 | X | C72 | 0758 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| I cabot TnTacsNoaewn | . D | | 671 | 176 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| I Noaobnt znt n | . D | | 276 | 0700 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| I NoaonTNct n | . D | | 176 | 0745 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| I Noaofoa8 | . D | | 274 | 0798 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| I Noao3 nTNct n | . D | | 170 | 0766 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| Debao3 osNoao3 nTNct n | . D | | 476 | 176 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| Di/ Vl3c8vi7lu3c8metVane | 5E1 | | 275 | 07g8 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| DesNoaoThTacfiPoaonTNct n | . D | | 14 | 176 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| ETNpibnt znt n | . D | | 272 | 171 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| HnxcsNoao-1h6-bPTcwent n | . D | | 1C | C72 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| Is3pc8pan3I | xE2 | X | 12 | 07gC | PmS3 6 | | | 04S04S21 09:45 | 1 |
| MnTNpint n I Noaewn | . D | | 19 | 17g | PmS3 6 | | | 04S04S21 09:45 | 1 |
| AetVUI-t-( utUI ) tVeoCAg( ) N | 14 | | 972 | 172 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| 3-6Uene | 1x | | 272 | 078C | PmS3 6 | | | 04S04S21 09:45 | 1 |
| m.p-6Uene | 4E2 | X | 879 | 279 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS3 6 | | | 04S04S21 09:45 | 1 |
| BTpant n | . D | | C74 | 276 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| Tact u-1h2-DesNoaonTNnt n | . D | | 270 | 0750 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| Tact u-1h6-DesNoaoyaoynt n | . D | | 475 | 07gC | PmS3 6 | | | 04S04S21 09:45 | 1 |
| TnaFdPTpibnt znt n | . D | | 872 | 175 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| getca/ Vl3c8etVene | 1h | | 674 | 171 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| g3luene | 2Ex | | 17g | 0750 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| raesNoaonTNnt n | . D | | 279 | 07gC | PmS3 6 | | | 04S04S21 09:45 | 1 |
| gci/ Vl3c87lu3c8metVane | 2E0 | X | 57C | 176 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| vetpi csnTcTh | . D | | 970 | 172 | PmS3 6 | | | 04S04S21 09:45 | 1 |
| vetpi sNoaewn | . D | | 176 | 0741 | PmS3 6 | | | 04S04S21 09:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *116* | | *70 - 130* | | *04/04/21 07:45* | *1* |
| *4-Bromofluorobenzene (Surr)* | *116* | | *67 - 131* | | *04/04/21 07:45* | *1* |
| *Toluene-d8 (Surr)* | *112* | | *70 - 130* | | *04/04/21 07:45* | *1* |

### AetV3v: D1O4P - Qicev Masses in dioGMCN

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| Cadb3n vi3cive | 2Ex | | 0750 | 0701C | V XSX | | | 06S05S21 21:16 | 1 |
| I cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S05S21 21:16 | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S05S21 21:16 | 1 |
| +itc8zen | hO | | 0750 | 0719 | V XSX | | | 06S05S21 21:16 | 1 |
| y cUzen E doz3n | 20 | | 0750 | 07084 | V XSX | | | 06S05S21 21:16 | 1 |

EPaofetu l ciusent sn laXetn

## Client Sample ID: SMr -4-x

**Date C3lle/ tev: 0592x921 14:51**
**Date Re/ eiTev: 0592x921 1Q:00**
**Sample C3ntaineα Summa Canisteo1L**

## Lab Sample ID: 440-28110P-8

**Aatdc: dio**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aasNoaonTNct n | . D | | 279 | 079g | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h1h2h2-r nTacsNoaonTNct n | . D | | C7g | 171 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h1h2-r aasNoao-1h2h2-TaaiPoaonTNct n | . D | | 11 | 276 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h1h2-r aasNoaonTNct n | . D | | 279 | 079C | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h1-DasNoaonTNct n | . D | | 270 | 0742 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h1-DasNoaonTNht n | . D | | 270 | 07Cg | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **1JI-Di7u3c3etVane** | **12** | | 574 | 07gg | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h2h4-r aasNoaobnt znt n | . D | | 15 | 47g | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h2h4-r aa3 nTNpibnt znt n | . D | | 974 | 17C | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h2-Dabao3 o-6-I NoaoyaoyctI n | . D | | 14 | 278 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h2-Dabao3 onTNct n | . D | | 678 | 176 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h2-DasNoaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h2-DasNoaonTNct n | . D | | 270 | 075g | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h2-DasNoaoyaoyct n | . D | | 276 | 07C4 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h6h5-r aa3 nTNpibnt znt n | . D | | 275 | 170 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h6-DasNoaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 1h4-DasNoaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **2-( utan3ne** | **PE2** | | 474 | 172 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **d/ et3ne** | **2O** | | 478 | 07g4 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **( enf ene** | **1E8** | | 17C | 0750 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| dnt zpi sNoaawn | . D | | 978 | 279 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| dao3 owsNoao3 nTNct n | . D | | 674 | 0794 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| dao3 ofoa8 | . D | | 572 | 178 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| seu-1h2-DasNoaonTNht n | . D | | 270 | 0754 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| seu-1h6-DasNoaoyaoynt n | . D | | 276 | 07g8 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **Cadb3n visul7ive** | **0E8x** | **X** | C72 | 0758 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| I cabot TnTacsNoaawn | . D | | 671 | 176 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| I NoaobntI znt n | . D | | 276 | 070O | PmS3 6 | | | 04S04S21 08:40 | 1 |
| I NoaonTNct n | . D | | 176 | 0745 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| I Noaofoa8 | . D | | 274 | 0798 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **CVI3c3metVane** | **0EPO** | **X** | 170 | 0766 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| Dabao3 osNoao3 nTNct n | . D | | 476 | 176 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **Di/ VI3c3vi7u3c3metVane** | **5E1** | | 275 | 07g8 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| DasNoaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **) tVUlbenf ene** | **1E5** | **X** | 272 | 171 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| HnxcsNoao-1h6-bPTcwnt n | . D | | 1C | C72 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| **Is3pc3pan3I** | **xE5** | **X** | 12 | 07gC | PmS3 6 | | | 04S04S21 08:40 | 1 |
| MnTNpint nI Noaawn | . D | | 19 | 17g | PmS3 6 | | | 04S04S21 08:40 | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| o-%pint n | . D | | 272 | 078C | PmS3 6 | | | 04S04S21 08:40 | 1 |
| 3 hy-%pint n | . D | | 879 | 279 | PmS3 6 | | | 04S04S21 08:40 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS3 6 | | | 04S04S21 08:40 | 1 |
| BTpant n | . D | | C74 | 276 | PmS3 6 | | | 04S04S21 08:40 | 1 |

EPaofeu I ciusent sn laXen

## Client Sample ID: SMr -4-x

**Lab Sample ID: 440-28110P-8**

**Date C3lle/ tev: 0592x921 14:51**

**Aatdc: dio**

**Date Re/ eiTev: 0592x921 1Q:00**

**Sample C3ntaineα: Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| Tact u-1h2-DesNioaonTNht n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 08:40 | 1 |
| Tact u-1h6-DesNioaoyaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 08:40 | 1 |
| TnaFdPTpibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 08:40 | 1 |
| getoa/ Vl3o3etVene | 15 | | 674 | 171 | PmS 6 | | | 04S04S21 08:40 | 1 |
| g3luene | 0E0h | X | 17g | 0750 | PmS 6 | | | 04S04S21 08:40 | 1 |
| r aesNioaonTNht n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 08:40 | 1 |
| gci/ Vl3o37u3o3metVane | 2EP | X | 57C | 176 | PmS 6 | | | 04S04S21 08:40 | 1 |
| FinUl a/ etate | 1E0 | X | 970 | 172 | PmS 6 | | | 04S04S21 08:40 | 1 |
| v et pi sNioaewn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 08:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *118* | | *70 - 130* | | *04/04/21 08:40* | *1* |
| *4-Bromofluorobenzene (Surr)* | *110* | | *67 - 131* | | *04/04/21 08:40* | *1* |
| *Toluene-d8 (Surr)* | *109* | | *70 - 130* | | *04/04/21 08:40* | *1* |

### AetV3v: D1O4P - Qicev Mases in dioQMCN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| Cado3n vi3cive | 1E | | 0750 | 0701C | V XSX | | | 06S05S21 21:68 | 1 |
| I cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S05S21 21:68 | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S05S21 21:68 | 1 |
| +ito3zen | hO | | 0750 | 0719 | V XSX | | | 06S05S21 21:68 | 1 |
| y cUzen E doz3n | 21 | | 0750 | 07084 | V XSX | | | 06S05S21 21:68 | 1 |

## Client Sample ID: SMr -4-20

**Lab Sample ID: 440-28110P-O**

**Date C3lle/ tev: 0592x921 14:04**

**Aatdc: dio**

**Date Re/ eiTev: 0592x921 1Q:00**

**Sample C3ntaineα: Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNioaonTNct n | . D | | 279 | 079g | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h1h2-r aesNioao-1h2h2-TaeiPoaonTNct n | . D | | 11 | 276 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h1h2-r aesNioaonTNct n | . D | | 279 | 079C | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h1-DesNioaonTNht n | . D | | 270 | 07Cg | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h1-DeiPoaonTNct n | . D | | 574 | 07gg | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h2h4-r aesNioaobnt znt n | . D | | 15 | 47g | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h2h4-r aes nTNpibnt znt n | . D | | 974 | 17C | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h2-Debao3 o-6-I Nioaoyaoyct n | . D | | 14 | 278 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h2-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h2-DesNioaoyaoyct n | . D | | 276 | 07C4 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h6h5-r aes nTNpibnt znt n | . D | | 275 | 170 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h6-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 1h4-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 2-( utan3ne | 18 | | 474 | 172 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS 6 | | | 04S04S21 0g:6C | 1 |

## Client Sample ID: SMr -4-20

**Date C3lle/ tev: 0592x921 14:04**
**Date Re/ eiTev: 0592x921 1O:00**
**Sample C3ntaineo: Summa Canisteo1L**

## Lab Sample ID: 440-28110P-O

**Aatdc: dio**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . ualifeo | RL | ADL | , nit | D | r epaev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| **d/ et3ne** | **50** | | 478 | 07g4 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| **( enfene** | **0Bh** | **X** | 17C | 0750 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| dnt zpi sNoaewn | . D | | 978 | 279 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| dao3 owesNoao3 nTNct n | . D | | 674 | 0794 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| dao3 ofoa8 | . D | | 572 | 178 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| seu-1h2-DesNoaonTNnt n | . D | | 270 | 0754 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| seu-1h6-DesNoaoyaoynt n | . D | | 276 | 07g8 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| l cabot weuPifewn | . D | | C72 | 0758 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| l cabot TnTacsNoaewn | . D | | 671 | 176 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| l Noaobnt znt n | . D | | 276 | 07C0 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| l NoaonTNct n | . D | | 176 | 0745 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| l Noaofoa8 | . D | | 274 | 0798 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| **CVl3c8metVane** | **0Bx** | **P X** | 170 | 0766 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| Debao3 osNoao3 nTNct n | . D | | 476 | 176 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| **Di/ Vl3c8vi7lu3c8metVane** | **2Bh** | | 275 | 07g8 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| DesNoaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| ETNpibnt znt n | . D | | 272 | 171 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| HnxcsNoao-1h6-bPTcwent n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| **ls3pc8pan3l** | **1O** | | 12 | 07gC | PmS 6 | | | 04S04S21 0g:6C | 1 |
| MnTNpint n l Noaewn | . D | | 19 | 17g | PmS 6 | | | 04S04S21 0g:6C | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| o-%pint n | . D | | 272 | 078C | PmS 6 | | | 04S04S21 0g:6C | 1 |
| 3 hy-%pint n | . D | | 879 | 279 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 0g:6C | 1 |
| BTpant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| Tact u-1h2-DesNoaonTNnt n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| Tact u-1h6-DesNoaoyaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 0g:6C | 1 |
| TnaTdPTpibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| **getca/ Vl3c8etVene** | **14** | | 674 | 171 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| **g3luene** | **1Bx** | **X** | 17g | 0750 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| r aesNoaonTNnt n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 0g:6C | 1 |
| **gci/ Vl3c87lu3c8metVane** | **5B** | **X** | 57C | 176 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| vet pi csnTcTn | . D | | 970 | 172 | PmS 6 | | | 04S04S21 0g:6C | 1 |
| vet pi sNoaewn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 0g:6C | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *118* | | *70 - 130* | | *04/04/21 09:36* | *1* |
| *4-Bromofluorobenzene (Surr)* | *111* | | *67 - 131* | | *04/04/21 09:36* | *1* |
| *Toluene-d8 (Surr)* | *109* | | *70 - 130* | | *04/04/21 09:36* | *1* |

### AetV3v: D1O4P - Qicev Mases in dioQMCN

| dnalUte | Result | . ualifeo | RL | ADL | , nit | D | r epaev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| **Cadob3n vi3cive** | **0Bh** | | 0750 | 0701C | V XSX | | | 06S30S21 21:5g | 1 |
| l cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S30S21 21:5g | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S30S21 21:5g | 1 |

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## Client Sample ID: SMr -4-20

**Lab Sample ID: 440-28110P-O**

**Date C3lle/ tev: 0592x921 14:04**

**Aatdic: dio**

**Date Re/ eiTev: 0592x921 1Q:00**

**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: D1O4P - Qicev Mases in dioQMCNG C3ntinuevN

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| +itc3zen | 81 | | 0750 | 0719 | V XSX | | | 06S0S21 21:5g | 1 |
| y cUzen E doz3n | 22 | | 0750 | 07084 | V XSX | | | 06S0S21 21:5g | 1 |

## Client Sample ID: SMr -x-x

**Lab Sample ID: 440-28110P-10**

**Date C3lle/ tev: 0592x921 12:x5**

**Aatdic: dio**

**Date Re/ eiTev: 0592x921 1Q:00**

**Sample C3ntaineα Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . uali7eo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aasNioaonTNct n | . D | | 279 | 079g | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h1h2-r aasNioao-1h2h2-TaaiPoaonTNct n | . D | | 11 | 276 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h1h2-r aasNioaonTNct n | . D | | 279 | 079C | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h1-DaaNioaonTNct n | . D | | 270 | 0742 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h1-DaaNioaonTNnt n | . D | | 270 | 07Cg | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1J1-Di7u3c3etVane | 4B9 | X | 574 | 07gg | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h2h4-r aasNioaobnt znt n | . D | | 15 | 47g | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1J2J4-gdimetVUlbenfene | 5B4 | X | 974 | 17C | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h2-Dabao3 o-6-I Nioaoyaoyct n | . D | | 14 | 278 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h2-Dabao3 onTNct n | . D | | 678 | 176 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h2-DaaNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h2-DaaNioaonTNct n | . D | | 270 | 075g | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h2-DaaNioaoyaoyct n | . D | | 276 | 07C4 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1J5Jk-gdimetVUlbenfene | 1B5 | X | 275 | 170 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h6-DaaNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 1h4-DaaNioaobnt znt n | . D | | 670 | 175 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 2-( utan3ne | 4B5 | X | 474 | 172 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| d/ et3ne | 51 | | 478 | 07g4 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| dnt znt n | . D | | 17C | 0750 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| dnt zpi sNioaawn | . D | | 978 | 279 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| dao3 owasNioao3 nTNct n | . D | | 674 | 0794 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| dao3 ofoa8 | . D | | 572 | 178 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| sau-1h2-DaaNioaonTNnt n | . D | | 270 | 0754 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| sau-1h6-DaaNioaoyaoynt n | . D | | 276 | 07g8 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| I cabot waaPifawn | . D | | C72 | 0758 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| I cabot TnTacsNioaawn | . D | | 671 | 176 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| I Nioaobnt znt n | . D | | 276 | 07C0 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| I NioaonTNct n | . D | | 176 | 0745 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| I Nioaofoa8 | . D | | 274 | 0798 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| CVI3c3metVane | 0B9P | X | 170 | 0766 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| Dabao3 osNioao3 nTNct n | . D | | 476 | 176 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| Di/ VI3c3vi7u3c3metVane | 5B1 | | 275 | 07g8 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| DaaNioaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS3 6 | | | 04S04S21 10:28 | 1 |
| ETNpibnt znt n | . D | | 272 | 171 | PmS3 6 | | | 04S04S21 10:28 | 1 |

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## Client Sample ID: SMr -x-x

**Lab Sample ID: 440-28110P-10**

**Date C3lle/ tev: 0592x921 12:x5**
**Aatdc: dio**
**Date Re/ eiTev: 0592x921 1Q:00**
**Sample C3ntaineo: Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| HnxcsNioao-1h6-bPTcwent n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 10:28 | 1 |
| **Is3po3pan3l** | **xBP** | **X** | 12 | 07gC | PmS 6 | | | 04S04S21 10:28 | 1 |
| MnTNpint n l Nioaewn | . D | | 19 | 17g | PmS 6 | | | 04S04S21 10:28 | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 10:28 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 10:28 | 1 |
| **3-6Uene** | **1El** | **X** | 272 | 078C | PmS 6 | | | 04S04S21 10:28 | 1 |
| 3 hy-%pint n | . D | | 879 | 279 | PmS 6 | | | 04S04S21 10:28 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 10:28 | 1 |
| BTpant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 10:28 | 1 |
| Tact u-1h2-DesNioaonTNnt n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 10:28 | 1 |
| Tact u-1h6-DesNioayaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 10:28 | 1 |
| TnaTdPTpibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 10:28 | 1 |
| **getœa/ Vl3c3etVene** | **1Bh** | **X** | 674 | 171 | PmS 6 | | | 04S04S21 10:28 | 1 |
| **g3luene** | **1BP** | **X** | 17g | 0750 | PmS 6 | | | 04S04S21 10:28 | 1 |
| r asNioaonTNnt n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 10:28 | 1 |
| **gci/ Vl3c37lu3c3metVane** | **2B5** | **X** | 57C | 176 | PmS 6 | | | 04S04S21 10:28 | 1 |
| **FinUl a/ etate** | **5Bx** | **X** | 970 | 172 | PmS 6 | | | 04S04S21 10:28 | 1 |
| v et pi sNioaewn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 10:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *119* | | *70 - 130* | | *04/04/21 10:28* | *1* |
| *4-Bromofluorobenzene (Surr)* | *111* | | *67 - 131* | | *04/04/21 10:28* | *1* |
| *Toluene-d8 (Surr)* | *112* | | *70 - 130* | | *04/04/21 10:28* | *1* |

### AetV3v: D1O4P - Qicev Mases in dioGMCN

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| **Cadb3n vi3cive** | **0BP4** | | 0750 | 0701C | V XSX | | | 06S30S21 22:28 | 1 |
| l cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S30S21 22:28 | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S30S21 22:28 | 1 |
| **+ito3zen** | **hO** | | 0750 | 0719 | V XSX | | | 06S30S21 22:28 | 1 |
| **y cUzen E doz3n** | **22** | | 0750 | 07084 | V XSX | | | 06S30S21 22:28 | 1 |

## Client Sample ID: SMr -x-20

**Lab Sample ID: 440-28110P-11**

**Date C3lle/ tev: 0592x921 15:22**
**Aatdc: dio**
**Date Re/ eiTev: 0592x921 1Q:00**
**Sample C3ntaineo: Summa Canisteo1L**

### AetV3v: gy -1x - F3latile y ozani/ C3mp3unvs in dmbient dio

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaoev | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r asNioaonTNct n | . D | | 279 | 079g | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h1h2-r asNioao-1h2h2-TaeiPoaonTNct n | . D | | 11 | 276 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h1h2-r asNioaonTNct n | . D | | 279 | 079C | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h1-DesNioaonTNnt n | . D | | 270 | 07Cg | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h1-DeiPoaonTNct n | . D | | 574 | 07gg | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h2h4-r asNioaobnt znt n | . D | | 15 | 47g | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h2h4-r as nTNpibnt znt n | . D | | 974 | 17C | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h2-Debao3 o-6-l Nioayaoyct n | . D | | 14 | 278 | PmS 6 | | | 04S04S21 11:26 | 1 |

EPaofe u l ciusent sn laXe n

## Client Sample ID: SMr -x-20

**Date C3lle/ tev: 059 2x921 15:22**
**Date Re/ eiTev: 059 2x921 1Q:00**
**Sample C3ntaineα Summa Canisteo1L**

## Lab Sample ID: 440-28110P-11

**Aatdc: dio**

### AetV3v: gy -1x - F3latile y œani/ C3mp3unvs in dmbient dioC3ntinuevN

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h2-DesNioabnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h2-DesNioaoyaoyct n | . D | | 276 | 07C4 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h6h5-r aæ3 nTNpibnt znt n | . D | | 275 | 170 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h6-DesNioabnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 1h4-DesNioabnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **2-( utan3ne** | **5E0** | **X** | 474 | 172 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS 6 | | | 04S04S21 11:26 | 1 |
| 4-ETNpiTbiPnt n | . D | | 275 | 172 | PmS 6 | | | 04S04S21 11:26 | 1 |
| 4-MnTNpi-2-ynt Tct ot n | . D | | C71 | 276 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **d/ et3ne** | **2x** | | 478 | 07g4 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **( enf ene** | **0EP4** | **X** | 17C | 0750 | PmS 6 | | | 04S04S21 11:26 | 1 |
| dnt zpi sNioawn | . D | | 978 | 279 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **( c3m3vi/ Vl3c3metVane** | **5E1** | **X** | 674 | 0794 | PmS 6 | | | 04S04S21 11:26 | 1 |
| dao3 ofoa3 | . D | | 572 | 178 | PmS 6 | | | 04S04S21 11:26 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS 6 | | | 04S04S21 11:26 | 1 |
| seu-1h2-DesNioaonTNnt n | . D | | 270 | 0754 | PmS 6 | | | 04S04S21 11:26 | 1 |
| seu-1h6-DesNioaoyaoynt n | . D | | 276 | 07g8 | PmS 6 | | | 04S04S21 11:26 | 1 |
| I cabot weuPifewn | . D | | C72 | 0758 | PmS 6 | | | 04S04S21 11:26 | 1 |
| I cabot TnTacsNioawn | . D | | 671 | 176 | PmS 6 | | | 04S04S21 11:26 | 1 |
| I NioabntznTn | . D | | 276 | 07C0 | PmS 6 | | | 04S04S21 11:26 | 1 |
| I NioaonTNct n | . D | | 176 | 0745 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **CVl3c373cm** | **CE3** | | 274 | 0798 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **CVl3c3metVane** | **0EtO** | **X** | 170 | 0766 | PmS 6 | | | 04S04S21 11:26 | 1 |
| Debao3 osNioao3 nTNct n | . D | | 476 | 176 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **Di/ Vl3c3vi7lu3c3metVane** | **5E1** | | 275 | 07g8 | PmS 6 | | | 04S04S21 11:26 | 1 |
| DesNioaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS 6 | | | 04S04S21 11:26 | 1 |
| ETNpibnt znt n | . D | | 272 | 171 | PmS 6 | | | 04S04S21 11:26 | 1 |
| HnxcsNioao-1h6-bPTcwnt n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **Is3pc3pan3l** | **18** | | 12 | 07gC | PmS 6 | | | 04S04S21 11:26 | 1 |
| MnTNpint n I Nioawn | . D | | 19 | 17g | PmS 6 | | | 04S04S21 11:26 | 1 |
| MnTNpi-TdPTpi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 11:26 | 1 |
| t -dPTpibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 11:26 | 1 |
| o-%pint n | . D | | 272 | 078C | PmS 6 | | | 04S04S21 11:26 | 1 |
| 3 hy-%pint n | . D | | 879 | 279 | PmS 6 | | | 04S04S21 11:26 | 1 |
| uns-dPTpibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 11:26 | 1 |
| BTpant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 11:26 | 1 |
| Tact u-1h2-DesNioaonTNnt n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 11:26 | 1 |
| Tact u-1h6-DesNioaoyaoynt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 11:26 | 1 |
| TnaTdPTpibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **getœa/ Vl3c3etVene** | **PE4** | | 674 | 171 | PmS 6 | | | 04S04S21 11:26 | 1 |
| **g3luene** | **1E3** | **X** | 17g | 0750 | PmS 6 | | | 04S04S21 11:26 | 1 |
| r aesNioaonTNnt n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 11:26 | 1 |
| **gci/ Vl3c37lu3c3metVane** | **5E5** | **X** | 57C | 176 | PmS 6 | | | 04S04S21 11:26 | 1 |
| vetpi csnTcTn | . D | | 970 | 172 | PmS 6 | | | 04S04S21 11:26 | 1 |
| vetpi sNioawn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 11:26 | 1 |

## Client Sample ID: SMr -x-20

**Lab Sample ID: 440-28110P-11**

**Date C3lle/ tev: 059 2x9 21 15:22**

**Aatdc: d io**

**Date Re/ eiTev: 059 2x9 21 1Q:00**

**Sample C3ntaineo: Summa Canisteo 1L**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *70 - 130* | | *04/04/21 11:23* | *1* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *67 - 131* | | *04/04/21 11:23* | *1* |
| *Toluene-d8 (Surr)* | *111* | | *70 - 130* | | *04/04/21 11:23* | *1* |

### AetV3v: D1O4P - Qicev Mases in dioGMCN

| dnalUte | Result | . uali7ieo | RL | ADL | , nit | D | r œpaœv | dnalUfev | Dil Qa/ |
|---|---|---|---|---|---|---|---|---|---|
| **Cadb3n vi3cive** | **0B02** | | 0750 | 0701C | V XSX | | | 06S0S21 22:50 | 1 |
| I cabot 3 ot oxewn | . D | | 0750 | 0712 | V XSX | | | 06S0S21 22:50 | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | V XSX | | | 06S0S21 22:50 | 1 |
| **+itc3zen** | **80** | | 0750 | 0719 | V XSX | | | 06S0S21 22:50 | 1 |
| **y cUzen E dcz3n** | **22** | | 0750 | 07084 | V XSX | | | 06S0S21 22:50 | 1 |

# Surrogate Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281106-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Matrix: Air**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | DCA | BFB | TOL |
| Lab Sample ID | Client Sample ID | (70-130) | (67-131) | (70-130) |
| 440-281106-1 | SGP-1-5 | 117 | 115 | 109 |
| 440-281106-2 | SGP-1-20 | 117 | 114 | 108 |
| 440-281106-3 | SGP-2-5 | 119 | 112 | 108 |
| 440-281106-4 | SGP-2-20 | 118 | 114 | 109 |
| 440-281106-5 | SGP-2-20 DUP | 119 | 111 | 108 |
| 440-281106-6 | SGP-3-5 | 117 | 114 | 107 |
| 440-281106-7 | SGP-3-20 | 116 | 116 | 112 |
| 440-281106-8 | SGP-4-5 | 118 | 110 | 109 |
| 440-281106-9 | SGP-4-20 | 118 | 111 | 109 |
| 440-281106-10 | SGP-5-5 | 119 | 111 | 112 |
| 440-281106-11 | SGP-5-20 | 117 | 112 | 111 |
| LCS 570-140853/3 | Lab Control Sample | 115 | 107 | 111 |
| LCSD 570-140853/4 | Lab Control Sample Dup | 114 | 106 | 113 |
| MB 570-140853/6 | Method Blank | 116 | 112 | 111 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

# Method Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281106-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| TO-15 | Volatile Organic Compounds in Ambient Air | EPA | ECL 2 |
| D1946 | Fixed Gases in Air (GC) | ASTM | ECL 2 |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

**Laboratory References:**

ECL 2 = Eurofins Calscience LLC  Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281106-1

## Client Sample ID: SGP-1-5
**Date Collected: 03/24/21 11:07**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-1
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 02:17 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 17:45 | USQD | ECL 2 |

## Client Sample ID: SGP-1-20
**Date Collected: 03/24/21 11:59**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-2
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 03:12 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 18:09 | USQD | ECL 2 |

## Client Sample ID: SGP-2-5
**Date Collected: 03/25/21 11:46**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-3
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 04:07 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 19:26 | USQD | ECL 2 |

## Client Sample ID: SGP-2-20
**Date Collected: 03/25/21 12:12**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-4
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 05:02 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 20:02 | USQD | ECL 2 |

## Client Sample ID: SGP-2-20 DUP
**Date Collected: 03/25/21 12:26**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-5
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 05:56 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 20:24 | USQD | ECL 2 |

## Client Sample ID: SGP-3-5
**Date Collected: 03/24/21 13:30**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-6
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 06:51 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 20:50 | USQD | ECL 2 |

# Lab Chronicle

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281106-1

## Client Sample ID: SGP-3-20
**Date Collected: 03/24/21 13:59**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-7
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 07:45 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 21:13 | USQD | ECL 2 |

## Client Sample ID: SGP-4-5
**Date Collected: 03/25/21 14:31**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-8
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 08:40 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 21:38 | USQD | ECL 2 |

## Client Sample ID: SGP-4-20
**Date Collected: 03/25/21 14:04**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-9
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 09:36 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 21:59 | USQD | ECL 2 |

## Client Sample ID: SGP-5-5
**Date Collected: 03/25/21 12:53**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-10
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 10:28 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 22:28 | USQD | ECL 2 |

## Client Sample ID: SGP-5-20
**Date Collected: 03/25/21 13:22**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281106-11
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 | | 1 | 400 mL | 400 mL | 140853 | 04/04/21 11:23 | UX77 | ECL 2 |
| Total/NA | Analysis | D1946 | | 1 | 1 mL | 1 mL | 139671 | 03/30/21 22:50 | USQD | ECL 2 |

**Laboratory References:**

ECL 2 = Eurofins Calscience LLC  Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Lab Sample ID: MB 570-140853/6**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNioaonTNct n | . D | | 279 | 079g | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h1h2h2-r nTacsNioaonTNct n | . D | | C7g | 171 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h1h2-r aesNioao-1h2h2-TaciPoaonTNct n | . D | | 11 | 276 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h1h2-r aesNioaonTNct n | . D | | 279 | 079C | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h1-DesNioaonTNct n | . D | | 270 | 0742 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h1-DesNioaonTNnt n | . D | | 270 | 07Cg | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h1-DeiPoaonTNct n | . D | | 574 | 07gg | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h2h4-r aesNioaobnt znt n | . D | | 15 | 47g | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h2h4-r a3 nTNyibnt znt n | . D | | 974 | 17C | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h2-Debao3 o-6-l Nioapaopct n | . D | | 14 | 278 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h2-Debao3 onTNct n | . D | | 678 | 176 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h2-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h2-DesNioaonTNct n | . D | | 270 | 075g | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h2-DesNioapaopct n | . D | | 276 | 07C4 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h6h5-r a3 nTNyibnt znt n | . D | | 275 | 170 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h6-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 1h4-DesNioaobnt znt n | . D | | 670 | 175 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 2-dPTct ot n | . D | | 474 | 172 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 2-Hnxct ot n | . D | | C71 | 27C | PmS 6 | | | 04S04S21 01:22 | 1 |
| 4-ETNyiTbiPnt n | . D | | 275 | 172 | PmS 6 | | | 04S04S21 01:22 | 1 |
| 4-MnTNyi-2-pnt Tct ot n | . D | | C71 | 276 | PmS 6 | | | 04S04S21 01:22 | 1 |
| AsnTot n | . D | | 478 | 07g4 | PmS 6 | | | 04S04S21 01:22 | 1 |
| dnt znt n | . D | | 17C | 0750 | PmS 6 | | | 04S04S21 01:22 | 1 |
| dnt zyi sNioawn | . D | | 978 | 279 | PmS 6 | | | 04S04S21 01:22 | 1 |
| dao3 owesNioao3 nTNct n | . D | | 674 | 0794 | PmS 6 | | | 04S04S21 01:22 | 1 |
| dao3 ofoa3 | . D | | 572 | 178 | PmS 6 | | | 04S04S21 01:22 | 1 |
| dao3 o3 nTNct n | . D | | 17g | 0754 | PmS 6 | | | 04S04S21 01:22 | 1 |
| seu-1h2-DesNioaonTNnt n | . D | | 270 | 0754 | PmS 6 | | | 04S04S21 01:22 | 1 |
| seu-1h6-DesNioapaopnt n | . D | | 276 | 07g8 | PmS 6 | | | 04S04S21 01:22 | 1 |
| l cabot weuPifewn | . D | | C72 | 0758 | PmS 6 | | | 04S04S21 01:22 | 1 |
| l cabot TnTacsNioawn | . D | | 671 | 176 | PmS 6 | | | 04S04S21 01:22 | 1 |
| l Nioabnt znt n | . D | | 276 | 07C0 | PmS 6 | | | 04S04S21 01:22 | 1 |
| l NioaonTNct n | . D | | 176 | 0745 | PmS 6 | | | 04S04S21 01:22 | 1 |
| l Nioafoa3 | . D | | 274 | 0798 | PmS 6 | | | 04S04S21 01:22 | 1 |
| l Nioao3 nTNct n | . D | | 170 | 0766 | PmS 6 | | | 04S04S21 01:22 | 1 |
| Debao3 osNioao3 nTNct n | . D | | 476 | 176 | PmS 6 | | | 04S04S21 01:22 | 1 |
| DesNioawfiPoao3 nTNct n | . D | | 275 | 07g8 | PmS 6 | | | 04S04S21 01:22 | 1 |
| DesNioaoTnTacfiPoaonTNct n | . D | | 14 | 176 | PmS 6 | | | 04S04S21 01:22 | 1 |
| ETNyibnt znt n | . D | | 272 | 171 | PmS 6 | | | 04S04S21 01:22 | 1 |
| HnxcsNioao-1h6-bPTcwnt n | . D | | 1C | C72 | PmS 6 | | | 04S04S21 01:22 | 1 |
| luopaopct oi | . D | | 12 | 07gC | PmS 6 | | | 04S04S21 01:22 | 1 |
| MnTNyint n l Nioawn | . D | | 19 | 17g | PmS 6 | | | 04S04S21 01:22 | 1 |
| MnTNyi-TdPTyi ETNha(Mr dE) | . D | | 972 | 172 | PmS 6 | | | 04S04S21 01:22 | 1 |
| t -dPTyibnt znt n | . D | | 872 | 276 | PmS 6 | | | 04S04S21 01:22 | 1 |
| o-Xyint n | . D | | 272 | 078C | PmS 6 | | | 04S04S21 01:22 | 1 |
| 3 hp-Xyint n | . D | | 879 | 279 | PmS 6 | | | 04S04S21 01:22 | 1 |
| uns-dPTyibnt znt n | . D | | 872 | 17C | PmS 6 | | | 04S04S21 01:22 | 1 |
| BTyant n | . D | | C74 | 276 | PmS 6 | | | 04S04S21 01:22 | 1 |

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 570-140853/6**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Tact u-1h2-DesNioaonTNht n | . D | | 270 | 0750 | PmS 6 | | | 04S04S21 01:22 | 1 |
| Tact u-1h6-DesNioaopaopnt n | . D | | 475 | 07gC | PmS 6 | | | 04S04S21 01:22 | 1 |
| TnaTdPTyibnt znt n | . D | | 872 | 175 | PmS 6 | | | 04S04S21 01:22 | 1 |
| rnTacsNioaonTNht n | . D | | 674 | 171 | PmS 6 | | | 04S04S21 01:22 | 1 |
| roiPnt n | . D | | 17g | 0750 | PmS 6 | | | 04S04S21 01:22 | 1 |
| raesNioaonTNht n | . D | | 279 | 07gC | PmS 6 | | | 04S04S21 01:22 | 1 |
| raesNioaofiPoao3 nTNct n | . D | | 57C | 176 | PmS 6 | | | 04S04S21 01:22 | 1 |
| Vet yi csnTcTh | . D | | 970 | 172 | PmS 6 | | | 04S04S21 01:22 | 1 |
| Vet yi sNioaewn | . D | | 176 | 0741 | PmS 6 | | | 04S04S21 01:22 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *116* | | *70 - 130* | | *04/04/21 01:22* | *1* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *67 - 131* | | *04/04/21 01:22* | *1* |
| *Toluene-d8 (Surr)* | *111* | | *70 - 130* | | *04/04/21 01:22* | *1* |

**Lab Sample ID: LCS 570-140853/3**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1h1h1-raesNioaonTNct n | 16C | 151 | | PmS 6 | | 111 | 90 - 169 |
| 1h1h2h2-rnTacsNioaonTNct n | 192 | 19g | | PmS 6 | | 104 | 90 - 160 |
| 1h1h2-raesNioao-1h2h2-TaeiPoaonTNc t n | 1g2 | 1g8 | | PmS 6 | | 106 | 90 - 160 |
| 1h1h2-raesNioaonTNct n | 16C | 152 | | PmS 6 | | 112 | 90 - 160 |
| 1h1-DesNioaonTNct n | 101 | 111 | | PmS 6 | | 10g | 90 - 161 |
| 1h1-DesNioaonTNht n | gg7l | 112 | | PmS 6 | | 116 | 90 - 160 |
| 1h1-DeiPoaonTNct n | C975 | 8270 | | PmS 6 | | 121 | C0 - 160 |
| 1h2h4-raesNioaobnt znt n | 18C | 1g8 | | PmS 6 | | 109 | 5C - 160 |
| 1h2h4-rae3 nTNyibnt znt n | 126 | 122 | | PmS 6 | | 100 | 90 - 160 |
| 1h2-Deoao3 o-6-l Nioaopaopct n | 242 | 256 | | PmS 6 | | 105 | C8 - 160 |
| 1h2-Deoao3 onTNct n | 1g2 | 1g0 | | PmS 6 | | gg | 90 - 160 |
| 1h2-DesNioaobnt znt n | 150 | 152 | | PmS 6 | | 101 | 90 - 160 |
| 1h2-DesNioaonTNct n | 101 | 11g | | PmS 6 | | 118 | 90 - 164 |
| 1h2-DesNioaopaopct n | 11C | 12g | | PmS 6 | | 112 | 90 - 160 |
| 1h6h5-rae3 nTNyibnt znt n | 126 | 125 | | PmS 6 | | 102 | 90 - 160 |
| 1h6-DesNioaobnt znt n | 150 | 145 | | PmS 6 | | g9 | Cg - 162 |
| 1h4-DesNioaobnt znt n | 150 | 148 | | PmS 6 | | gg | C9 - 162 |
| 2-dPTct ot n | 967 9 | 8g70 | | PmS 6 | | 121 | C4 - 146 |
| 2-Hnxct ot n | 102 | 119 | | PmS 6 | | 114 | 5g - 140 |
| 4-ETNyiTeiPnt n | 126 | 129 | | PmS 6 | | 106 | 90 - 160 |
| 4-MnTNyi-2-pnt Tct ot n | 102 | 161 | | PmS 6 | | 128 | C4 - 166 |
| AsnTot n | 5g74 | CgT2 | | PmS 6 | | 11C | Cg - 14C |
| dnt znt n | 9g7g | 817C | | PmS 6 | | 102 | 90 - 166 |
| dnt zyi sNioaewn | 12g | 166 | | PmS 6 | | 106 | C6 - 160 |
| dao3 owesNioao3 nTNct n | 1C8 | 182 | | PmS 6 | | 10g | 90 - 160 |
| dao3 ofoa3 | 258 | 24C | | PmS 6 | | g5 | 90 - 162 |
| dao3 o3 nTNct n | g97l | 116 | | PmS 6 | | 119 | 90 - 169 |
| seu-1h2-DesNioaonTNht n | gg7l | 106 | | PmS 6 | | 104 | 90 - 160 |

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 570-140853/3**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| seu-1h6-DesNioaopaopnt n | 116 | 129 | | Pms3 6 | | 112 | 90 - 160 |
| l cabot waPifewn | 997g | 9970 | | Pms3 6 | | gg | 90 - 150 |
| l cabot TnTacsNioawn | 159 | 1C8 | | Pms3 6 | | 109 | 90 - 160 |
| l Nioaobnt znt n | 115 | 11C | | Pms3 6 | | 101 | 90 - 160 |
| l NioaonTNct n | CC70 | 9978 | | Pms3 6 | | 118 | 90 - 169 |
| l Nioaofoa3 | 122 | 161 | | Pms3 6 | | 109 | 90 - 162 |
| l Nioao3 nTNct n | 517C | C074 | | Pms3 6 | | 119 | C5 - 142 |
| Debao3 osNioao3 nTNct n | 216 | 1g9 | | Pms3 6 | | g2 | 90 - 160 |
| DesNioaowfiPoao3 nTNct n | 124 | 165 | | Pms3 6 | | 10g | 90 - 142 |
| DesNioaoTnTacfiPoaonTNct n | 195 | 211 | | Pms3 6 | | 121 | 90 - 169 |
| ETNyibnt znt n | 10g | 112 | | Pms3 6 | | 106 | 90 - 160 |
| HnxcsNioao-1h6-bPTcwent n | 2C9 | 28C | | Pms3 6 | | 109 | 55 - 160 |
| luopaopct oi | C175 | C171 | | Pms3 6 | | gg | C0 - 160 |
| MnTNyint n l Nioawn | 8C78 | 8C72 | | Pms3 6 | | gg | 90 - 160 |
| MnTNyi-T-dPTyi ETNha(Mr dE) | g071 | g675 | | Pms3 6 | | 104 | 90 - 162 |
| t -dPTyibnt znt n | 169 | 15C | | Pms3 6 | | 116 | 90 - 160 |
| o-Xyint n | 10g | 110 | | Pms3 6 | | 101 | 90 - 160 |
| 3 hp-Xyint n | 219 | 214 | | Pms3 6 | | gg | 90 - 160 |
| uns-dPTyibnt znt n | 169 | 145 | | Pms3 6 | | 10C | 90 - 160 |
| BTyant n | 10C | 112 | | Pms3 6 | | 105 | 90 - 160 |
| Tact u-1h2-DesNioaonTNnt n | gg71 | 101 | | Pms3 6 | | 102 | 90 - 140 |
| Tact u-1h6-DesNioaopaopnt n | 116 | 161 | | Pms3 6 | | 115 | 90 - 160 |
| TnaT-dPTyibnt znt n | 169 | 14C | | Pms3 6 | | 10C | 90 - 160 |
| r nTacsNioaonTNnt n | 190 | 1C2 | | Pms3 6 | | g5 | 90 - 160 |
| r oiPnt n | g472 | g072 | | Pms3 6 | | gC | 90 - 160 |
| r aesNioaonTNnt n | 164 | 142 | | Pms3 6 | | 105 | 90 - 160 |
| r aesNioaofiPoao3 nTNct n | 140 | 1C9 | | Pms3 6 | | 11g | 90 - 146 |
| Vet yi csnTcTh | 8870 | 106 | | Pms3 6 | | 119 | C9 - 168 |
| Vet yi sNioawn | C67g | 967C | | Pms3 6 | | 115 | 90 - 166 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *107* | | *67 - 131* |
| *Toluene-d8 (Surr)* | *111* | | *70 - 130* |

**Lab Sample ID: LCSD 570-140853/4**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1h1h1-r aesNioaonTNct n | 16C | 151 | | Pms3 6 | | 110 | 90 - 169 | 1 | 25 |
| 1h1h2h2-r nTacsNioaonTNct n | 192 | 19g | | Pms3 6 | | 104 | 90 - 160 | 0 | 25 |
| 1h1h2-r aesNioao-1h2h2-TafiPoaonTNc t n | 1g2 | 202 | | Pms3 6 | | 105 | 90 - 160 | 2 | 25 |
| 1h1h2-r aesNioaonTNct n | 16C | 158 | | Pms3 6 | | 11C | 90 - 160 | 4 | 25 |
| 1h1-DesNioaonTNct n | 101 | 116 | | Pms3 6 | | 111 | 90 - 161 | 2 | 25 |
| 1h1-DesNioaonTNnt n | gg71 | 115 | | Pms3 6 | | 11C | 90 - 160 | 2 | 25 |
| 1h1-DefiPoaonTNct n | C975 | 8670 | | Pms3 6 | | 126 | C0 - 160 | 1 | 25 |
| 1h2h4-r aesNioaobnt znt n | 18C | 1g8 | | Pms3 6 | | 109 | 5C - 160 | 0 | 25 |

EPaofet u l ciusent sn lavet n

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCSD 570-140853/4**
**Matrix: Air**
**Analysis Batch: 140853**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1h2h4-r as nTNyibnt znt n | 126 | 126 | | Pms 6 | | 100 | 90 - 160 | 1 | 25 |
| 1h2-Debao3 o-6-l Nioaopaopct n | 242 | 250 | | Pms 6 | | 106 | C8 - 160 | 1 | 25 |
| 1h2-Debao3 onTNct n | 1g2 | 1g1 | | Pms 6 | | 100 | 90 - 160 | 1 | 25 |
| 1h2-DesNioabnt znt n | 150 | 150 | | Pms 6 | | 100 | 90 - 160 | 1 | 25 |
| 1h2-DesNioaonTNct n | 101 | 11g | | Pms 6 | | 119 | 90 - 164 | 1 | 25 |
| 1h2-DesNioaopaopct n | 11C | 162 | | Pms 6 | | 114 | 90 - 160 | 2 | 25 |
| 1h6h5-r as nTNyibnt znt n | 126 | 124 | | Pms 6 | | 101 | 90 - 160 | 1 | 25 |
| 1h6-DesNioabnt znt n | 150 | 145 | | Pms 6 | | gC | Cg - 162 | 1 | 25 |
| 1h4-DesNioabnt znt n | 150 | 149 | | Pms 6 | | g8 | C9 - 162 | 1 | 25 |
| 2-dPTct ot n | 967 | g27l | | Pms 6 | | 125 | C4 - 146 | 6 | 25 |
| 2-Hnxct ot n | 102 | 120 | | Pms 6 | | 119 | 5g - 140 | 2 | 25 |
| 4-ETNyiTbiPnt n | 126 | 12C | | Pms 6 | | 102 | 90 - 160 | 1 | 25 |
| 4-MnTNyi-2-pnt Tct ot n | 102 | 164 | | Pms 6 | | 160 | C4 - 166 | 2 | 25 |
| AsnTbt n | 5g4 | 927l | | Pms 6 | | 121 | Cg - 14C | 4 | 25 |
| dnt znt n | 9g7g | 817g | | Pms 6 | | 102 | 90 - 166 | 0 | 25 |
| dnt zyi sNioawn | 12g | 166 | | Pms 6 | | 102 | C6 - 160 | 0 | 25 |
| dao3 owesNioao3 nTNct n | 1C8 | 18g | | Pms 6 | | 116 | 90 - 160 | 6 | 25 |
| dao3 ofoa3 | 258 | 249 | | Pms 6 | | gC | 90 - 162 | 0 | 25 |
| dao3 o3 nTNct n | g97l | 115 | | Pms 6 | | 11g | 90 - 169 | 2 | 25 |
| seu-1h2-DesNioaonTNnt n | gg7l | 104 | | Pms 6 | | 105 | 90 - 160 | 1 | 25 |
| seu-1h6-DesNioaopaopnt n | 116 | 160 | | Pms 6 | | 115 | 90 - 160 | 2 | 25 |
| l cabot weuPifewn | 997g | 9g72 | | Pms 6 | | 102 | 90 - 150 | 6 | 25 |
| l cabot TnTecsNioawn | 159 | 1CC | | Pms 6 | | 105 | 90 - 160 | 1 | 25 |
| l Nioabnt znt n | 115 | 11C | | Pms 6 | | 101 | 90 - 160 | 0 | 25 |
| l NioaonTNct n | CC70 | 807l | | Pms 6 | | 121 | 90 - 169 | 6 | 25 |
| l Nioafoa3 | 122 | 160 | | Pms 6 | | 109 | 90 - 162 | 1 | 25 |
| l Nioao3 nTNct n | 517C | C075 | | Pms 6 | | 119 | C5 - 142 | 0 | 25 |
| Debao3 osNioao3 nTNct n | 216 | 1g8 | | Pms 6 | | g6 | 90 - 160 | 1 | 25 |
| DesNioaowfiPoao3 nTNct n | 124 | 16C | | Pms 6 | | 110 | 90 - 142 | 0 | 25 |
| DesNioaoTnTecfiPoaonTNct n | 195 | 210 | | Pms 6 | | 120 | 90 - 169 | 1 | 25 |
| ETNyibnt znt n | 10g | 112 | | Pms 6 | | 106 | 90 - 160 | 0 | 25 |
| HnxcsNioao-1h6-bPTcwnt n | 2C9 | 288 | | Pms 6 | | 108 | 55 - 160 | 1 | 25 |
| luopaopct oi | C175 | C270 | | Pms 6 | | 101 | C0 - 160 | 1 | 25 |
| MnTNyint n l Nioawn | 8C78 | 8874 | | Pms 6 | | 102 | 90 - 160 | 6 | 25 |
| MnTNyi-TdPTyi ETNha(Mr dE) | g07l | g570 | | Pms 6 | | 105 | 90 - 162 | 2 | 25 |
| t -dPTyibnt znt n | 169 | 156 | | Pms 6 | | 112 | 90 - 160 | 1 | 25 |
| o-Xyint n | 10g | 108 | | Pms 6 | | 100 | 90 - 160 | 1 | 25 |
| 3 hp-Xyint n | 219 | 215 | | Pms 6 | | gg | 90 - 160 | 0 | 25 |
| uns-dPTyibnt znt n | 169 | 146 | | Pms 6 | | 105 | 90 - 160 | 1 | 25 |
| BTyant n | 10C | 111 | | Pms 6 | | 104 | 90 - 160 | 0 | 25 |
| Tact u-1h2-DesNioaonTNnt n | gg7l | 102 | | Pms 6 | | 106 | 90 - 140 | 1 | 25 |
| Tact u-1h6-DesNioaopaopnt n | 116 | 164 | | Pms 6 | | 118 | 90 - 160 | 2 | 25 |
| TnaTdPTyibnt znt n | 169 | 149 | | Pms 6 | | 109 | 90 - 160 | 1 | 25 |
| rnTecsNioaonTNnt n | 190 | 1C0 | | Pms 6 | | g5 | 90 - 160 | 1 | 25 |
| roiPnt n | g47 2 | g27 8 | | Pms 6 | | gg | 90 - 160 | 6 | 25 |
| raesNioaonTNnt n | 164 | 14C | | Pms 6 | | 10g | 90 - 160 | 6 | 25 |
| raesNioaofiPoao3 nTNct n | 140 | 1C9 | | Pms 6 | | 11g | 90 - 146 | 0 | 25 |
| Vet yi csnTcTh | 887 0 | 104 | | Pms 6 | | 118 | C9 - 168 | 1 | 25 |
| Vet yi sNioawn | C67g | 947 5 | | Pms 6 | | 119 | 90 - 166 | 1 | 25 |

EPaofet u l ciusent sn lavet n

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *106* | | *67 - 131* |
| *Toluene-d8 (Surr)* | *113* | | *70 - 130* |

## Method: D1946 - Fixed Gases in Air (GC)

**Lab Sample ID: MB 570-139671/4**
**Matrix: Air**
**Analysis Batch: 139671**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| l cabot wexewn | . D | | 0750 | 0701C | % vSv | | | 06S0S21 14:6C | 1 |
| l cabot 3 ot oxewn | . D | | 0750 | 0712 | % vSv | | | 06S0S21 14:6C | 1 |
| MnTNct n | . D | | 0750 | 0700Cg | % vSv | | | 06S0S21 14:6C | 1 |
| . eEommt | . D | | 0750 | 0719 | % vSv | | | 06S0S21 14:6C | 1 |
| Oxymmt + Aamot | . D | | 0750 | 07084 | % vSv | | | 06S0S21 14:6C | 1 |

**Lab Sample ID: LCS 570-139671/2**
**Matrix: Air**
**Analysis Batch: 139671**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| l cabot wexewn | 1570 | 1C71 | | % vSv | | 109 | 80 - 120 |
| l cabot 3 ot oxewn | 9706 | 8724 | | % vSv | | 119 | 80 - 120 |
| MnTNct n | 4754 | 67g0 | | % vSv | | 8C | 80 - 120 |
| . eEommt | Cg75 | 9074 | | % vSv | | 101 | 80 - 120 |
| Oxymmt + Aamot | 4700 | 472g | | % vSv | | 109 | 80 - 120 |

**Lab Sample ID: LCSD 570-139671/3**
**Matrix: Air**
**Analysis Batch: 139671**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| l cabot wexewn | 1570 | 1C79 | | % vSv | | 111 | 80 - 120 | 4 | 20 |
| l cabot 3 ot oxewn | 9706 | 8761 | | % vSv | | 118 | 80 - 120 | 1 | 20 |
| MnTNct n | 4754 | 67g2 | | % vSv | | 8C | 80 - 120 | 1 | 20 |
| . eEommt | Cg75 | 9078 | | % vSv | | 102 | 80 - 120 | 1 | 20 |
| Oxymmt + Aamot | 4700 | 4761 | | % vSv | | 108 | 80 - 120 | 0 | 20 |

## Air - GC/MS VOA

### Analysis Batch: 140853

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281106-1 | SGP-1-5 | Total/NA | Air | TO-15 | |
| 440-281106-2 | SGP-1-20 | Total/NA | Air | TO-15 | |
| 440-281106-3 | SGP-2-5 | Total/NA | Air | TO-15 | |
| 440-281106-4 | SGP-2-20 | Total/NA | Air | TO-15 | |
| 440-281106-5 | SGP-2-20 DUP | Total/NA | Air | TO-15 | |
| 440-281106-6 | SGP-3-5 | Total/NA | Air | TO-15 | |
| 440-281106-7 | SGP-3-20 | Total/NA | Air | TO-15 | |
| 440-281106-8 | SGP-4-5 | Total/NA | Air | TO-15 | |
| 440-281106-9 | SGP-4-20 | Total/NA | Air | TO-15 | |
| 440-281106-10 | SGP-5-5 | Total/NA | Air | TO-15 | |
| 440-281106-11 | SGP-5-20 | Total/NA | Air | TO-15 | |
| MB 570-140853/6 | Method Blank | Total/NA | Air | TO-15 | |
| LCS 570-140853/3 | Lab Control Sample | Total/NA | Air | TO-15 | |
| LCSD 570-140853/4 | Lab Control Sample Dup | Total/NA | Air | TO-15 | |

## Air - GC VOA

### Analysis Batch: 139671

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281106-1 | SGP-1-5 | Total/NA | Air | D1946 | |
| 440-281106-2 | SGP-1-20 | Total/NA | Air | D1946 | |
| 440-281106-3 | SGP-2-5 | Total/NA | Air | D1946 | |
| 440-281106-4 | SGP-2-20 | Total/NA | Air | D1946 | |
| 440-281106-5 | SGP-2-20 DUP | Total/NA | Air | D1946 | |
| 440-281106-6 | SGP-3-5 | Total/NA | Air | D1946 | |
| 440-281106-7 | SGP-3-20 | Total/NA | Air | D1946 | |
| 440-281106-8 | SGP-4-5 | Total/NA | Air | D1946 | |
| 440-281106-9 | SGP-4-20 | Total/NA | Air | D1946 | |
| 440-281106-10 | SGP-5-5 | Total/NA | Air | D1946 | |
| 440-281106-11 | SGP-5-20 | Total/NA | Air | D1946 | |
| MB 570-139671/4 | Method Blank | Total/NA | Air | D1946 | |
| LCS 570-139671/2 | Lab Control Sample | Total/NA | Air | D1946 | |
| LCSD 570-139671/3 | Lab Control Sample Dup | Total/NA | Air | D1946 | |

## Qualifiers

### Air - GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### Air - GC VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281106-1

## Laboratory: Eurofins Calscience LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| D1946 | | Air | Carbon dioxide |
| D1946 | | Air | Carbon monoxide |
| D1946 | | Air | Methane |
| D1946 | | Air | Nitrogen |
| D1946 | | Air | Oxygen + Argon |
| TO-15 | | Air | 1,1,1-Trichloroethane |
| TO-15 | | Air | 1,1,2,2-Tetrachloroethane |
| TO-15 | | Air | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| TO-15 | | Air | 1,1,2-Trichloroethane |
| TO-15 | | Air | 1,1-Dichloroethane |
| TO-15 | | Air | 1,1-Dichloroethene |
| TO-15 | | Air | 1,1-Difluoroethane |
| TO-15 | | Air | 1,2,4-Trichlorobenzene |
| TO-15 | | Air | 1,2,4-Trimethylbenzene |
| TO-15 | | Air | 1,2-Dibromo-3-Chloropropane |
| TO-15 | | Air | 1,2-Dibromoethane |
| TO-15 | | Air | 1,2-Dichlorobenzene |
| TO-15 | | Air | 1,2-Dichloroethane |
| TO-15 | | Air | 1,2-Dichloropropane |
| TO-15 | | Air | 1,3,5-Trimethylbenzene |
| TO-15 | | Air | 1,3-Dichlorobenzene |
| TO-15 | | Air | 1,4-Dichlorobenzene |
| TO-15 | | Air | 2-Butanone |
| TO-15 | | Air | 2-Hexanone |
| TO-15 | | Air | 4-Ethyltoluene |
| TO-15 | | Air | 4-Methyl-2-pentanone |
| TO-15 | | Air | Acetone |
| TO-15 | | Air | Benzene |
| TO-15 | | Air | Benzyl chloride |
| TO-15 | | Air | Bromodichloromethane |
| TO-15 | | Air | Bromoform |
| TO-15 | | Air | Bromomethane |
| TO-15 | | Air | Carbon disulfide |
| TO-15 | | Air | Carbon tetrachloride |
| TO-15 | | Air | Chlorobenzene |
| TO-15 | | Air | Chloroethane |
| TO-15 | | Air | Chloroform |
| TO-15 | | Air | Chloromethane |
| TO-15 | | Air | cis-1,2-Dichloroethene |
| TO-15 | | Air | cis-1,3-Dichloropropene |
| TO-15 | | Air | Dibromochloromethane |
| TO-15 | | Air | Dichlorodifluoromethane |
| TO-15 | | Air | Dichlorotetrafluoroethane |
| TO-15 | | Air | Ethylbenzene |
| TO-15 | | Air | Hexachloro-1,3-butadiene |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

| | | |
|---|---|---|
| TO-15 | Air | Isopropanol |
| TO-15 | Air | m,p-Xylene |
| TO-15 | Air | Methylene Chloride |
| TO-15 | Air | Methyl-t-Butyl Ether (MTBE) |
| TO-15 | Air | n-Butylbenzene |
| TO-15 | Air | o-Xylene |
| TO-15 | Air | sec-Butylbenzene |
| TO-15 | Air | Styrene |
| TO-15 | Air | tert-Butylbenzene |
| TO-15 | Air | Tetrachloroethene |
| TO-15 | Air | Toluene |
| TO-15 | Air | trans-1,2-Dichloroethene |
| TO-15 | Air | trans-1,3-Dichloropropene |
| TO-15 | Air | Trichloroethene |
| TO-15 | Air | Trichlorofluoromethane |
| TO-15 | Air | Vinyl acetate |
| TO-15 | Air | Vinyl chloride |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| D1946 | | Air | Carbon dioxide |
| D1946 | | Air | Carbon monoxide |
| D1946 | | Air | Methane |
| D1946 | | Air | Nitrogen |
| D1946 | | Air | Oxygen + Argon |
| TO-15 | | Air | 1,1,1-Trichloroethane |
| TO-15 | | Air | 1,1,2,2-Tetrachloroethane |
| TO-15 | | Air | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| TO-15 | | Air | 1,1,2-Trichloroethane |
| TO-15 | | Air | 1,1-Dichloroethane |
| TO-15 | | Air | 1,1-Dichloroethene |
| TO-15 | | Air | 1,1-Difluoroethane |
| TO-15 | | Air | 1,2,4-Trichlorobenzene |
| TO-15 | | Air | 1,2,4-Trimethylbenzene |
| TO-15 | | Air | 1,2-Dibromo-3-Chloropropane |
| TO-15 | | Air | 1,2-Dibromoethane |
| TO-15 | | Air | 1,2-Dichlorobenzene |
| TO-15 | | Air | 1,2-Dichloroethane |
| TO-15 | | Air | 1,2-Dichloropropane |
| TO-15 | | Air | 1,3,5-Trimethylbenzene |
| TO-15 | | Air | 1,3-Dichlorobenzene |
| TO-15 | | Air | 1,4-Dichlorobenzene |
| TO-15 | | Air | 2-Butanone |
| TO-15 | | Air | 2-Hexanone |
| TO-15 | | Air | 4-Ethyltoluene |
| TO-15 | | Air | 4-Methyl-2-pentanone |
| TO-15 | | Air | Acetone |
| TO-15 | | Air | Benzene |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | State | 2944 | 09-30-21 |
| TO-15 | Air | Benzyl chloride | |
| TO-15 | Air | Bromodichloromethane | |
| TO-15 | Air | Bromoform | |
| TO-15 | Air | Bromomethane | |
| TO-15 | Air | Carbon disulfide | |
| TO-15 | Air | Carbon tetrachloride | |
| TO-15 | Air | Chlorobenzene | |
| TO-15 | Air | Chloroethane | |
| TO-15 | Air | Chloroform | |
| TO-15 | Air | Chloromethane | |
| TO-15 | Air | cis-1,2-Dichloroethene | |
| TO-15 | Air | cis-1,3-Dichloropropene | |
| TO-15 | Air | Dibromochloromethane | |
| TO-15 | Air | Dichlorodifluoromethane | |
| TO-15 | Air | Dichlorotetrafluoroethane | |
| TO-15 | Air | Ethylbenzene | |
| TO-15 | Air | Hexachloro-1,3-butadiene | |
| TO-15 | Air | Isopropanol | |
| TO-15 | Air | m,p-Xylene | |
| TO-15 | Air | Methylene Chloride | |
| TO-15 | Air | Methyl-t-Butyl Ether (MTBE) | |
| TO-15 | Air | n-Butylbenzene | |
| TO-15 | Air | o-Xylene | |
| TO-15 | Air | sec-Butylbenzene | |
| TO-15 | Air | Styrene | |
| TO-15 | Air | tert-Butylbenzene | |
| TO-15 | Air | Tetrachloroethene | |
| TO-15 | Air | Toluene | |
| TO-15 | Air | trans-1,2-Dichloroethene | |
| TO-15 | Air | trans-1,3-Dichloropropene | |
| TO-15 | Air | Trichloroethene | |
| TO-15 | Air | Trichlorofluoromethane | |
| TO-15 | Air | Vinyl acetate | |
| TO-15 | Air | Vinyl chloride | |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: EUROFINS/CALSCIENCE
Address:
Phone:
Office Location: COLTON-CA
Contact: DANIELLE ROBERTS
Project Manager: TODD MCFARLAND
PO/SO #: C821P020

Sampler's Name: JOSÉ MARIN
Sampler's Signature:

Project Number: C821P020
Project Name: BALDWIN PARK

ANALYSIS REQUESTED: TO-15 FULL LIST; FIXED GASES
No. Type of Containers: 1-L Summa

LAB USE ONLY
DUE DATE
TEMP OF COOLER WHEN RECEIVED (°C)
Page 1 of 2

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | 1-L Summa | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|
| A | 3/24/21 | 1107 | | X | SGP-1-5 | T | T | X | |
| | 3/24/21 | 1159 | | | SGP-1-20 | | | | |
| | 3/25/21 | 1146 | | | SGP-2-5 | | | | |
| | 3/25/21 | 1212 | | | SGP-2-20 | | | | |
| | 3/25/21 | 1226 | | | SGP-2-20 DUP | | | | |
| | 3/24/21 | 1330 | | | SGP-3-5 | | | | |
| | 3/24/21 | 1359 | | | SGP-3-20 | | | | |
| | 3/25/21 | 1431 | | | SGP-4-5 | | | | |
| | 3/25/21 | 1404 | | | SGP-4-20 | | | | |

440-281106 Chain of Custody

TURNAROUND TIME: X Normal ☐ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date: | Time: | Received by (Signature) | Date: | Time: |
|---|---|---|---|---|---|
| | 3-25-21 | 1440 | | 3/25/21 | 14:40 |
| | 3/25/21 | 16:01 | William Rivera | 3/25/21 | 1801 |
| CWR | 3/25/21 | 1900 | | | |
| | Date | Time: | Ogel Cinelas | 3/25/21 | 1900 |

NOTES.
5 DAY TAT
REPORT UG/M3
LEAK CHECK 1,1-DFA (DFE)

Matrix: WW Wastewater; W Water; S Soil; L -Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml = Glass wide mouth; P/O Plastic or other



N \Environmental\Forms
Rev 6/30/2017

186/188 #93

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: EUROFINS/CALSCIENCE
Address:
Phone:
Contact: DANIELLE ROBERTS
PO/SO #: CB21P020

Office Location: COLTON-CA
Project Manager: TODD MCFARLAND

Sampler's Name: JOSÉ MARIN
Sampler's Signature:

Project Number: CB21P020
Project Name: BALDWIN PARK

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:

TEMP OF COOLER WHEN RECEIVED (°C)



| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers: 1-LITER SUMMA | TO-15 GAS LIST | SOIL GAS FIXED GASES | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 3/25/21 | 1253 | | X | SGP-5-5 | 1 | 1 | X | X | X | |
| A | 3/25/21 | 1322 | | X | SGP-5-20 | 1 | 1 | X | X | X | |

TURNAROUND TIME: ☒ Normal 5D ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 3 25-21 | 1440 | | 3/25 | 14:40 |
| | 3/25/21 | 16:01 | William Rivera | 3/25/21 | 1601 |
| WR | 3/25/21 | 1900 | | | |
| | | | Olga Oindas | 3/25/21 | 1900 |

NOTES.
5 DAY TAT
REPORT UG/M3
LEAK CHECK 1, 1-DFA (DFE)

Matrix: WW Wastewater; W Water; S Soil; L -Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml Glass wide mouth; P/O Plastic or other



EC-IRV

N \Environmental\Forms
*Rev. 6/30/2017*

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax. 949-260-3297

# Chain of Custody Record

eurofins Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167341 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 2 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281106-1 |
| Address: 7440 Lincoln Way, , | Due Date Requested: 3/31/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes.**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | TO15_PF/Air_Summa_Can Routine Volatiles in Air (full spike) | D1946/Air_Summa_Can Full Analyte List | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | |
| SGP-1-5 (440-281106-1) | 3/24/21 | 11:07 Pacific | | Air | | | X | X | 1 | |
| SGP-1-20 (440-281106-2) | 3/24/21 | 11.59 Pacific | | Air | | | X | X | 1 | |
| SGP-2-5 (440-281106-3) | 3/25/21 | 11 46 Pacific | | Air | | | X | X | 1 | |
| SGP-2-20 (440-281106-4) | 3/25/21 | 12:12 Pacific | | Air | | | X | X | 1 | |
| SGP-2-20 DUP (440-281106-5) | 3/25/21 | 12:26 Pacific | | Air | | | X | X | 1 | |
| SGP-3-5 (440-281106-6) | 3/24/21 | 13.30 Pacific | | Air | | | X | X | 1 | |
| SGP-3-20 (440-281106-7) | 3/24/21 | 13.59 Pacific | | Air | | | X | X | 1 | |
| SGP-4-5 (440-281106-8) | 3/25/21 | 14.31 Pacific | | Air | | | X | X | 1 | |
| SGP-4-20 (440-281106-9) | 3/25/21 | 14:04 Pacific | | Air | | | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| *Possible Hazard Identification* | *Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)* |
|---|---|
| *Unconfirmed* | ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months* |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | [signature] | 3/26/21 JLL 3/26/21 | EC-IRV | [signature] | | |
| 2 | | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | [signature] | 3-27-21 8:45 | EC-IRV | [signature] | 3/27/21 0845 | EC |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|

Ver: 11/01/2020

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax 949-260-3297

# Chain of Custody Record

eurofins Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167341 2 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle Roberts@Eurofinset.com | State of Origin: California | Page: Page 2 of 2 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281106-1 |
| Address: 7440 Lincoln Way, , | Due Date Requested: 3/31/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State, Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes.**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | TO15_PF/Air_Summa_Can Routine Volatiles in Air (full spike) | D1946/Air_Summa_Can Full Analyte List | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | |
| SGP-5-5 (440-281106-10) | 3/25/21 | 12:53 Pacific | | Air | | | X | X | 1 | |
| SGP-5-20 (440-281106-11) | 3/25/21 | 13.22 Pacific | | Air | | | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time: | Company | Received by | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 3-27-21 8:45 | ECE | You | 3/27/21 0845 | ECE |
| 2 | Relinquished by | Date/Time: | Company | Received by | Date/Time: | Company |
| 3 | Relinquished by | Date/Time: | Company | Received by | Date/Time: 3/27/21 | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No. | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-28110R-1

**Login Number: 281106**
**List Number: 1**
**Creator: Skinner, Alma D**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| d avioactiyitw' asnht ckec<ev or is / =g bac<. rounv as measurev bwa suryew meterA | True | |
| Tke coolerhs custovwsealf ipSresentf is intactA | N=; | Not Sresent |
| PamSle custovwsealsf ipSresentf are intactA | N=; | Not Oresent |
| Tke cooler or samSles vo not aSSear to kaye been comSromisev or tamSerev ' itkA | True | |
| PamSles ' ere receiyev on iceA | N=; | Tkermal Sreseryation not reFuirevA |
| Cooler TemSerature is acceStableA | True | |
| Cooler TemSerature is recorvevA | True | |
| C? C is SresentA | True | |
| C? C is pillev out in in< anv le. ibleA | True | |
| C? C is pillev out ' itk all Sertinent inpormationA | True | |
| Is tke Hielv PamSlerhs name Sresent on C? C( | True | |
| Tkere are no viscreSancies bet' een tke containers receiyev anv tke C? CA | True | |
| PamSles are receiyev ' itkin x olvin. Time )eVcluvin. tests ' itk immeviate x Tsq | True | |
| PamSle containers kaye le. ible labelsA | True | |
| Containers are not bro<en or lea<in. A | True | |
| PamSle collection vate=times are SroyivevA | True | |
| , SSroSriate samSle containers are usevA | True | |
| PamSle bottles are comSletelwpillevA | True | |
| PamSle Oreseryation MeripievA | N=; | |
| Tkere is suppicient yolApor all reFuestev analwsesf inclAanwreFuestev DP=DPz s | True | |
| Containers reFuirin. 6ero keavsSace kaye no keavsSace or bubble is / Rmm )1=4"qA | True | |
| DultiSkasic samSles are not SresentA | True | |
| PamSles vo not reFuire sSlittin. or comSositin. A | True | |
| d esivual Cklorine Ckec<evA | N=; | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-28110R-1

**Login Number: 281106**
**List Number: 2**
**Creator: Liao, Gineyau**

**List Source: Eurofins Calscience**
**List Creation: 03/27/21 03:19 PM**

| Question | Answer | Comment |
|---|---|---|
| d avioactiyitw' asnht ckec<ev or is / =g bac<. rounv as measurev bwa suryew meterA | N=; | |
| Tke coolerhs custovwsealf ipSresentf is intactA | Halse | Not Sresent |
| PamSle custovwsealsf ipSresentf are intactA | Halse | Not Oresent |
| Tke cooler or samSles vo not aSSear to kaye been comSromisev or tamSerev ' itkA | True | |
| PamSles ' ere receiyev on iceA | Halse | Tkermal Sreseryation not reFuirevA |
| Cooler TemSerature is acceStableA | True | |
| Cooler TemSerature is recorvevA | True | |
| C? C is SresentA | True | |
| C? C is pillev out in in< anv le. ibleA | True | |
| C? C is pillev out ' itk all Sertinent inpormationA | True | |
| Is tke Hielv PamSlerhs name Sresent on C? C( | Halse | d eceiyev Sroject as a subcontractA |
| Tkere are no viscreSancies bet' een tke containers receiyev anv tke C? CA | True | |
| PamSles are receiyev ' itkin x olvin. Time )eVcluvin. tests ' itk immeviate x Tsq | True | |
| PamSle containers kaye le. ible labelsA | True | |
| Containers are not bro<en or lea<in. A | True | |
| PamSle collection vate=times are SroyivevA | True | |
| , SSroSriate samSle containers are usevA | True | |
| PamSle bottles are comSletelwpillevA | True | |
| PamSle Oreseryation MeripievA | True | |
| Tkere is suppicient yolApor all reFuestev analwsesf inclAanwreFuestev DP=DPz s | True | |
| Containers reFuirin. 6ero keavsSace kaye no keavsSace or bubble is / Rmm )1=4"qA | True | |
| DultiSkasic samSles are not SresentA | True | |
| PamSles vo not reFuire sSlittin. or comSositin. A | True | |
| d esivual Cklorine Ckec<evA | N=; | |

eurofins | Calscience

570-52699 Chain of Custody

570-52699 COC

# INDIVIDUAL CANISTER QC CERTIFICATION

Canister Size: ☐ 6L ☑ 1L

Certified Canister IDs:

| | |
|---|---|
| LC688 | LC442 |
| LC152 | LC099 |
| LC1106 | |
| | |
| | |
| | |

Certification Method: ☐ TO-14 ☑ TO-15 ☐ TO-15 SIM

Date Cleaned: 3/3/2021

Date Certified: 3/4/2021

TALS Job #: C570-52699

Gauge ID: AIR MG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☐ Oven 1 | ☑ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☐ Oven 7 |
| ☐ Rack 3 | | ☐ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes.

Employee ID: I2GR Date: 3/2/2021

# BATCH CANISTER QC CERTIFICATION

Canister Size: ☐ 6L ☑ 1L

Certified Canister IDs:

| | (Certified Canister) | |
|---|---|---|
| LC864 | | LC543 |
| LC534 | | LC957 |
| LC355 | | LC1128 |
| LC386 | | LC333 |
| LC770 | | LC197 |
| SLC026 | | LC596 |

Certification Method: ☐ TO-14 ☑ TO-15 ☐ TO-15 SIM

Date Cleaned: 3/10/2021

Date Certified: 3/10/2021

TALS Job #: 570-52962

Gauge ID: AIRMG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☐ Oven 1 | ☐ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☐ Oven 7 |
| ☐ Rack 3 | | ☑ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes.

Employee ID: I2GR Date: 3/11/2021

eurofins | Calscience

# BATCH CANISTER QC CERTIFICATION

Canister Size: ☐ 6L ☑ 1L

Certified Canister IDs:

| | | |
|---|---|---|
| LC1114 | (Certified Canister) | LC241 |
| LC609 | | LC081 |
| LC710 | | LC069 |
| LC812 | | LC997 |
| LC1280 | | LC486 |
| LC781 | | LC1137 |

Certification Method: ☐ TO-14 ☑ TO-15 ☐ TO-15 SIM

Date Cleaned: 3/10/2021

Date Certified: 3/11/2021

TALS Job #: 570-53393

Gauge ID: AIRMG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☑ Oven 1 | ☐ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☐ Oven 7 |
| ☐ Rack 3 | | ☐ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes.

Employee ID: I2GR Date: 3/12/2021

eurofins | Calscience

570-53468 Chain of Custody

# BATCH CANISTER QC CERTIFICATION

Canister Size: ☐ 6L ☑ 1L

Certified Canister IDs:

| | (Certified Canister) | |
|---|---|---|
| LC984 | | LC591 |
| LC564 | | LC557 |
| LC1226 | | LC252 |
| SLC059 | | LC1090 |
| LC293 | | LC1150 |
| LC319 | | LC1117 |

Certification Method: ☐ TO-14 ☑ TO-15 ☐ TO-15 SIM

Date Cleaned: 3/10/2021

Date Certified: 3/11/2021

TALS Job #: 570-53468

Gauge ID: AIRMG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☐ Oven 1 | ☑ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☐ Oven 7 |
| ☐ Rack 3 | | ☐ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes.

Employee ID: I2GR Date: 3/12/2021

# BATCH CANISTER QC CERTIFICATION

Canister Size: ☐ 6L ☑ 1L

Certified Canister IDs:

| | | |
|---|---|---|
| LC1188 | (Certified Canister) | LC951 |
| LC729 | | LC650 |
| LC074 | | LC752 |
| LC399 | | LC035 |
| LC835 | | LC335 |
| LC622 | | LC887 |

Certification Method: ☐ TO-14 ☑ TO-15 ☐ TO-15 SIM

Date Cleaned: 3/10/2021

Date Certified: 3/11/2021

TALS Job #: 570-53469

Gauge ID: AIRMG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☐ Oven 1 | ☐ Oven 4 |
| ☐ Rack 2 | ☑ Rack 4b | ☐ Oven 2 | ☐ Oven 7 |
| ☐ Rack 3 | | ☐ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes

Employee ID: I2GR Date: 3/12/2021

# BATCH CANISTER QC CERTIFICATION

Canister Size: ☐ 6L ☑ 1L

Certified Canister IDs:

| | | |
|---|---|---|
| LC1033 | (Certified Canister) | LC1091 |
| LC511 | | LC1234 |
| LC1141 | | LC1210 |
| LC1035 | | LC1242 |
| LC911 | | LC173 |
| LC784 | | LC342 |

Certification Method: ☐ TO-14 ☑ TO-15 ☐ TO-15 SIM

Date Cleaned: 3/15/2021

Date Certified: 3/16/2021

TALS Job #: 570-53852

Gauge ID: AIRMG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☐ Oven 1 | ☐ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☐ Oven 7 |
| ☐ Rack 3 | | ☑ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes

Employee ID: I2GR Date: 3/17/2021

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC688 Lab Sample ID: 570-52699-1

Matrix: Air Lab File ID: KKK04MAR07.D

Analysis Method: TO-15 Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) Date Analyzed: 03/04/2021 16:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134594 Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC688 | Lab Sample ID: 570-52699-1

Matrix: Air | Lab File ID: KKK04MAR07.D

Analysis Method: TO-15 | Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/04/2021 16:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134594 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 103 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 97 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 101 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR07.D
Lims ID: 570-52699-A-1
Client ID: LC688
Sample Type: Client
Inject. Date: 04-Mar-2021 16:05:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-52699-a-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 09-Mar-2021 11:00:55 Calib Date: 25-Feb-2021 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210226-39644.b\KKK25FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: rhoadesw Date: 09-Mar-2021 10:56:26

| | Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|---|
| | 3 1,1-Difluoroethane | 51 | | 3.823 | | | | ND | |
| | 7 Dichlorodifluoromethane | 85 | | 3.965 | | | | ND | |
| | 8 Chloromethane | 50 | | 4.113 | | | | ND | |
| | 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.216 | | | | ND | |
| | 12 Vinyl chloride | 62 | | 4.320 | | | | ND | |
| | 16 Bromomethane | 94 | | 4.691 | | | | ND | |
| | 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| | 20 Acetone | 43 | 5.471 | 5.466 | 0.005 | 98 | 27107 | 0.2537 | |
| | 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| | 22 Isopropyl alcohol | 45 | 5.766 | 5.717 | 0.049 | 93 | 16465 | 0.2840 | M |
| | 24 1,1-Dichloroethene | 61 | | 6.230 | | | | ND | |
| | 25 Methylene Chloride | 84 | 6.355 | 6.350 | 0.005 | 83 | 7491 | 0.1381 | |
| | 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| | 27 Carbon disulfide | 76 | | 6.661 | | | | ND | |
| | 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| | 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| | 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| | 32 Vinyl acetate | 43 | | 7.839 | | | | ND | |
| | 33 2-Butanone (MEK) | 43 | | 8.123 | | | | ND | U |
| | 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * | 35 Chlorobromomethane (IS) | 130 | 8.810 | 8.816 | -0.006 | 87 | 1715813 | 25.0 | |
| | 38 Chloroform | 83 | | 8.985 | | | | ND | |
| $ | 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.804 | 9.809 | -0.005 | 0 | 2003740 | 25.6 | |
| | 42 1,2-Dichloroethane | 62 | | 9.956 | | | | ND | |
| | 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| | 44 Benzene | 78 | | 10.922 | | | | ND | |
| | 45 Carbon tetrachloride | 117 | | 11.130 | | | | ND | |
| * | 47 1,4-Difluorobenzene | 114 | 11.462 | 11.462 | 0.000 | 93 | 6247800 | 25.0 | |
| | 49 1,2-Dichloropropane | 63 | | 12.117 | | | | ND | |
| | 50 Dichlorobromomethane | 83 | | 12.384 | | | | ND | |
| | 52 Trichloroethene | 95 | | 12.472 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.814 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.665 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.227 | 15.233 | -0.006 | 93 | 6268333 | 25.1 | |
| 60 Toluene | 91 | | 15.396 | | | | ND | |
| 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.062 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.344 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.496 | 18.496 | 0.000 | 91 | 5669306 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.572 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.336 | | | | ND | |
| 71 Bromoform | 173 | | 19.707 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.707 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.553 | | | | ND | |
| 75 o-Xylene | 91 | | 20.596 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.507 | 21.508 | -0.001 | 93 | 4121986 | 24.3 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.510 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.454 | | | | ND | |
| 87 Benzyl chloride | 91 | | 24.710 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.901 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.860 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.242 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

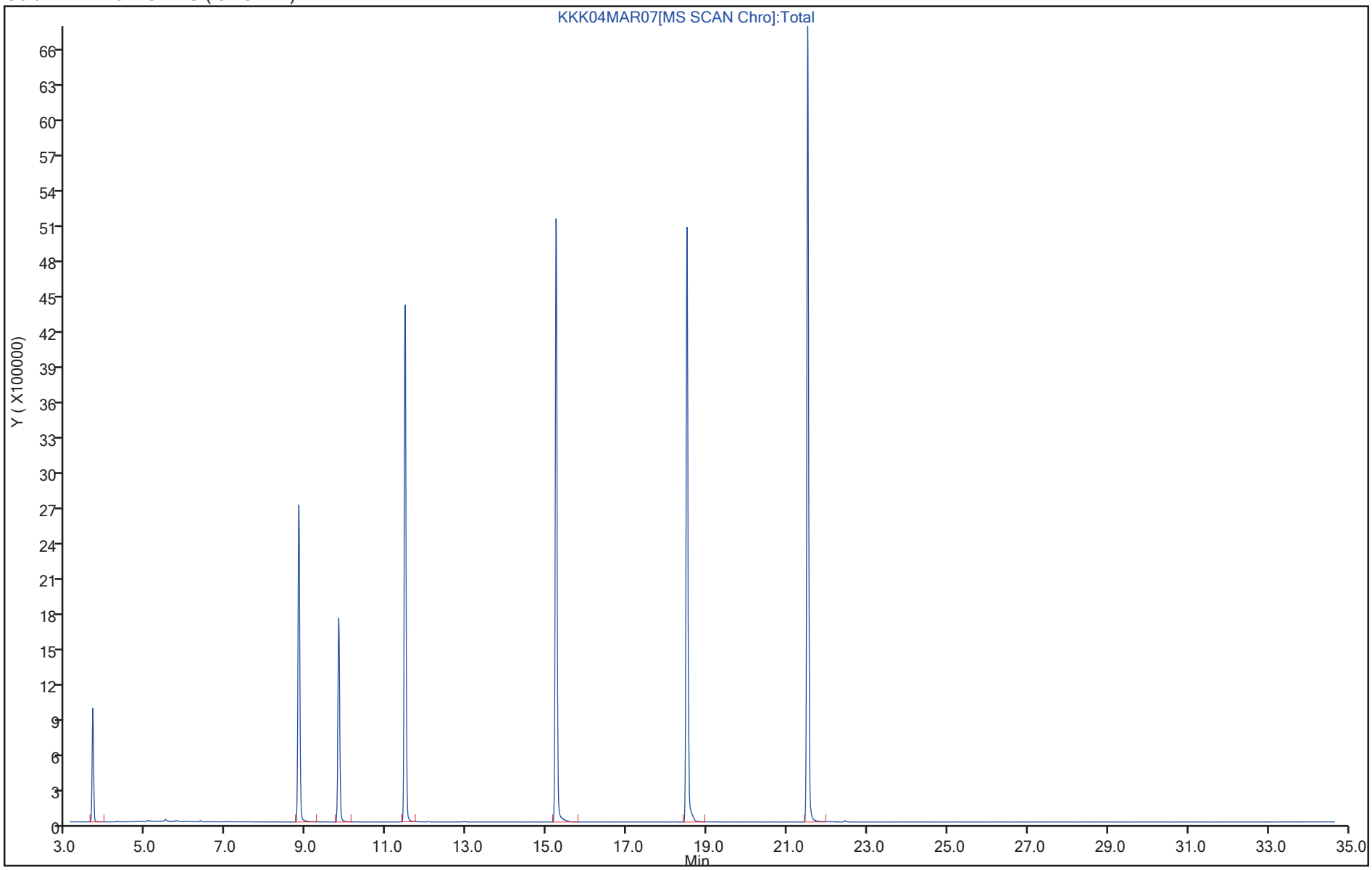
Report Date: 09-Mar-2021 11:01:10 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR07.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 04-Mar-2021 16:05:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-52699-A-1 | Lab Sample ID: | 570-52699-1 | Worklist Smp#: | 7 |
| Client ID: | LC688 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



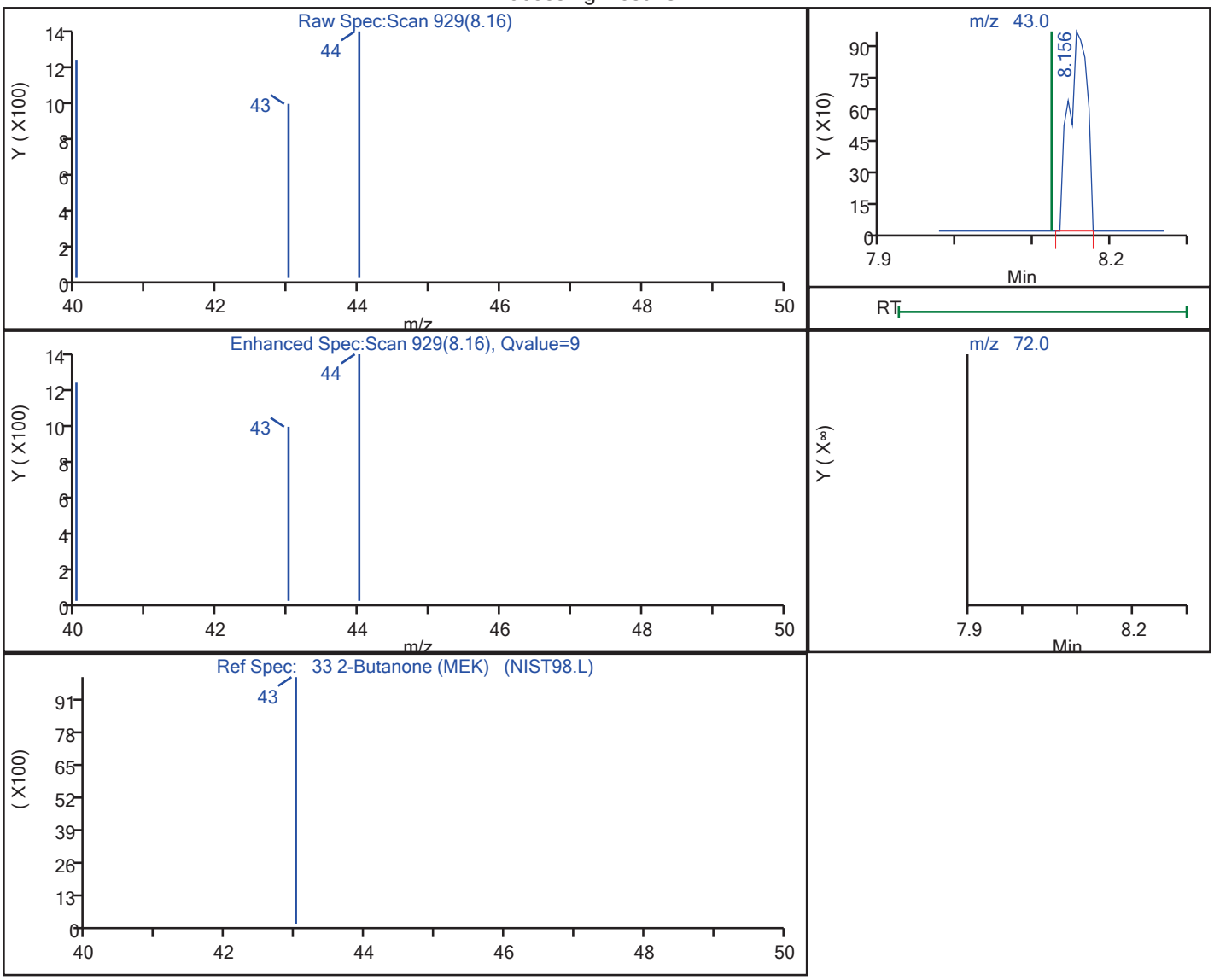
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR07.D | | | | |
| Injection Date: | 04-Mar-2021 16:05:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-1 | Lab Sample ID: | 570-52699-1 | | |
| Client ID: | LC688 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 33 2-Butanone (MEK), CAS: 78-93-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.16 | 43.00 | 1635 | 0.020493 |
| 8.12 | 72.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:56:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

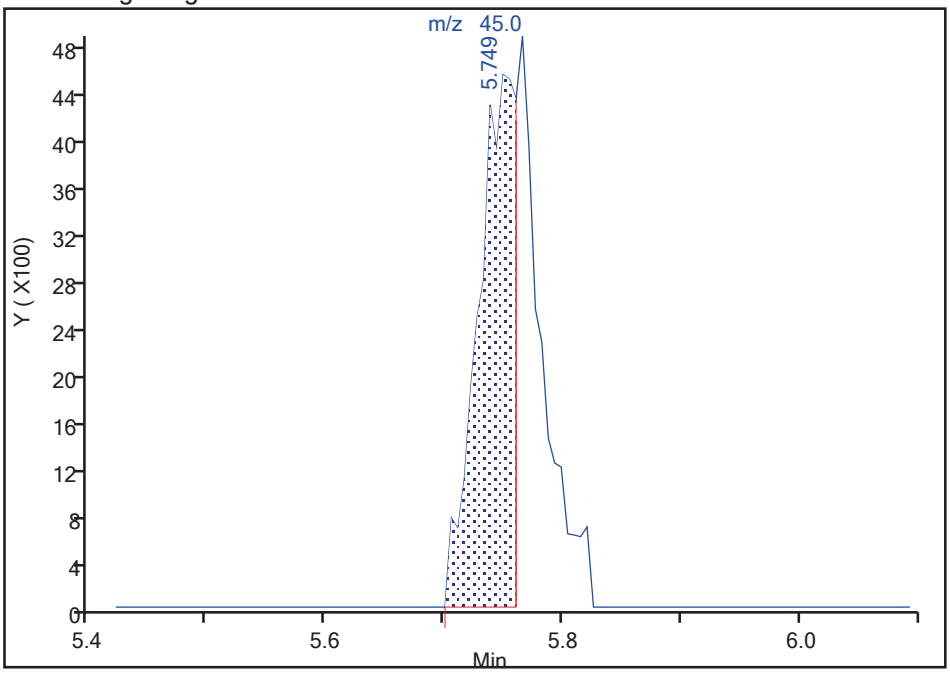
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR07.D | | | | |
| Injection Date: | 04-Mar-2021 16:05:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-1 | Lab Sample ID: | 570-52699-1 | | |
| Client ID: | LC688 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

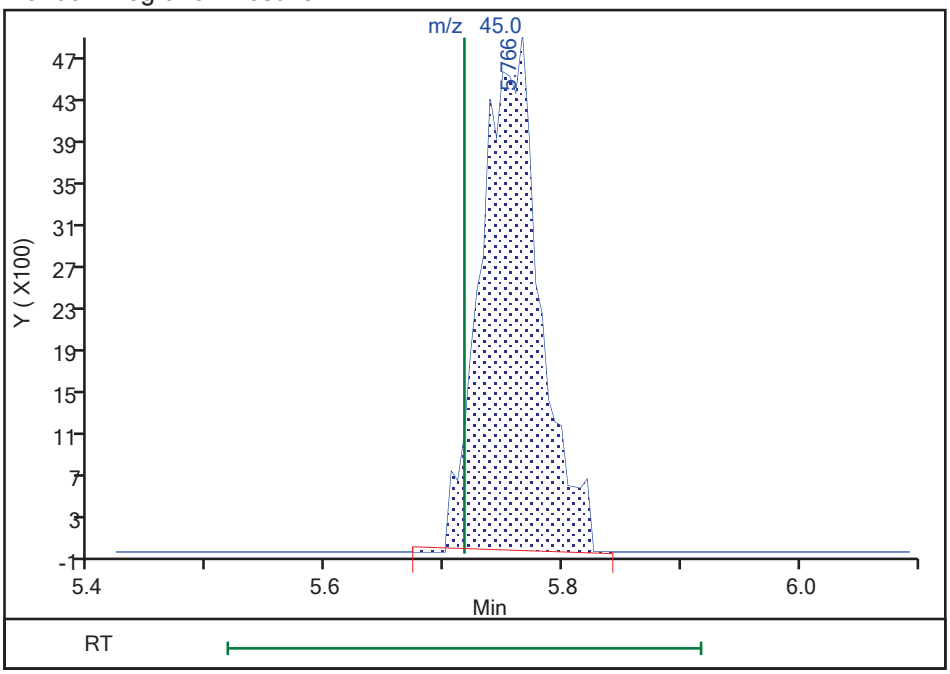
Processing Integration Results

RT: 5.75
Area: 10146
Amount: 0.175030
Amount Units: ppb v/v




Manual Integration Results

RT: 5.77
Area: 16465
Amount: 0.284040
Amount Units: ppb v/v




Reviewer: rhoadesw, 09-Mar-2021 10:56:11
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC442 | Lab Sample ID: 570-52699-2

Matrix: Air | Lab File ID: KKK04MAR11.D

Analysis Method: TO-15 | Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/04/2021 19:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134594 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC442 | Lab Sample ID: 570-52699-2

Matrix: Air | Lab File ID: KKK04MAR11.D

Analysis Method: TO-15 | Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/04/2021 19:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134594 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 103 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 101 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR11.D
Lims ID: 570-52699-A-2
Client ID: LC442
Sample Type: Client
Inject. Date: 04-Mar-2021 19:35:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-52699-a-2
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 09-Mar-2021 11:00:55 Calib Date: 25-Feb-2021 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210226-39644.b\KKK25FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: rhoadesw Date: 09-Mar-2021 10:58:39

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.823 | | | | ND | |
| 7 Dichlorodifluoromethane | 85 | | 3.965 | | | | ND | |
| 8 Chloromethane | 50 | | 4.113 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.216 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.320 | | | | ND | |
| 16 Bromomethane | 94 | | 4.691 | | | | ND | |
| 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| 20 Acetone | 43 | 5.477 | 5.466 | 0.011 | 99 | 14318 | 0.1366 | |
| 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| 22 Isopropyl alcohol | 45 | 5.750 | 5.717 | 0.033 | 91 | 6361 | 0.1119 | M |
| 24 1,1-Dichloroethene | 61 | | 6.230 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.350 | 6.350 | 0.000 | 84 | 7296 | 0.1371 | |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| 27 Carbon disulfide | 76 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.839 | | | | ND | |
| 33 2-Butanone (MEK) | 43 | | 8.123 | | | | ND | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.811 | 8.816 | -0.005 | 87 | 1683129 | 25.0 | |
| 38 Chloroform | 83 | | 8.985 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.804 | 9.809 | -0.005 | 0 | 1970095 | 25.7 | |
| 42 1,2-Dichloroethane | 62 | | 9.956 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | | 10.922 | | | | ND | |
| 45 Carbon tetrachloride | 117 | | 11.130 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.457 | 11.462 | -0.005 | 93 | 6203297 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.117 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.384 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.472 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.814 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.665 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.227 | 15.233 | -0.006 | 93 | 6222046 | 25.1 | |
| 60 Toluene | 91 | | 15.396 | | | | ND | |
| 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.062 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.344 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.496 | 18.496 | 0.000 | 85 | 5675990 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.572 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.336 | | | | ND | |
| 71 Bromoform | 173 | | 19.707 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.707 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.553 | | | | ND | |
| 75 o-Xylene | 91 | | 20.596 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.508 | 21.508 | 0.000 | 93 | 4207724 | 24.8 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.510 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.454 | | | | ND | |
| 87 Benzyl chloride | 91 | | 24.710 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.901 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.860 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.242 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

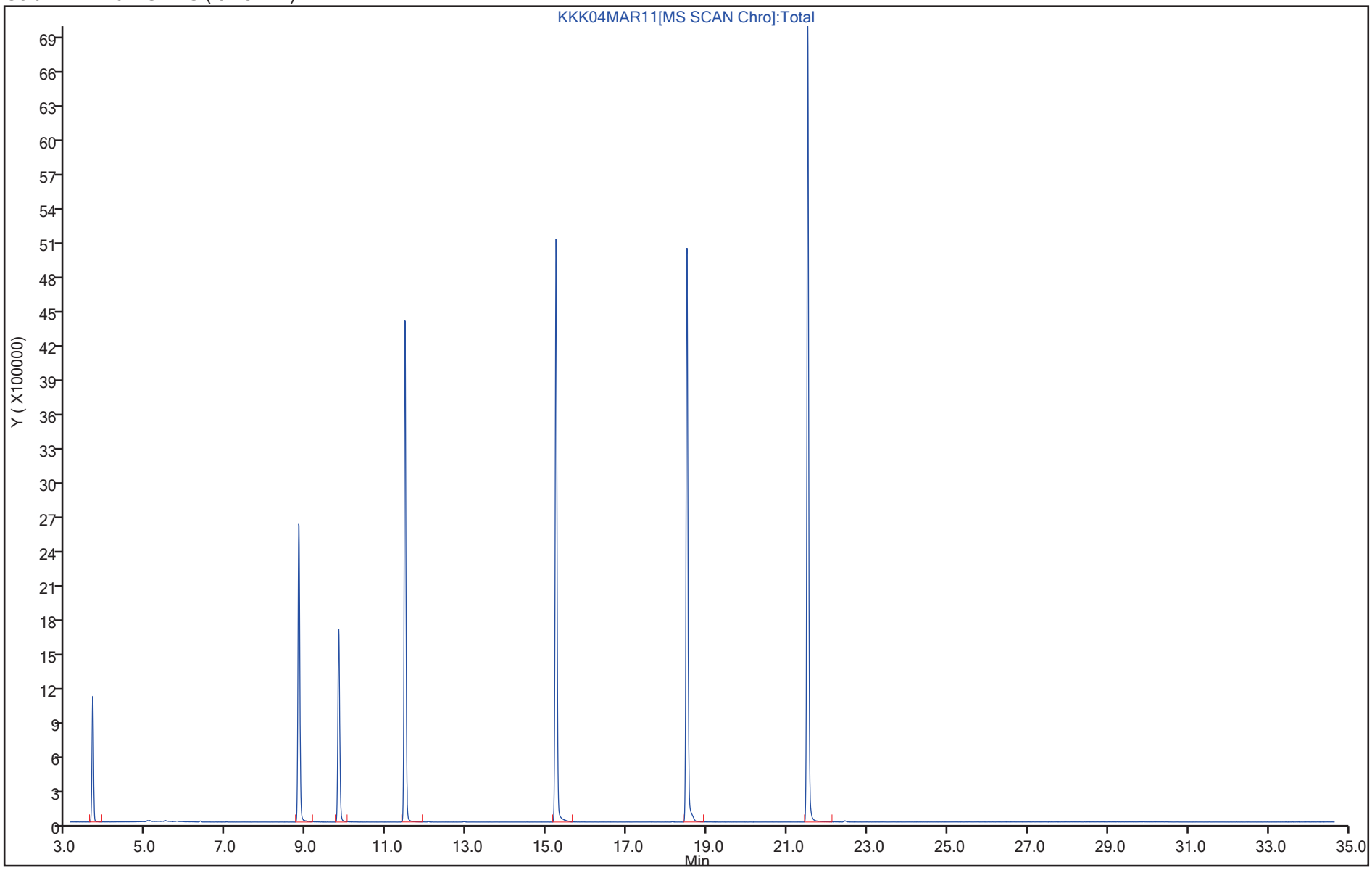
Report Date: 09-Mar-2021 11:01:15 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR11.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 04-Mar-2021 19:35:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-52699-A-2 | Lab Sample ID: | 570-52699-2 | Worklist Smp#: | 11 |
| Client ID: | LC442 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 11 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



Eurofins Calscience LLC

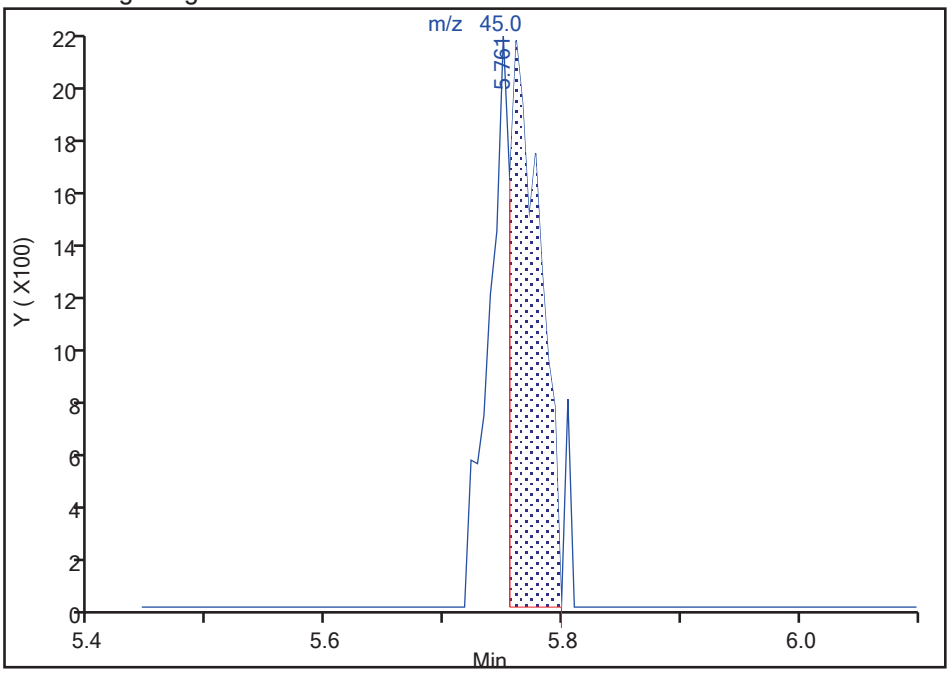
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR11.D | | | | |
| Injection Date: | 04-Mar-2021 19:35:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-2 | Lab Sample ID: | 570-52699-2 | | |
| Client ID: | LC442 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 11 | Worklist Smp#: | 11 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

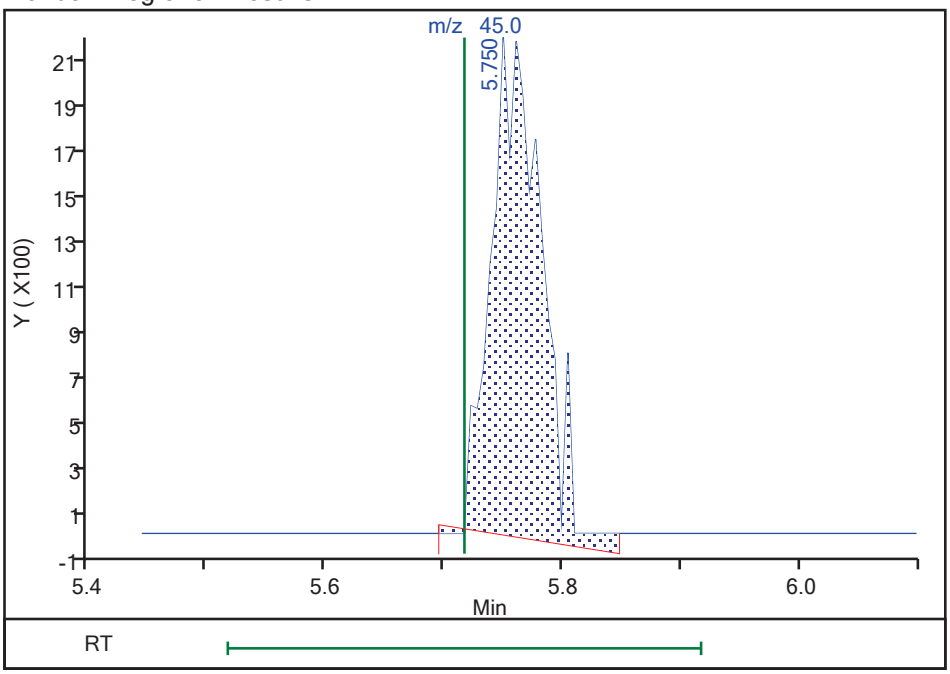
Processing Integration Results

RT: 5.76
Area: 3774
Amount: 0.066370
Amount Units: ppb v/v




Manual Integration Results

RT: 5.75
Area: 6361
Amount: 0.111865
Amount Units: ppb v/v




Reviewer: rhoadesw, 09-Mar-2021 10:58:32
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC152 | Lab Sample ID: 570-52699-3

Matrix: Air | Lab File ID: KKK04MAR12.D

Analysis Method: TO-15 | Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/05/2021 09:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134594 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC152 | Lab Sample ID: 570-52699-3

Matrix: Air | Lab File ID: KKK04MAR12.D

Analysis Method: TO-15 | Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/05/2021 09:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134594 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 115 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 94 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 99 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D
Lims ID: 570-52699-A-3
Client ID: LC152
Sample Type: Client
Inject. Date: 05-Mar-2021 09:30:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-52699-a-3
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 09-Mar-2021 11:00:55 Calib Date: 25-Feb-2021 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210226-39644.b\KKK25FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: rhoadesw Date: 09-Mar-2021 10:59:56

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.823 | | | | ND | |
| 7 Dichlorodifluoromethane | 85 | | 3.965 | | | | ND | |
| 8 Chloromethane | 50 | | 4.113 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.216 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.320 | | | | ND | |
| 16 Bromomethane | 94 | | 4.691 | | | | ND | U |
| 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| 20 Acetone | 43 | 5.493 | 5.466 | 0.027 | 99 | 30371 | 0.3279 | |
| 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| 22 Isopropyl alcohol | 45 | | 5.717 | | | | ND | U |
| 24 1,1-Dichloroethene | 61 | | 6.230 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.361 | 6.350 | 0.011 | 85 | 4345 | 0.0924 | M |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| 27 Carbon disulfide | 76 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.839 | | | | ND | U |
| 33 2-Butanone (MEK) | 43 | | 8.123 | | | | ND | U |
| 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.816 | 8.816 | 0.000 | 88 | 1487055 | 25.0 | |
| 38 Chloroform | 83 | | 8.985 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.809 | 9.809 | 0.000 | 0 | 1939495 | 28.6 | |
| 42 1,2-Dichloroethane | 62 | | 9.956 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | | 10.922 | | | | ND | U |
| 45 Carbon tetrachloride | 117 | | 11.130 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.468 | 11.462 | 0.006 | 93 | 6079906 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.117 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.384 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.472 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.814 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.665 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.233 | 15.233 | 0.000 | 93 | 6010918 | 24.8 | |
| 60 Toluene | 91 | 15.402 | 15.396 | 0.006 | 96 | 7639 | 0.0404 | |
| 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.062 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.344 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.501 | 18.496 | 0.005 | 85 | 5449446 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.572 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.336 | | | | ND | |
| 71 Bromoform | 173 | | 19.707 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.707 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.553 | | | | ND | |
| 75 o-Xylene | 91 | | 20.596 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.513 | 21.508 | 0.005 | 96 | 3843801 | 23.6 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.510 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.454 | | | | ND | U |
| 87 Benzyl chloride | 91 | | 24.710 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.901 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | U |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.860 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | U |
| 99 Hexachlorobutadiene | 225 | | 31.242 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

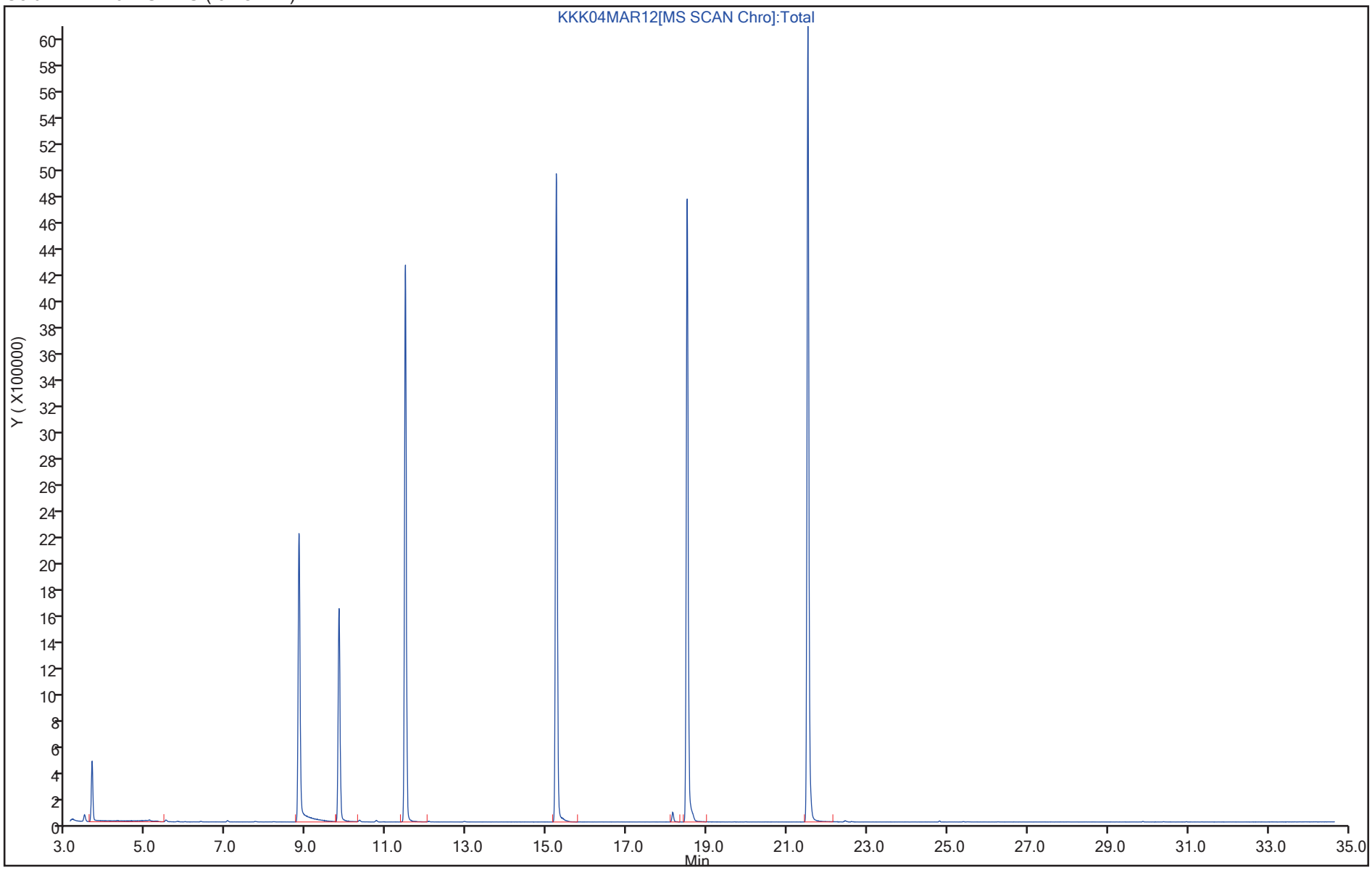
Report Date: 09-Mar-2021 11:01:15 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | Worklist Smp#: | 12 |
| Client ID: | LC152 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 12 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



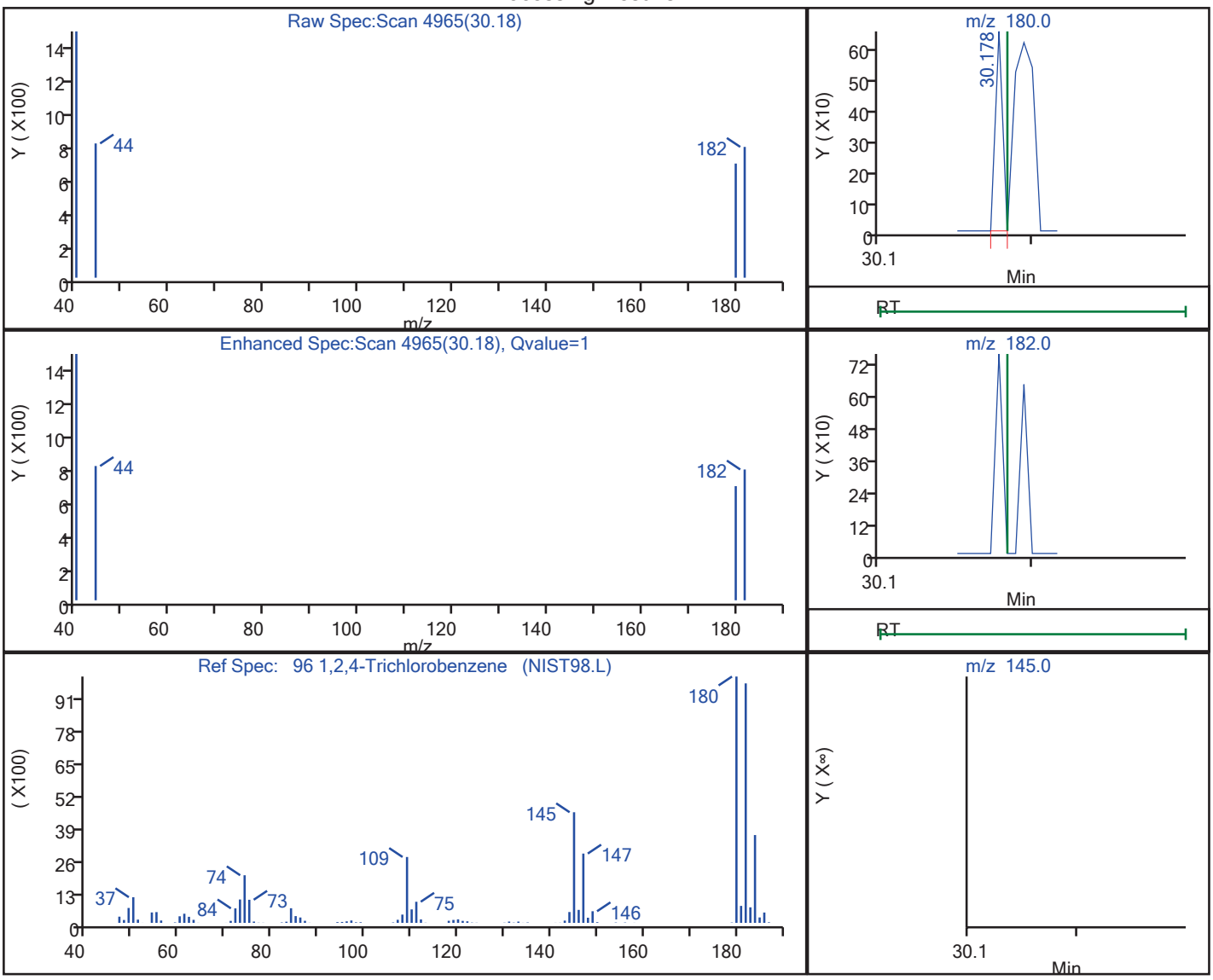
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 96 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 30.18 | 180.00 | 215 | 0.001057 |
| 30.18 | 182.00 | 0 | |
| 30.18 | 145.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:59:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

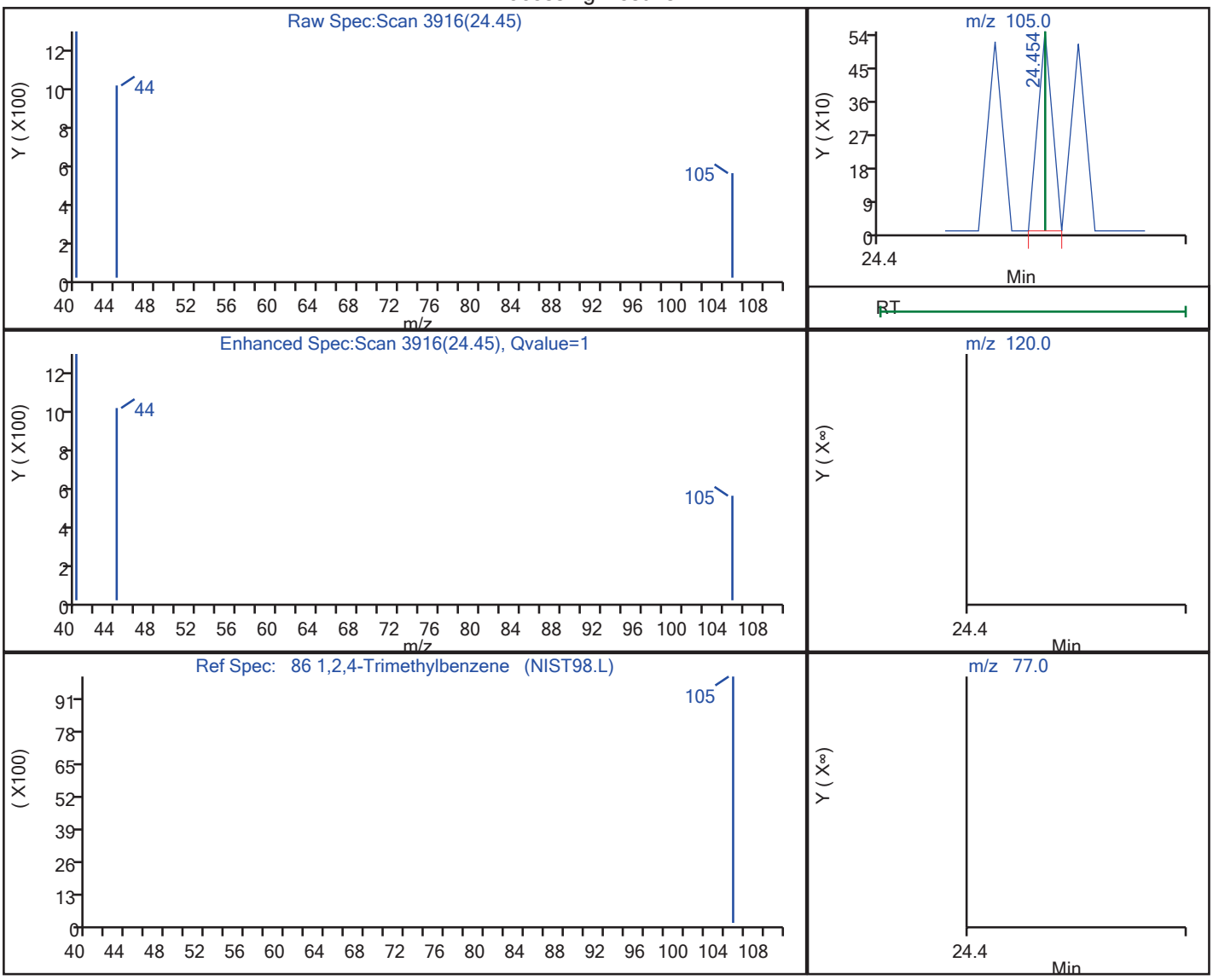
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 86 1,2,4-Trimethylbenzene, CAS: 95-63-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 24.45 | 105.00 | 177 | 0.000663 |
| 24.45 | 120.00 | 0 | |
| 24.45 | 77.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:59:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

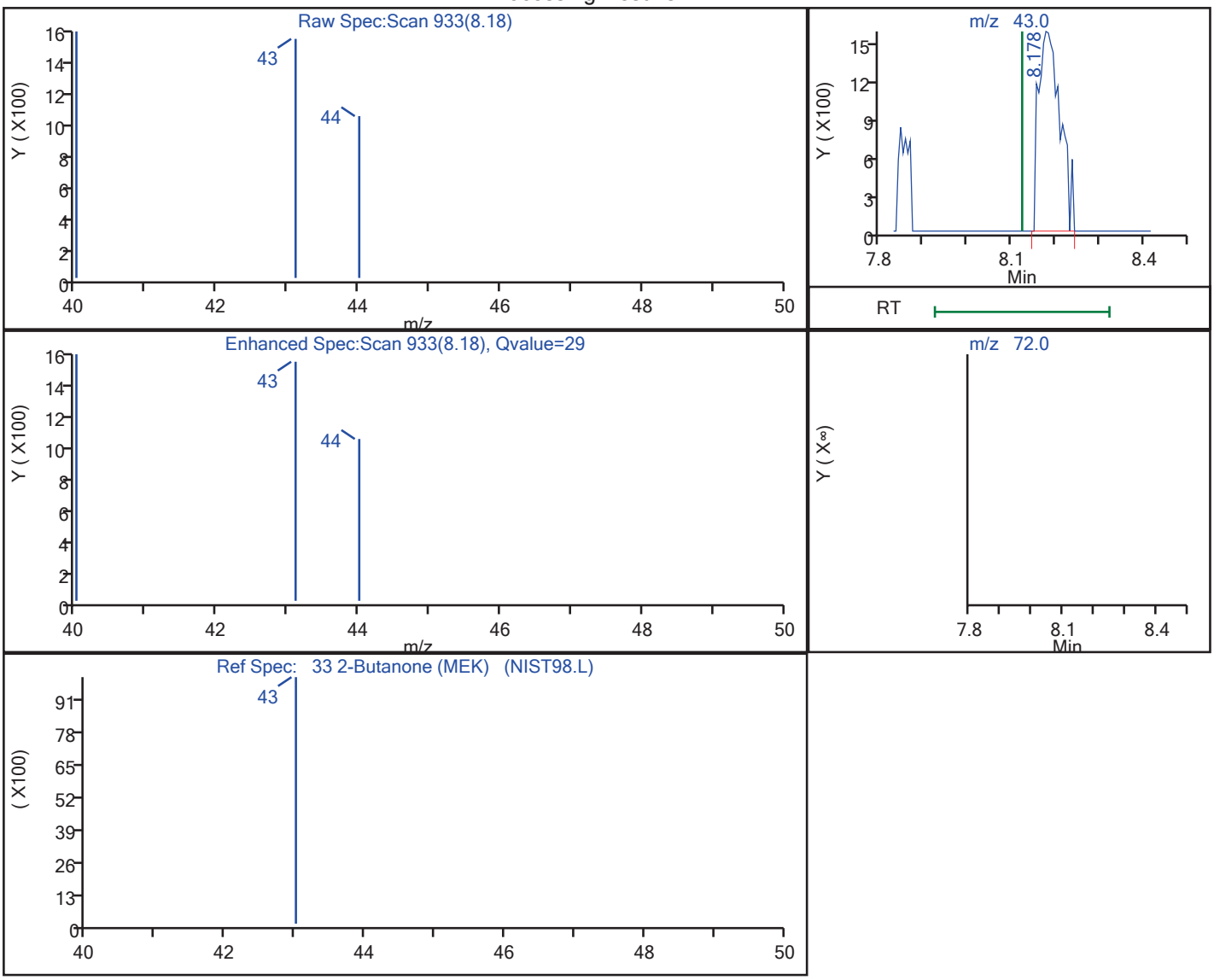
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 33 2-Butanone (MEK), CAS: 78-93-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.18 | 43.00 | 5352 | 0.077401 |
| 8.12 | 72.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:59:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

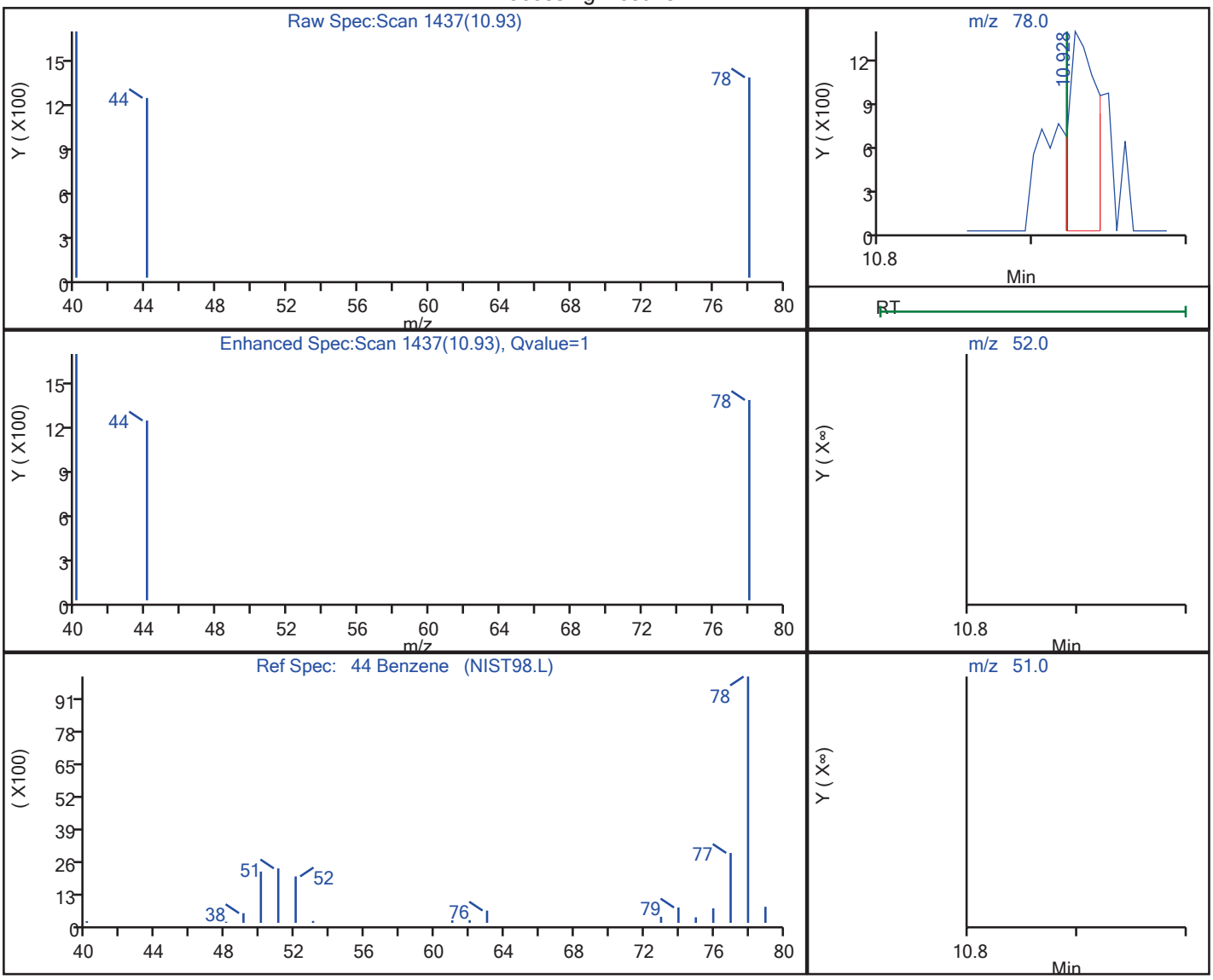
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 44 Benzene, CAS: 71-43-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 10.93 | 78.00 | 1647 | 0.011124 |
| 10.92 | 52.00 | 0 | |
| 10.92 | 51.00 | 0 | |
| 10.92 | 50.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:59:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

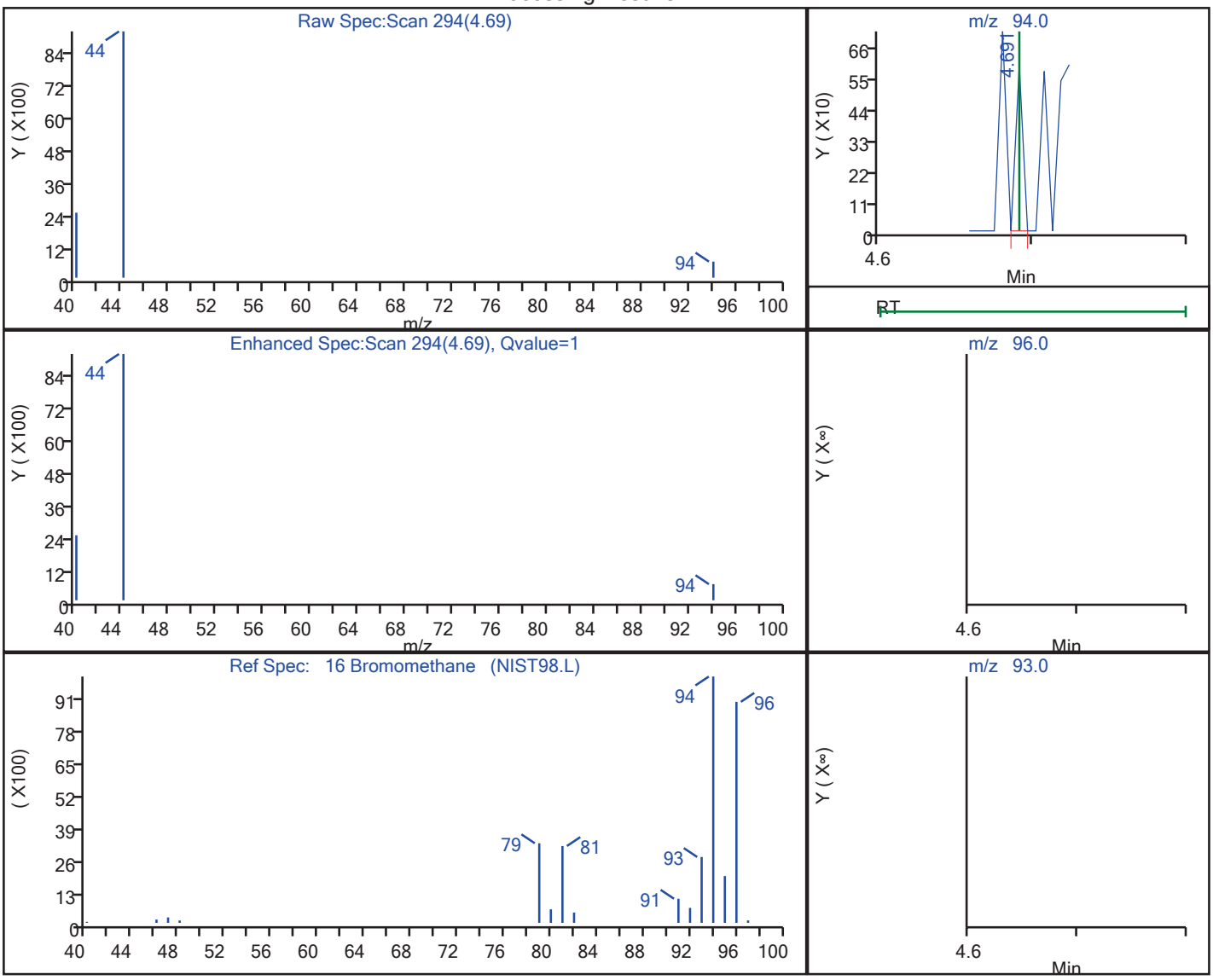
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 16 Bromomethane, CAS: 74-83-9

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.69 | 94.00 | 195 | 0.003094 |
| 4.69 | 96.00 | 0 | |
| 4.69 | 93.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:58:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

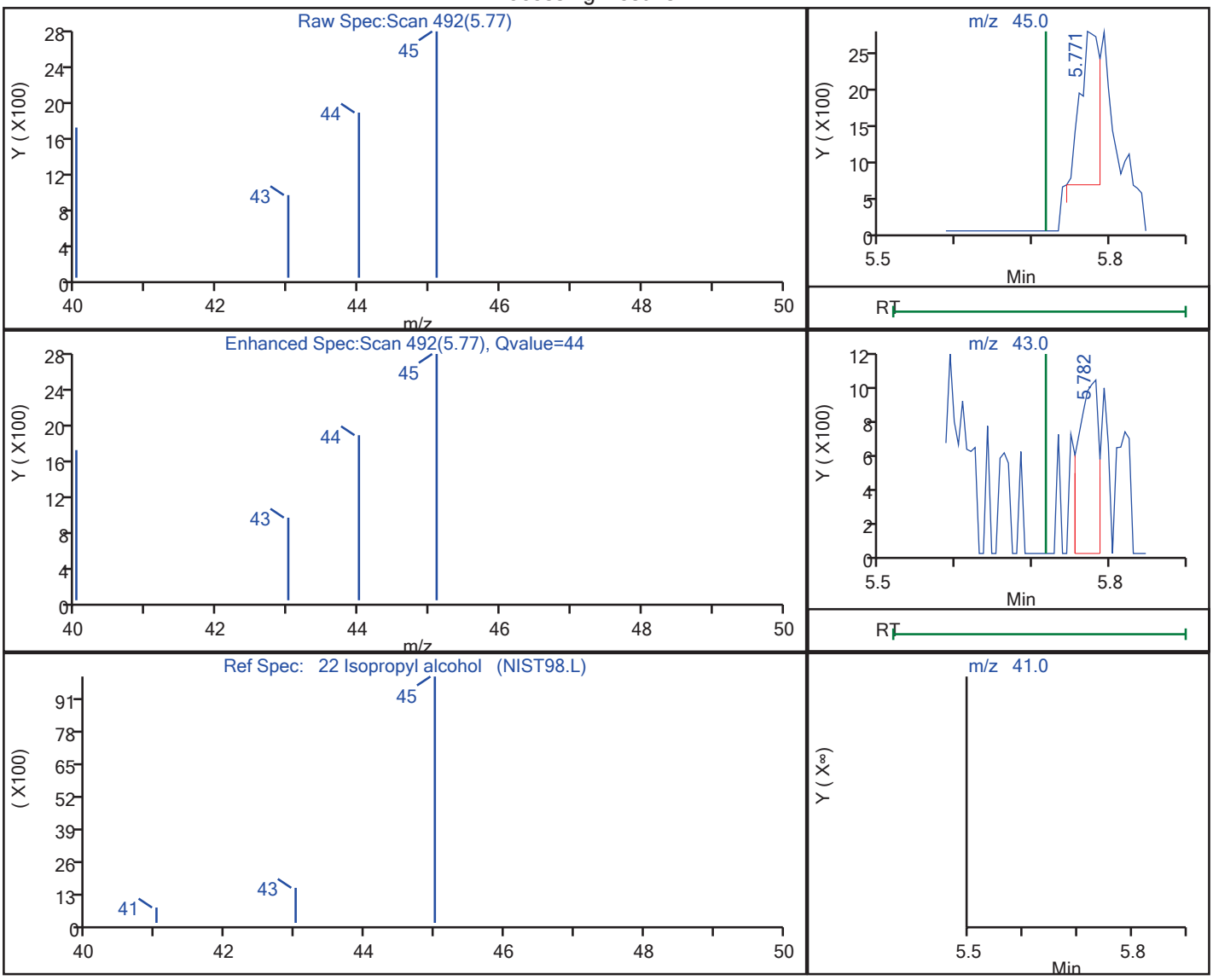
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.77 | 45.00 | 3654 | 0.072733 |
| 5.78 | 43.00 | 1765 | |
| 5.72 | 41.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:58:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

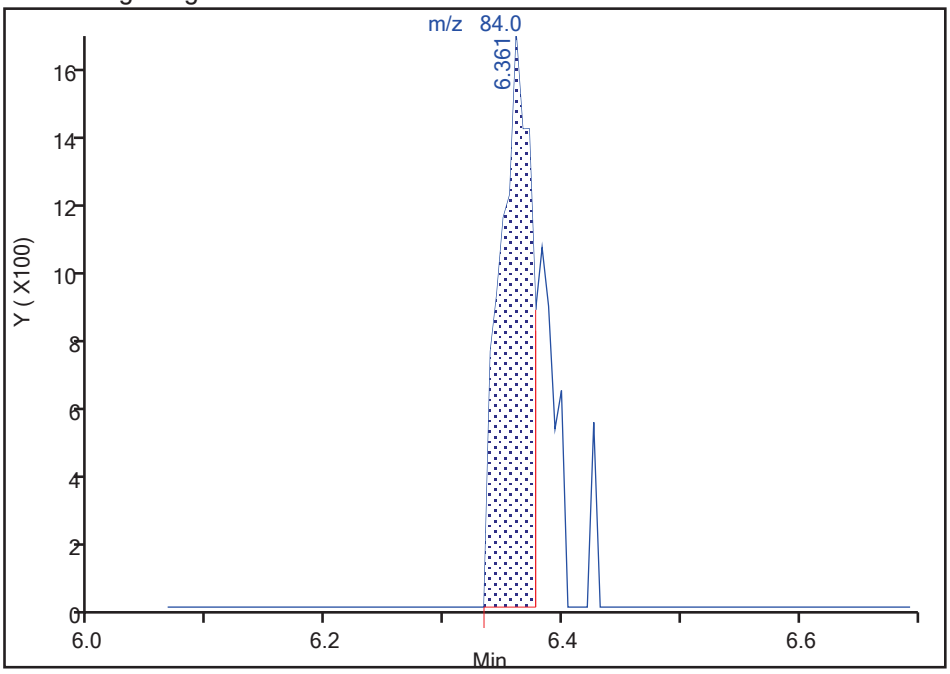
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 25 Methylene Chloride, CAS: 75-09-2

Signal: 1

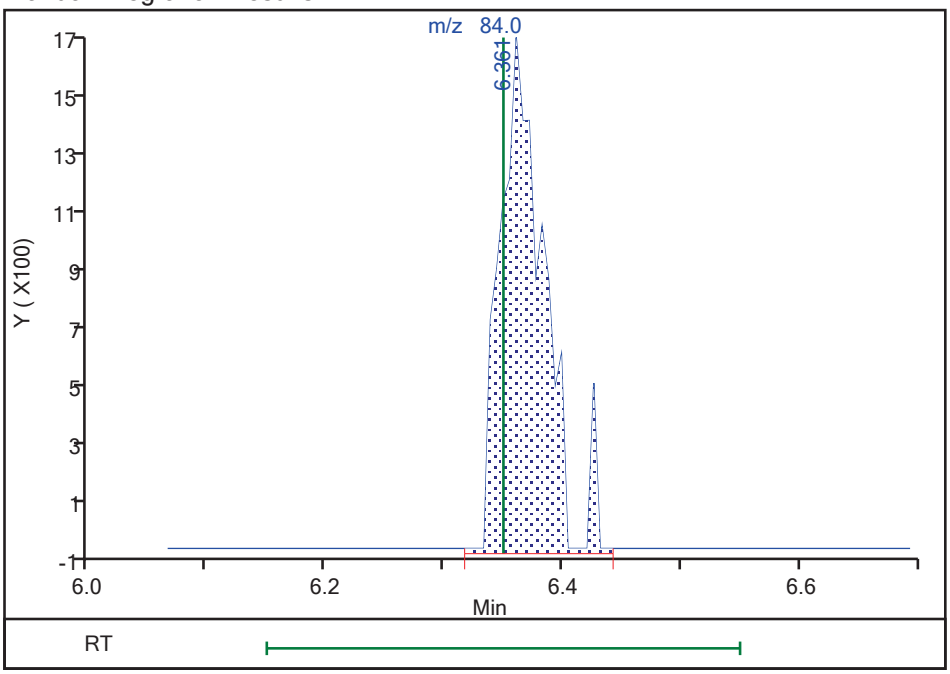
Processing Integration Results

RT: 6.36
Area: 3034
Amount: 0.064528
Amount Units: ppb v/v




Manual Integration Results

RT: 6.36
Area: 4345
Amount: 0.092411
Amount Units: ppb v/v




Reviewer: rhoadesw, 09-Mar-2021 10:58:58
Audit Action: Manually Integrated Audit Reason: Baseline

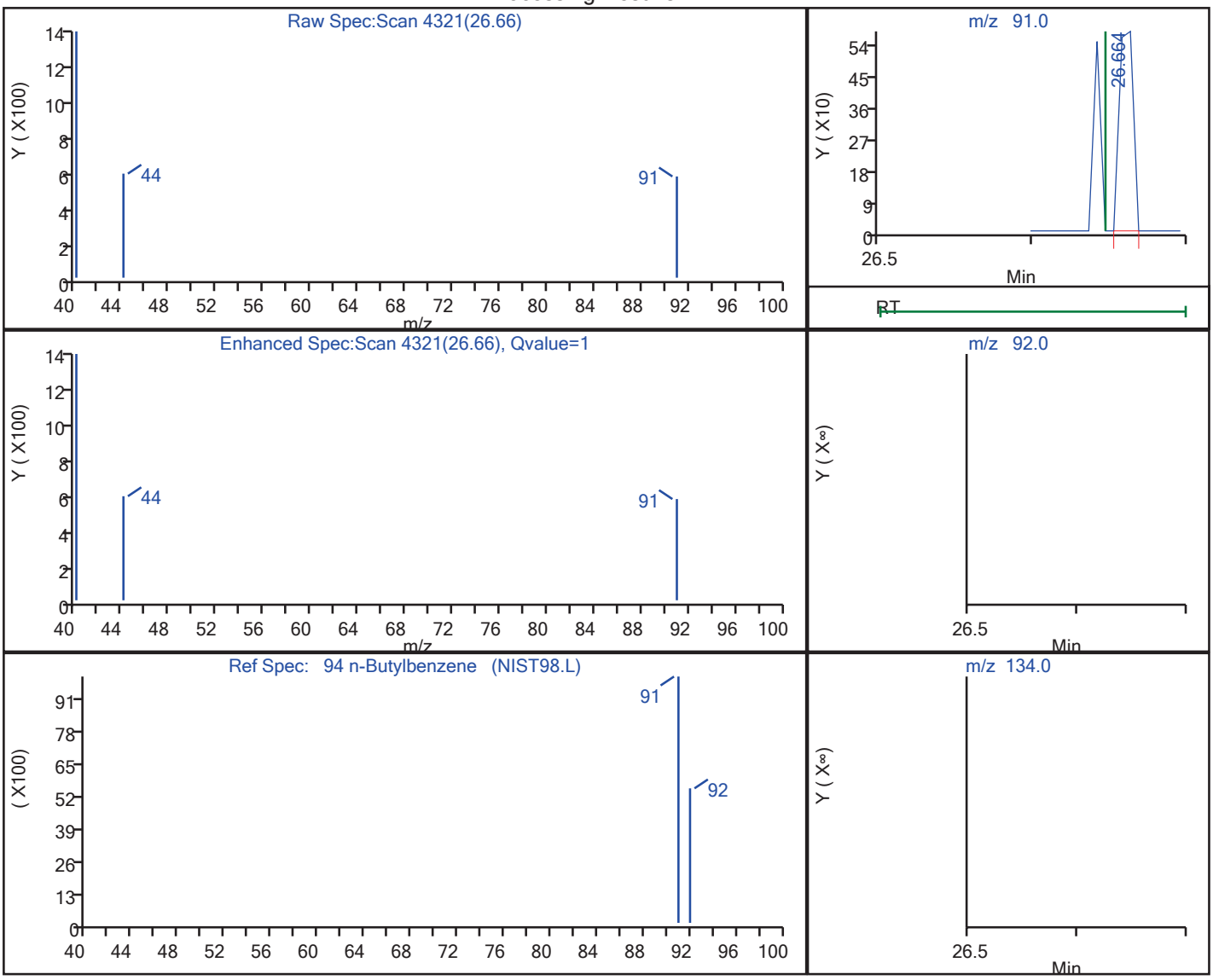
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 94 n-Butylbenzene, CAS: 104-51-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 26.66 | 91.00 | 369 | 0.001131 |
| 26.65 | 92.00 | 0 | |
| 26.65 | 134.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:59:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

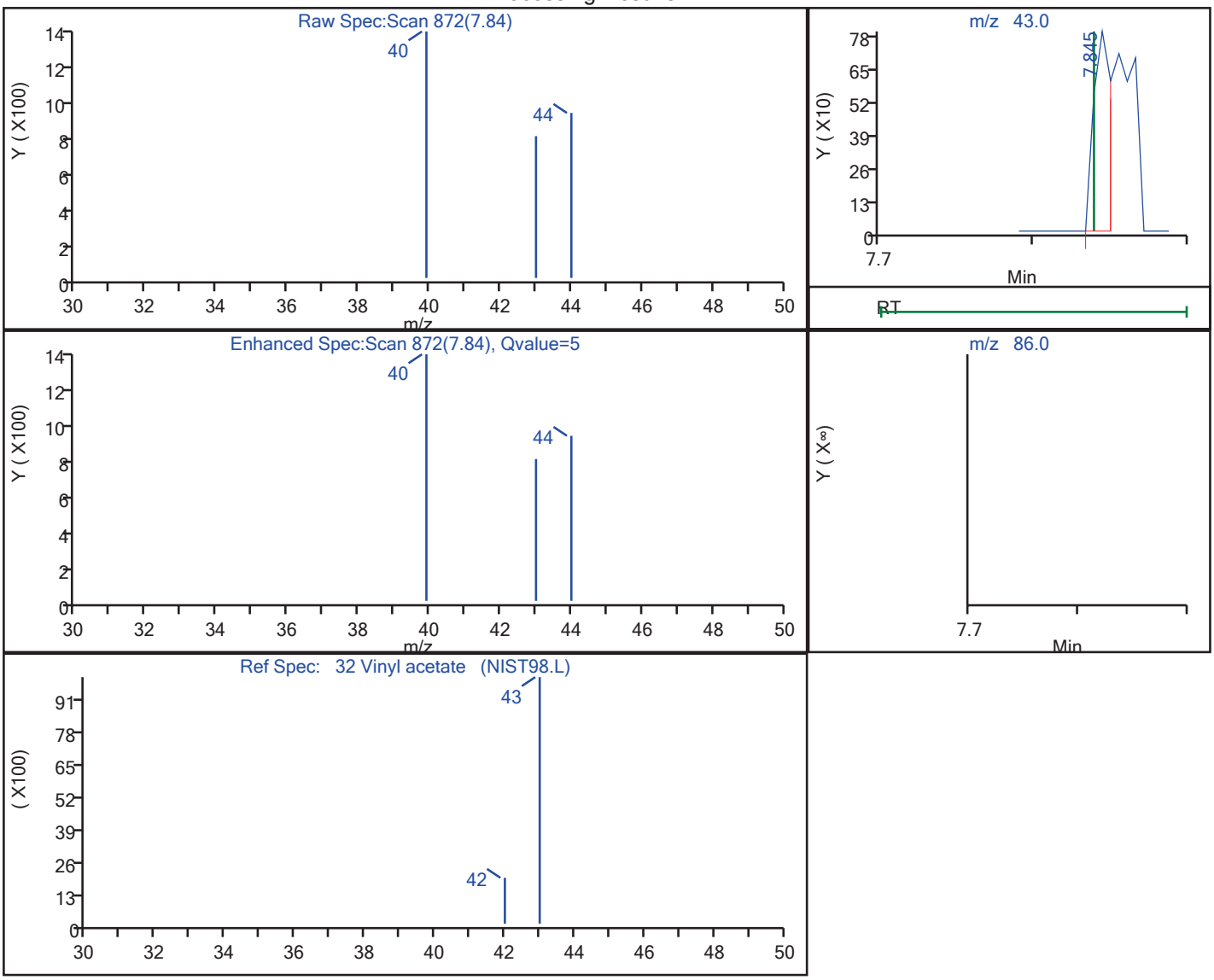
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR12.D | | | | |
| Injection Date: | 05-Mar-2021 09:30:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-3 | Lab Sample ID: | 570-52699-3 | | |
| Client ID: | LC152 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 12 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 32 Vinyl acetate, CAS: 108-05-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.84 | 43.00 | 639 | 0.007719 |
| 7.84 | 86.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:59:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC099 Lab Sample ID: 570-52699-4

Matrix: Air Lab File ID: KKK05MAR05.D

Analysis Method: TO-15 Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) Date Analyzed: 03/05/2021 14:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134600 Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC099 | Lab Sample ID: 570-52699-4

Matrix: Air | Lab File ID: KKK05MAR05.D

Analysis Method: TO-15 | Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/05/2021 14:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134600 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 103 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 100 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR05.D
Lims ID: 570-52699-A-4
Client ID: LC099
Sample Type: Client
Inject. Date: 05-Mar-2021 14:52:30 ALS Bottle#: 13 Worklist Smp#: 5
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-52699-a-4
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 09-Mar-2021 12:05:48 Calib Date: 25-Feb-2021 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210226-39644.b\KKK25FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: rhoadesw Date: 09-Mar-2021 11:53:40

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.818 | | | | ND | U |
| 7 Dichlorodifluoromethane | 85 | | 3.960 | | | | ND | |
| 8 Chloromethane | 50 | | 4.113 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.211 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.309 | | | | ND | |
| 16 Bromomethane | 94 | | 4.685 | | | | ND | |
| 17 Chloroethane | 64 | | 4.855 | | | | ND | |
| 20 Acetone | 43 | | 5.455 | | | | ND | U |
| 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| 22 Isopropyl alcohol | 45 | | 5.717 | | | | ND | U |
| 24 1,1-Dichloroethene | 61 | | 6.230 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.383 | 6.355 | 0.027 | 81 | 7952 | 0.1503 | |
| 27 Carbon disulfide | 76 | | 6.655 | | | | ND | |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.610 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.719 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.834 | | | | ND | |
| 33 2-Butanone (MEK) | 43 | | 8.128 | | | | ND | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.620 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.832 | 8.811 | 0.022 | 88 | 1673509 | 25.0 | |
| 38 Chloroform | 83 | | 8.980 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.836 | 9.809 | 0.027 | 0 | 1963160 | 25.8 | |
| 42 1,2-Dichloroethane | 62 | | 9.956 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | | 10.928 | | | | ND | |
| 45 Carbon tetrachloride | 117 | | 11.124 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.484 | 11.462 | 0.022 | 93 | 6110514 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.112 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.384 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.466 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.819 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.671 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.244 | 15.233 | 0.011 | 93 | 6105860 | 25.0 | |
| 60 Toluene | 91 | | 15.396 | | | | ND | |
| 61 2-Hexanone | 58 | | 15.915 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.067 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.350 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.507 | 18.496 | 0.011 | 85 | 5396642 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.577 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.341 | | | | ND | |
| 71 Bromoform | 173 | | 19.712 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.712 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.553 | | | | ND | |
| 75 o-Xylene | 91 | | 20.602 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.518 | 21.513 | 0.005 | 97 | 3975590 | 24.7 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.515 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.448 | | | | ND | |
| 87 Benzyl chloride | 91 | | 24.705 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.890 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.866 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.178 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.247 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

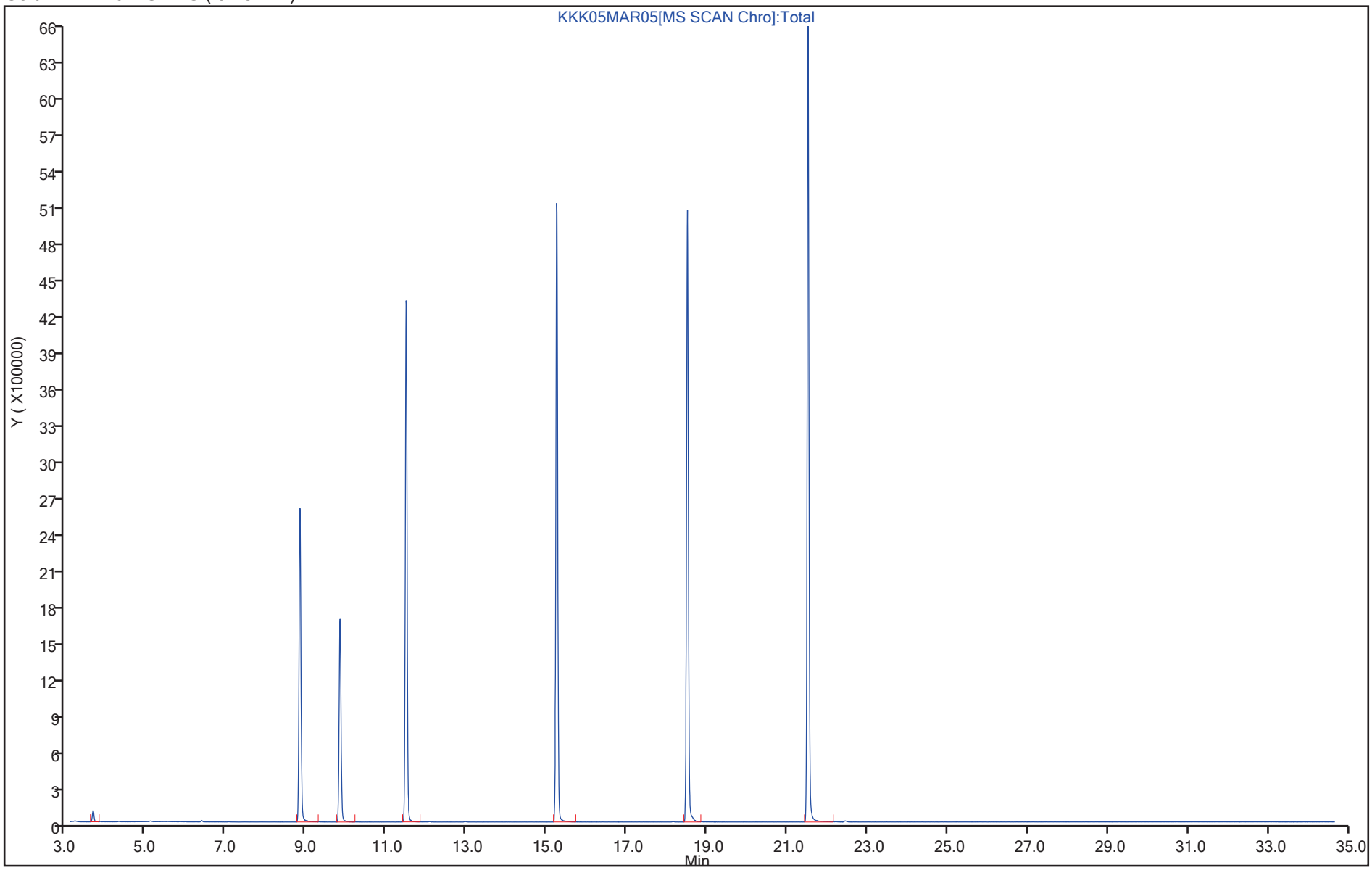
Report Date: 09-Mar-2021 12:05:52 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR05.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 05-Mar-2021 14:52:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-52699-A-4 | Lab Sample ID: | 570-52699-4 | Worklist Smp#: | 5 |
| Client ID: | LC099 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 13 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



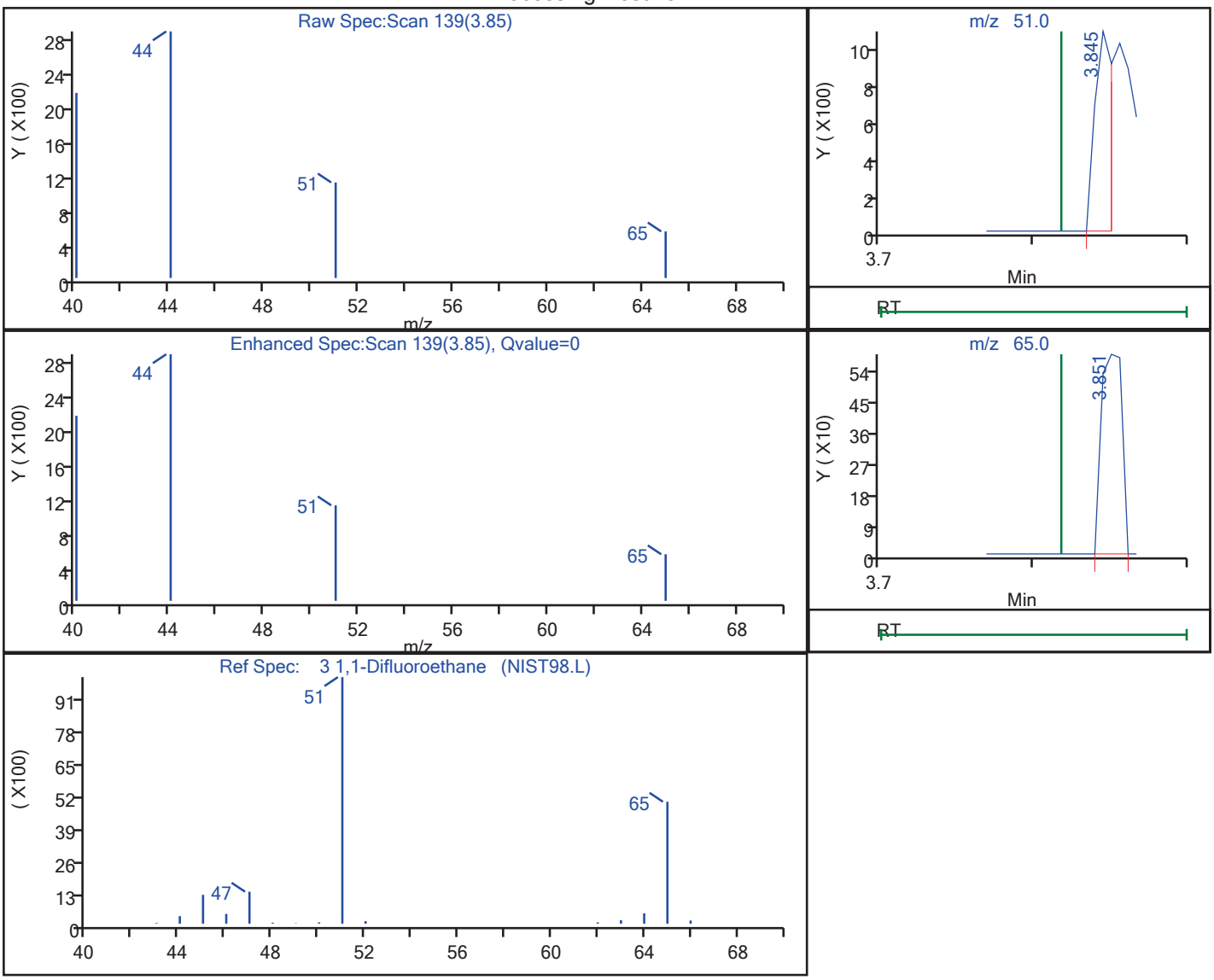
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR05.D | | | | |
| Injection Date: | 05-Mar-2021 14:52:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-4 | Lab Sample ID: | 570-52699-4 | | |
| Client ID: | LC099 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 13 | Worklist Smp#: | 5 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 3 1,1-Difluoroethane, CAS: 75-37-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.85 | 51.00 | 881 | 0.018906 |
| 3.85 | 65.00 | 554 | |

Reviewer: rhoadesw, 09-Mar-2021 11:53:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

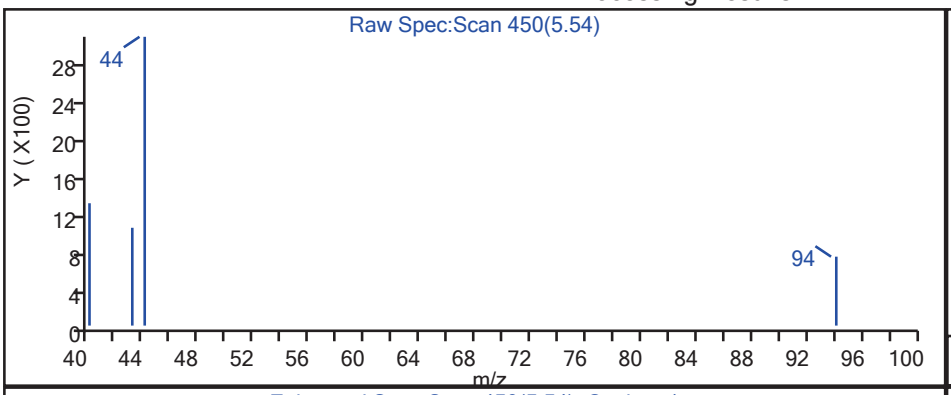
User Disabled Compound Report

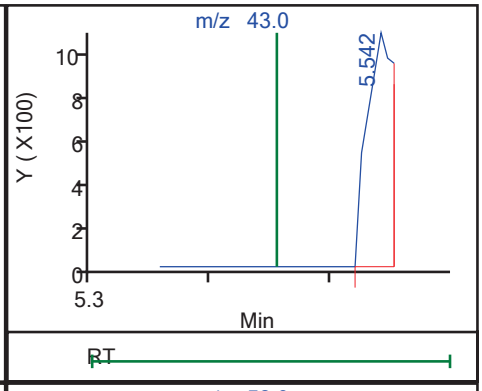
Eurofins Calscience LLC

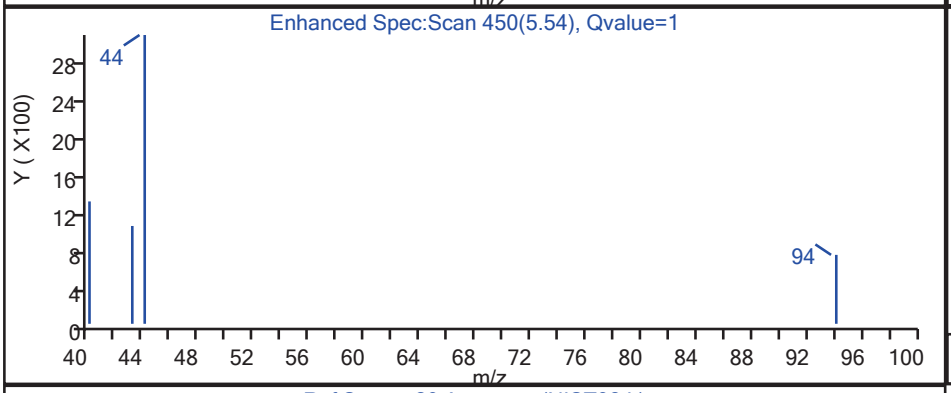
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR05.D | | | | |
| Injection Date: | 05-Mar-2021 14:52:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-4 | Lab Sample ID: | 570-52699-4 | | |
| Client ID: | LC099 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 13 | Worklist Smp#: | 5 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

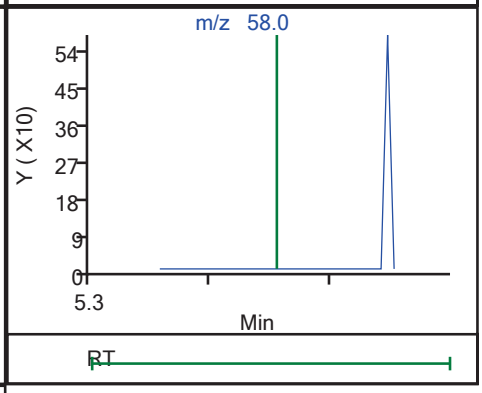
## 20 Acetone, CAS: 67-64-1

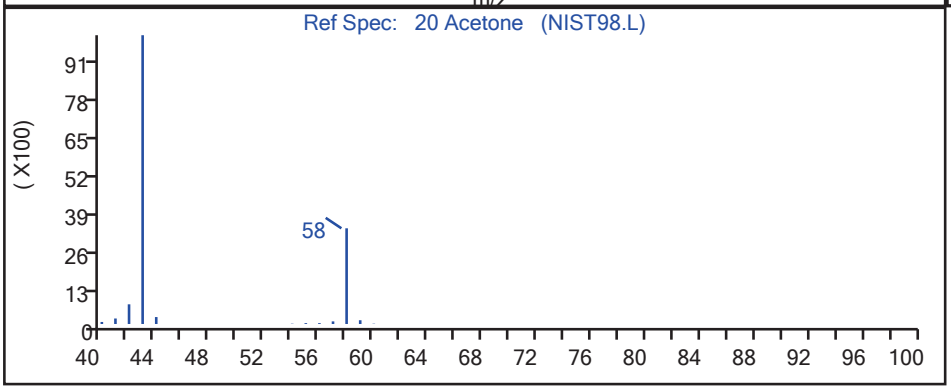
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.54 | 43.00 | 1606 | 0.015408 |
| 5.45 | 58.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 11:53:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

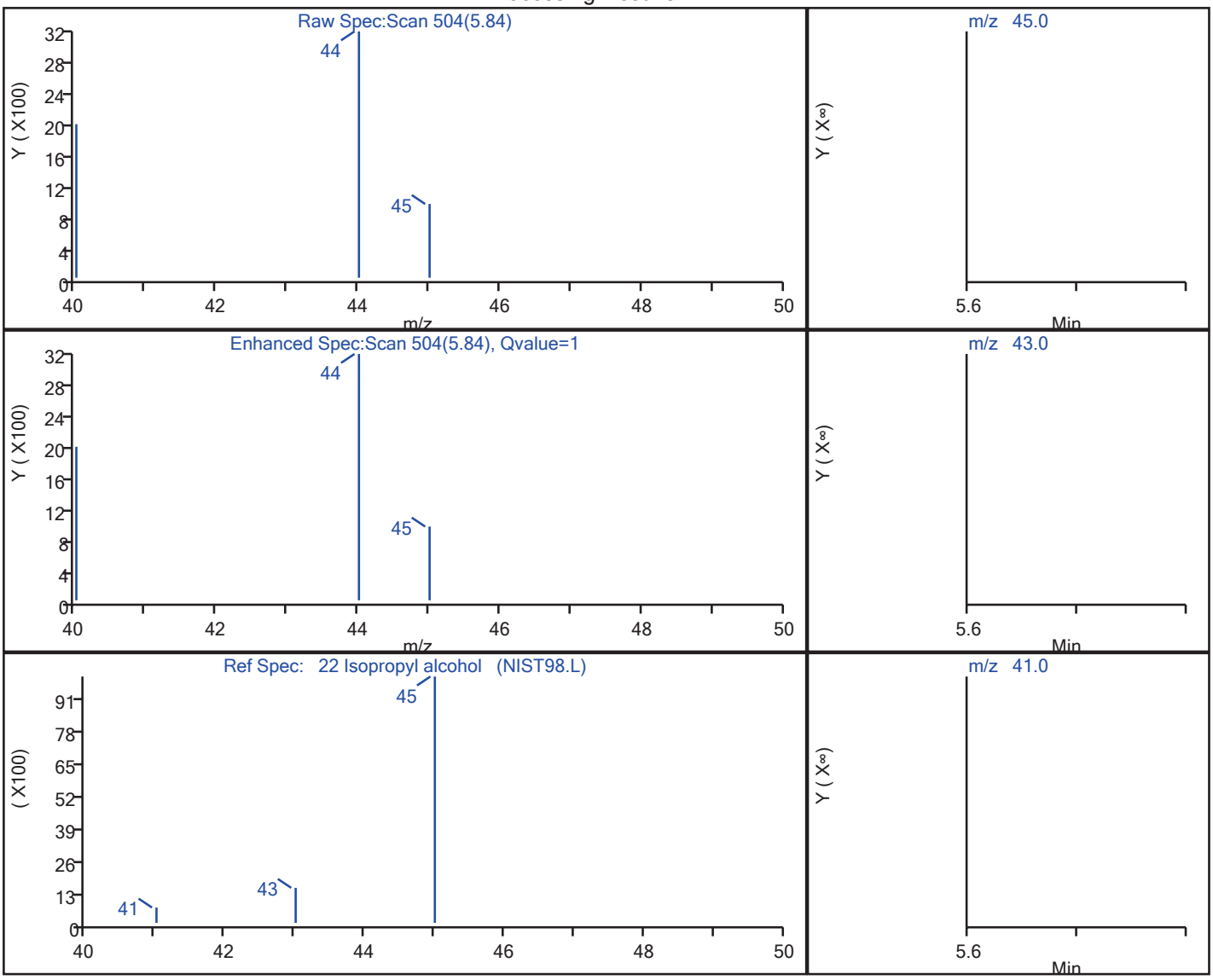
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR05.D | | | | |
| Injection Date: | 05-Mar-2021 14:52:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-4 | Lab Sample ID: | 570-52699-4 | | |
| Client ID: | LC099 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 13 | Worklist Smp#: | 5 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.84 | 45.00 | 1331 | 0.023542 |
| 5.72 | 43.00 | 0 | |
| 5.72 | 41.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 11:53:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC1106 Lab Sample ID: 570-52699-5

Matrix: Air Lab File ID: KKK04MAR06.D

Analysis Method: TO-15 Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) Date Analyzed: 03/04/2021 15:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 134594 Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52699-1

SDG No.:

Client Sample ID: LC1106 | Lab Sample ID: 570-52699-5

Matrix: Air | Lab File ID: KKK04MAR06.D

Analysis Method: TO-15 | Date Collected: 03/03/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/04/2021 15:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134594 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 103 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 101 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR06.D
Lims ID: 570-52699-A-5
Client ID: LC1106
Sample Type: Client
Inject. Date: 04-Mar-2021 15:13:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-52699-a-5
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 09-Mar-2021 11:00:55 Calib Date: 25-Feb-2021 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210226-39644.b\KKK25FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: rhoadesw Date: 09-Mar-2021 10:55:58

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.823 | | | | ND | |
| 7 Dichlorodifluoromethane | 85 | | 3.965 | | | | ND | |
| 8 Chloromethane | 50 | | 4.113 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.216 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.320 | | | | ND | |
| 16 Bromomethane | 94 | | 4.691 | | | | ND | |
| 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| 20 Acetone | 43 | 5.493 | 5.466 | 0.027 | 97 | 12100 | 0.1131 | |
| 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| 22 Isopropyl alcohol | 45 | 5.771 | 5.717 | 0.054 | 95 | 18912 | 0.3258 | M |
| 24 1,1-Dichloroethene | 61 | | 6.230 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.366 | 6.350 | 0.016 | 94 | 8188 | 0.1507 | M |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| 27 Carbon disulfide | 76 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.839 | | | | ND | |
| 33 2-Butanone (MEK) | 43 | | 8.123 | | | | ND | U |
| 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.811 | 8.816 | -0.005 | 87 | 1717961 | 25.0 | |
| 38 Chloroform | 83 | | 8.985 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.809 | 9.809 | 0.000 | 0 | 2008082 | 25.7 | |
| 42 1,2-Dichloroethane | 62 | | 9.956 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | | 10.922 | | | | ND | |
| 45 Carbon tetrachloride | 117 | | 11.130 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.462 | 11.462 | 0.000 | 93 | 6327924 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.117 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.384 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.472 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.814 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.665 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.233 | 15.233 | 0.000 | 93 | 6352104 | 25.2 | |
| 60 Toluene | 91 | | 15.396 | | | | ND | U |
| 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.062 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.344 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.501 | 18.496 | 0.005 | 85 | 5746551 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.572 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.336 | | | | ND | U |
| 71 Bromoform | 173 | | 19.707 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.707 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.553 | | | | ND | |
| 75 o-Xylene | 91 | | 20.596 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.508 | 21.508 | 0.000 | 93 | 4258172 | 24.8 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.510 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.454 | | | | ND | |
| 87 Benzyl chloride | 91 | | 24.710 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.901 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.860 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.242 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

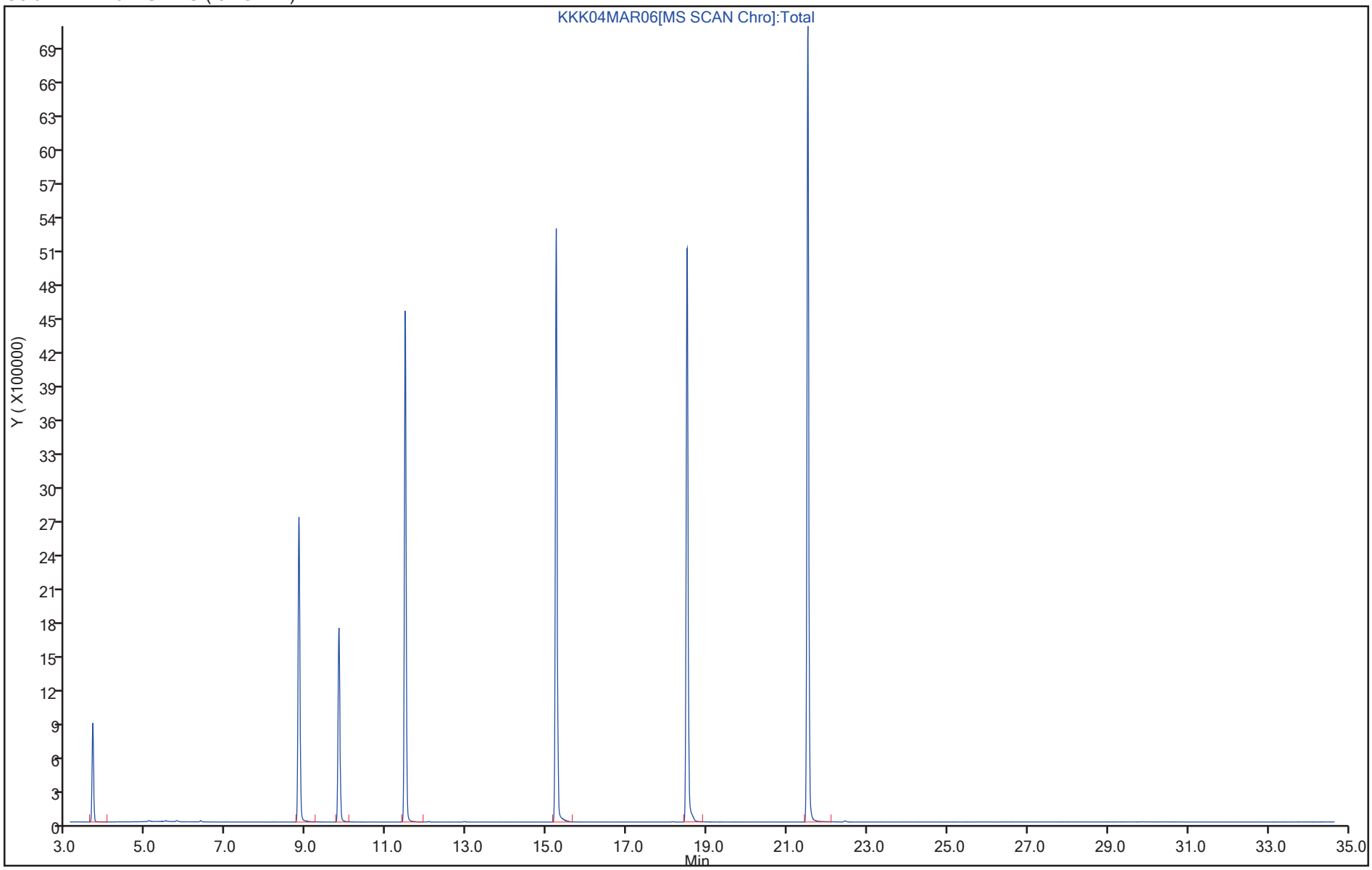
Report Date: 09-Mar-2021 11:01:08 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR06.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 04-Mar-2021 15:13:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-52699-A-5 | Lab Sample ID: | 570-52699-5 | Worklist Smp#: | 6 |
| Client ID: | LC1106 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



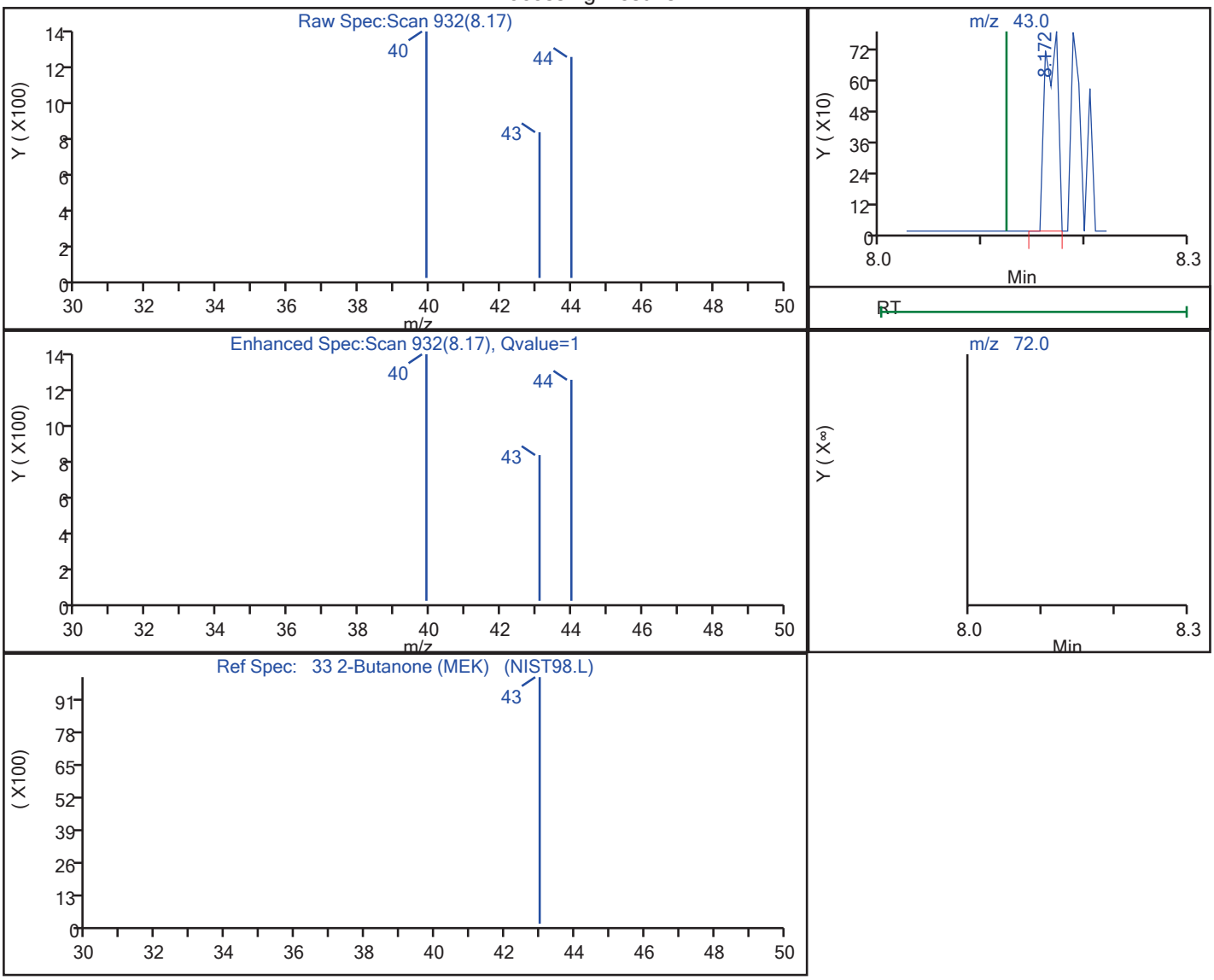
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR06.D | | | | |
| Injection Date: | 04-Mar-2021 15:13:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-5 | Lab Sample ID: | 570-52699-5 | | |
| Client ID: | LC1106 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 5 | Worklist Smp#: | 6 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 33 2-Butanone (MEK), CAS: 78-93-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.17 | 43.00 | 673 | 0.008425 |
| 8.12 | 72.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:55:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

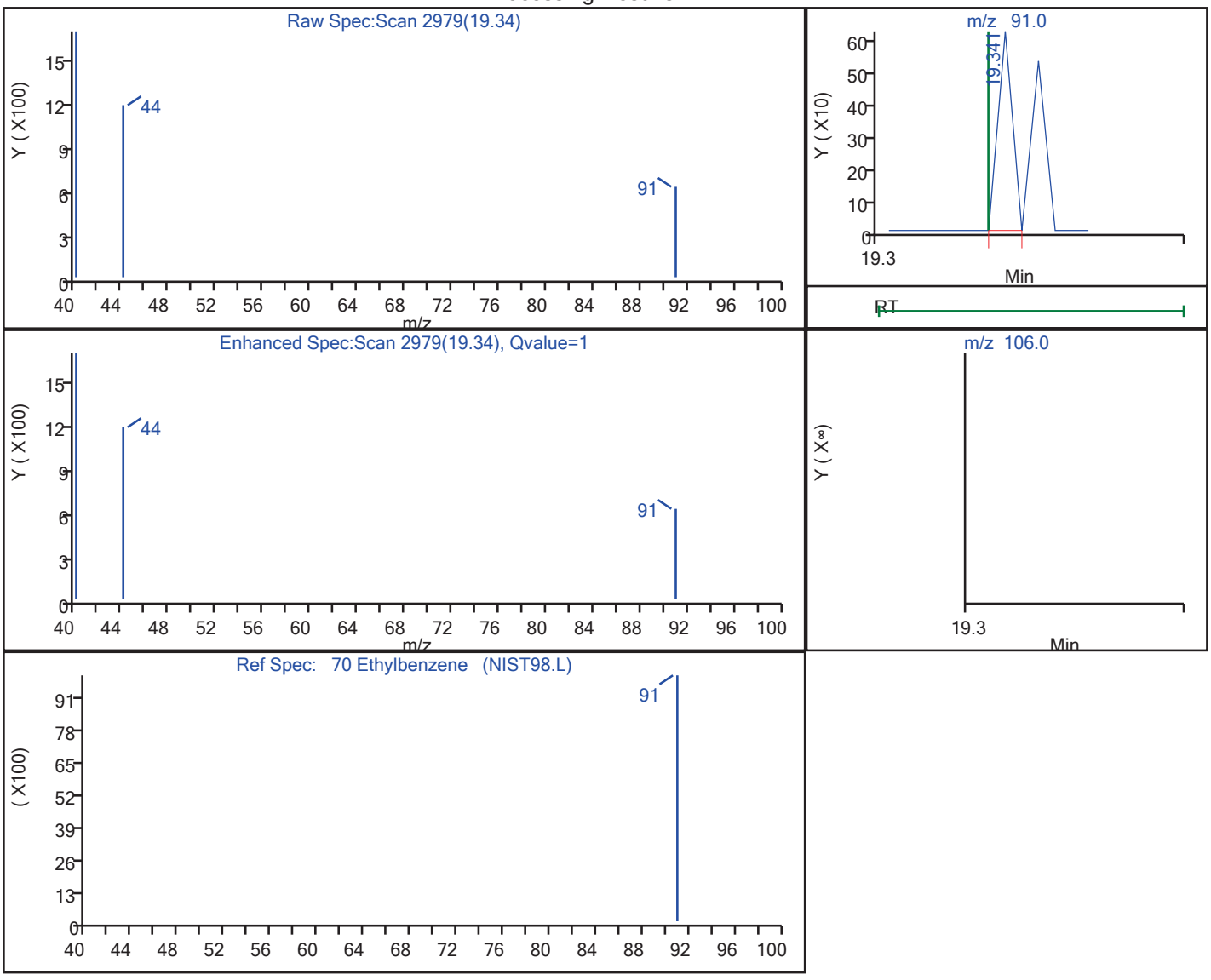
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR06.D | | | | |
| Injection Date: | 04-Mar-2021 15:13:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-5 | Lab Sample ID: | 570-52699-5 | | |
| Client ID: | LC1106 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 5 | Worklist Smp#: | 6 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 70 Ethylbenzene, CAS: 100-41-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 19.34 | 91.00 | 204 | 0.000790 |
| 19.34 | 106.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:55:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

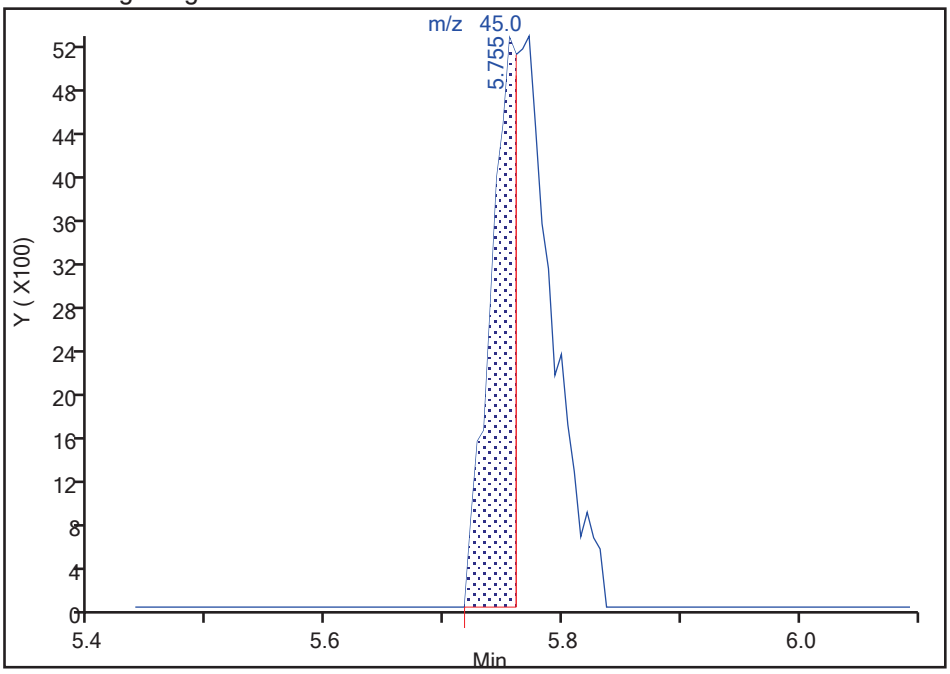
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR06.D | | | | |
| Injection Date: | 04-Mar-2021 15:13:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-5 | Lab Sample ID: | 570-52699-5 | | |
| Client ID: | LC1106 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 5 | Worklist Smp#: | 6 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

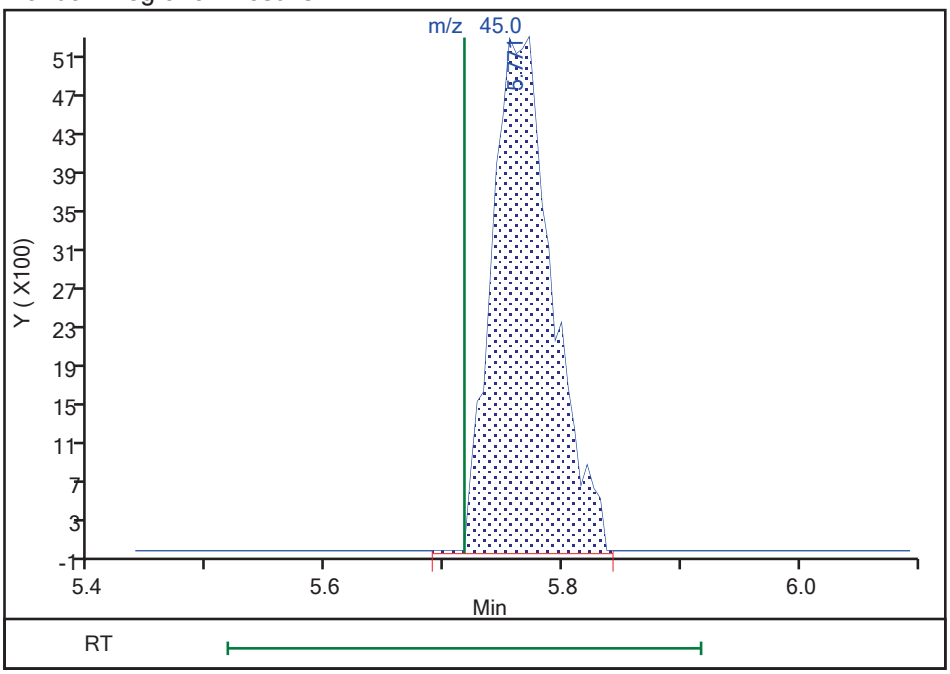
Processing Integration Results

RT: 5.76
Area: 8317
Amount: 0.143298
Amount Units: ppb v/v




Manual Integration Results

RT: 5.77
Area: 18912
Amount: 0.325845
Amount Units: ppb v/v




Reviewer: rhoadesw, 09-Mar-2021 10:55:30
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Calscience LLC

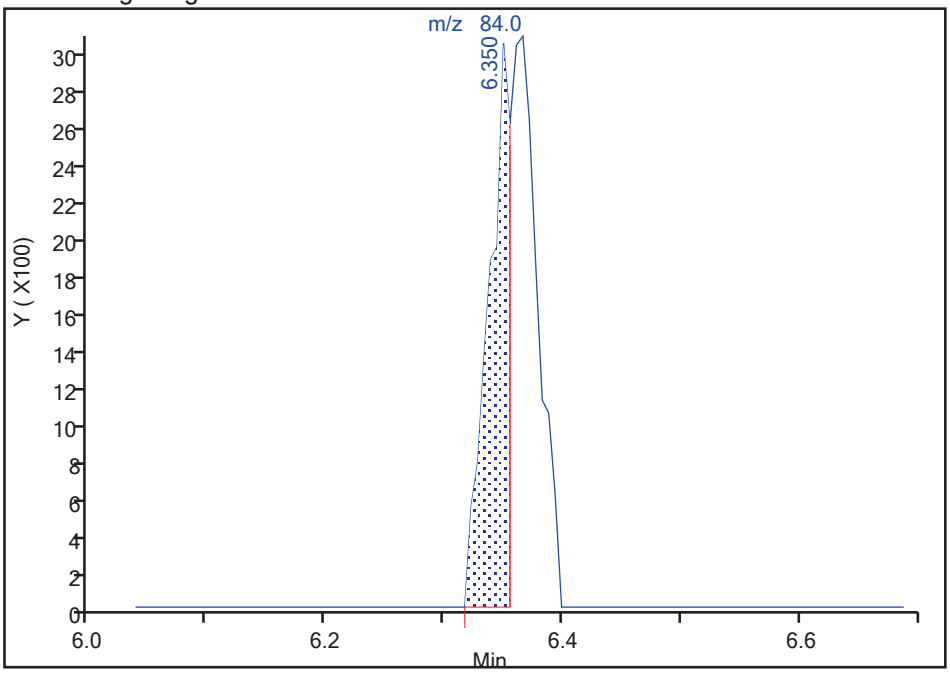
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR06.D | | | | |
| Injection Date: | 04-Mar-2021 15:13:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-5 | Lab Sample ID: | 570-52699-5 | | |
| Client ID: | LC1106 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 5 | Worklist Smp#: | 6 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 25 Methylene Chloride, CAS: 75-09-2

Signal: 1

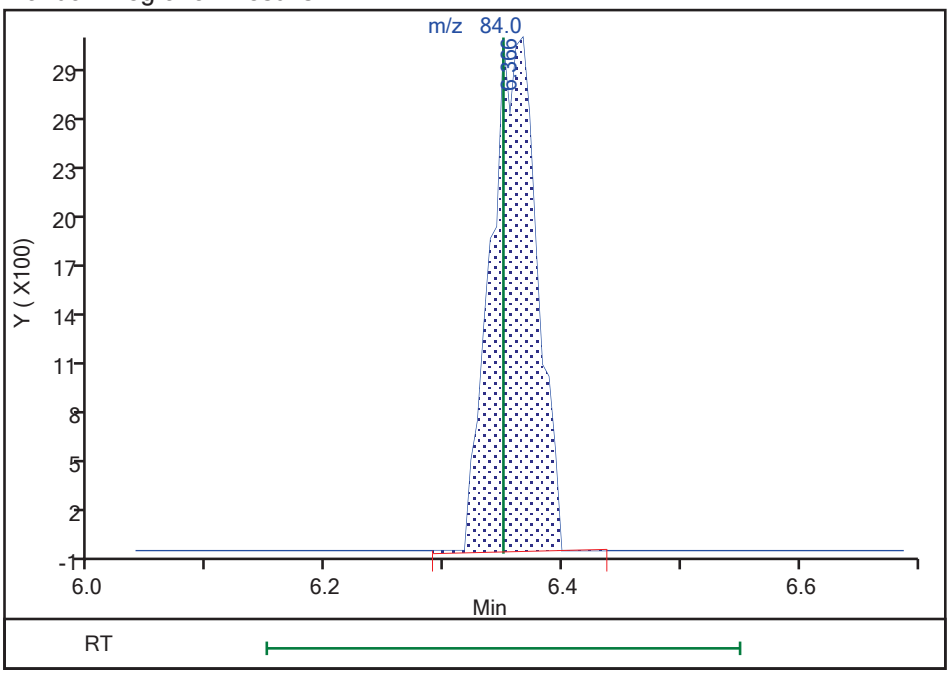
Processing Integration Results

RT: 6.35
Area: 3878
Amount: 0.071393
Amount Units: ppb v/v




Manual Integration Results

RT: 6.37
Area: 8188
Amount: 0.150739
Amount Units: ppb v/v




Reviewer: rhoadesw, 09-Mar-2021 10:55:35
Audit Action: Manually Integrated Audit Reason: Baseline

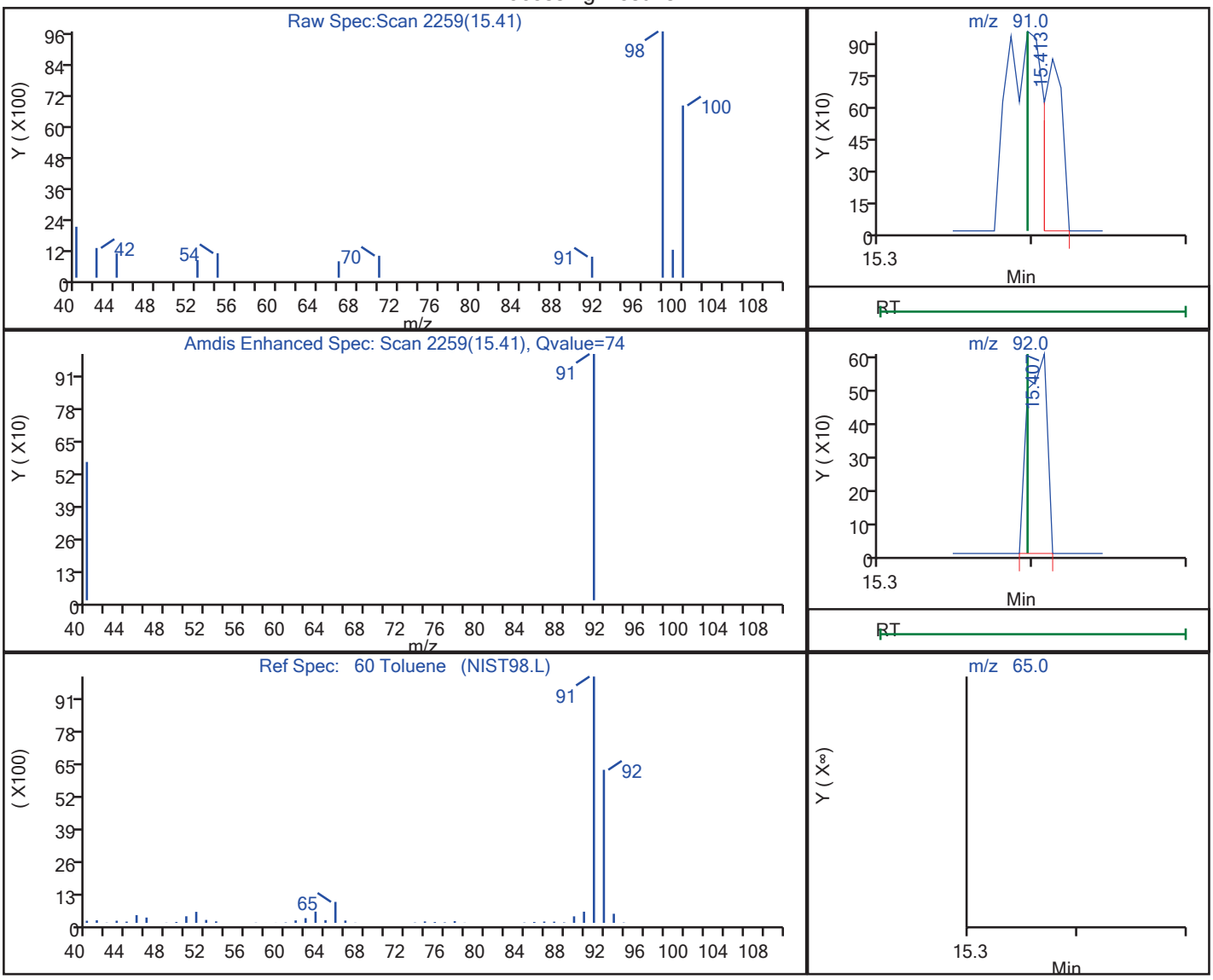
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40396.b\KKK04MAR06.D | | | | |
| Injection Date: | 04-Mar-2021 15:13:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52699-A-5 | Lab Sample ID: | 570-52699-5 | | |
| Client ID: | LC1106 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 5 | Worklist Smp#: | 6 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 60 Toluene, CAS: 108-88-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 15.41 | 91.00 | 698 | 0.003500 |
| 15.41 | 92.00 | 533 | |
| 15.40 | 65.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 10:55:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52962-1

SDG No.:

Client Sample ID: LC864 | Lab Sample ID: 570-52962-1

Matrix: Air | Lab File ID: KKK05MAR16.D

Analysis Method: TO-15 | Date Collected: 03/05/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/06/2021 00:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134600 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | 0.58 | J | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52962-1

SDG No.:

Client Sample ID: LC864 | Lab Sample ID: 570-52962-1

Matrix: Air | Lab File ID: KKK05MAR16.D

Analysis Method: TO-15 | Date Collected: 03/05/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/06/2021 00:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 134600 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | 1.0 | J | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 103 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 97 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 100 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR16.D
Lims ID: 570-52962-A-1
Client ID: LC864
Sample Type: Client
Inject. Date: 06-Mar-2021 00:57:30 ALS Bottle#: 12 Worklist Smp#: 16
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-52962-a-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 09-Mar-2021 12:05:48 Calib Date: 25-Feb-2021 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210226-39644.b\KKK25FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1607

First Level Reviewer: rhoadesw Date: 09-Mar-2021 12:02:24

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.818 | | | | ND | U |
| 7 Dichlorodifluoromethane | 85 | 3.960 | 3.960 | 0.000 | 95 | 4828 | 0.0419 | |
| 8 Chloromethane | 50 | 4.096 | 4.113 | -0.017 | 1 | 1463 | 0.0436 | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.211 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.309 | | | | ND | |
| 16 Bromomethane | 94 | | 4.685 | | | | ND | |
| 17 Chloroethane | 64 | | 4.855 | | | | ND | |
| 20 Acetone | 43 | 5.455 | 5.455 | 0.000 | 96 | 56369 | 0.5821 | |
| 21 Trichlorofluoromethane | 101 | 5.580 | 5.591 | -0.011 | 95 | 3441 | 0.0173 | |
| 22 Isopropyl alcohol | 45 | 5.739 | 5.717 | 0.022 | 94 | 53562 | 1.02 | |
| 24 1,1-Dichloroethene | 61 | | 6.230 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.339 | 6.355 | -0.016 | 82 | 7350 | 0.1495 | |
| 27 Carbon disulfide | 76 | | 6.655 | | | | ND | |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.610 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.719 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.834 | | | | ND | U |
| 33 2-Butanone (MEK) | 43 | 8.140 | 8.128 | 0.012 | 32 | 5106 | 0.0706 | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.620 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.805 | 8.811 | -0.005 | 87 | 1554952 | 25.0 | |
| 38 Chloroform | 83 | | 8.980 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.798 | 9.809 | -0.011 | 0 | 1825674 | 25.8 | |
| 42 1,2-Dichloroethane | 62 | | 9.956 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | 10.933 | 10.928 | 0.005 | 79 | 995 | 0.007209 | |
| 45 Carbon tetrachloride | 117 | | 11.124 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.457 | 11.462 | -0.005 | 93 | 5667956 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.112 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.384 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.466 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.819 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.671 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.227 | 15.233 | -0.006 | 93 | 5641220 | 24.9 | |
| 60 Toluene | 91 | 15.402 | 15.396 | 0.006 | 95 | 8343 | 0.0472 | |
| 61 2-Hexanone | 58 | | 15.915 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.067 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.350 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.490 | 18.496 | -0.006 | 85 | 5089832 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.577 | | | | ND | |
| 70 Ethylbenzene | 91 | 19.336 | 19.341 | -0.005 | 1 | 531 | 0.002321 | |
| 71 Bromoform | 173 | | 19.712 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.712 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.553 | | | | ND | |
| 75 o-Xylene | 91 | 20.596 | 20.602 | -0.006 | 1 | 940 | 0.005248 | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.508 | 21.513 | -0.005 | 92 | 3690069 | 24.3 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.515 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | 24.465 | 24.448 | 0.017 | 1 | 342 | 0.001372 | |
| 87 Benzyl chloride | 91 | | 24.705 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.890 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.866 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.178 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.247 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

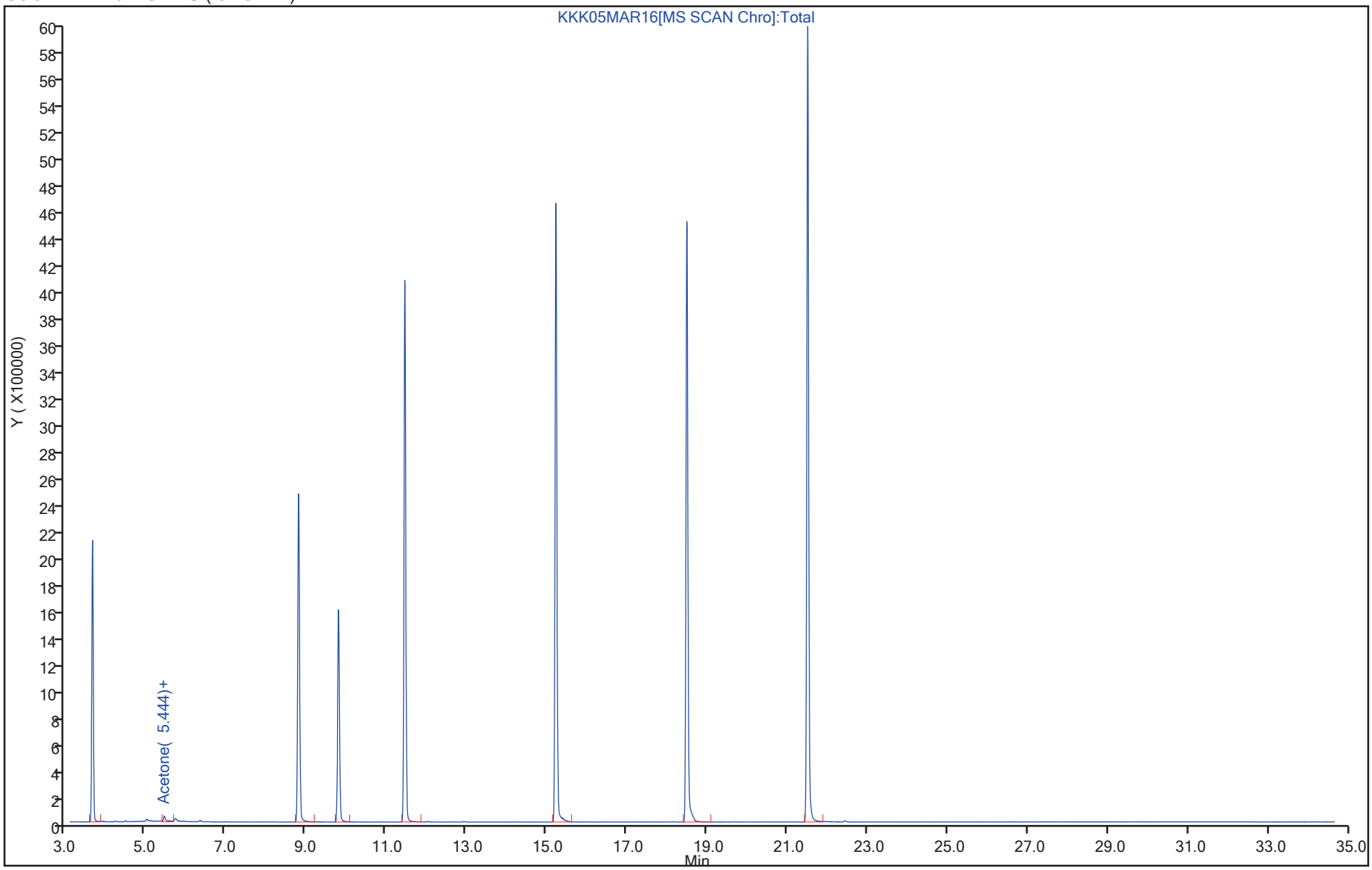
Report Date: 09-Mar-2021 12:06:08 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR16.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 00:57:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-52962-A-1 | Lab Sample ID: | 570-52962-1 | Worklist Smp#: | 16 |
| Client ID: | LC864 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 12 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



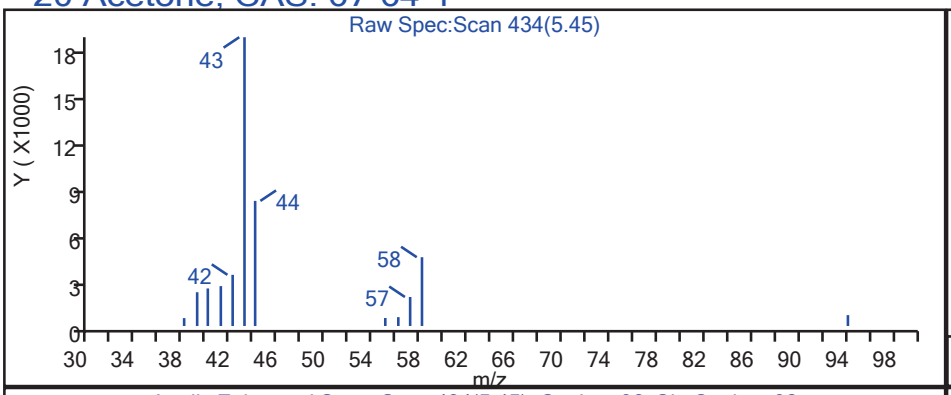
Report Date: 09-Mar-2021 12:06:08 Chrom Revision: 2.3 05-Feb-2021 00:13:28

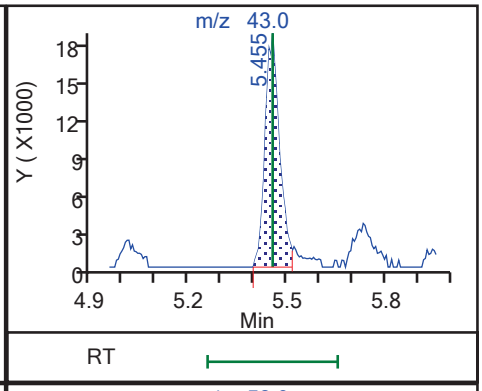
Eurofins Calscience LLC

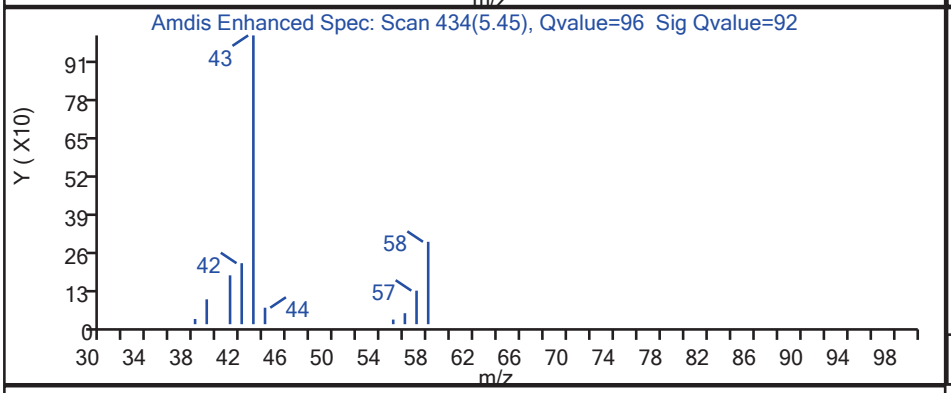
Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR16.D

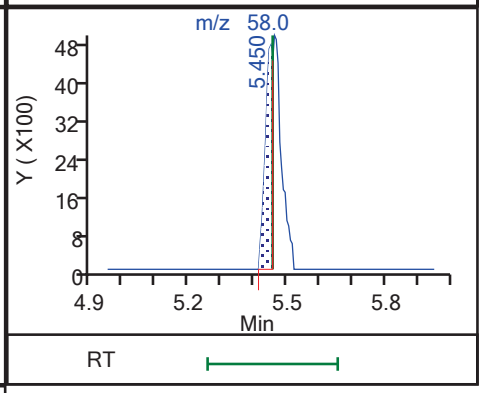
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 00:57:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52962-A-1 | Lab Sample ID: | 570-52962-1 | | |
| Client ID: | LC864 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

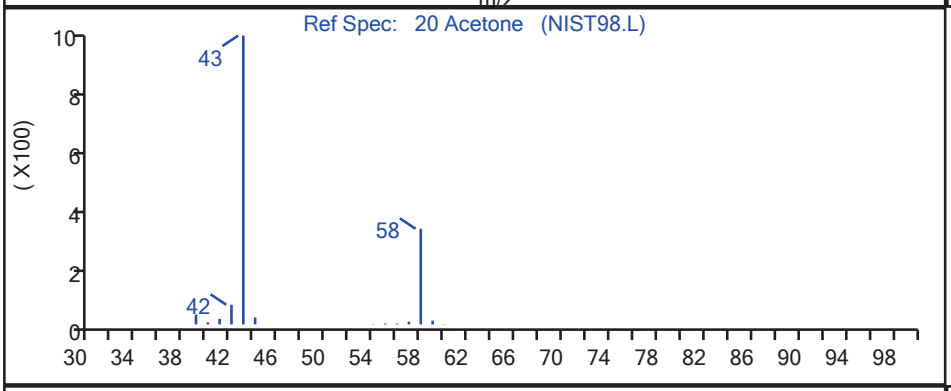
## 20 Acetone, CAS: 67-64-1

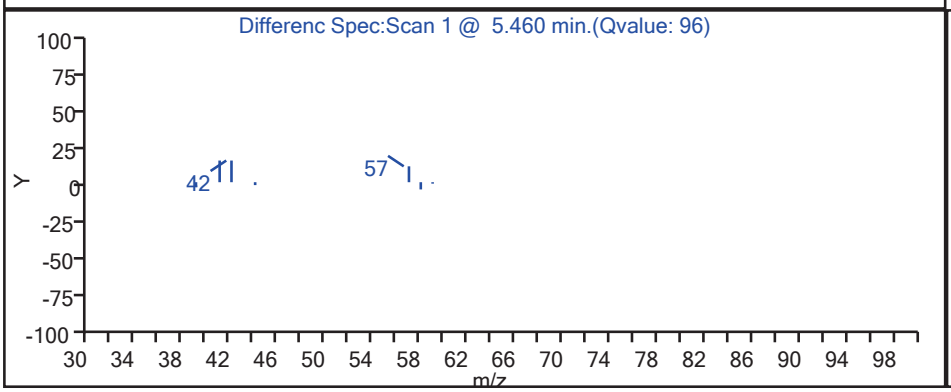


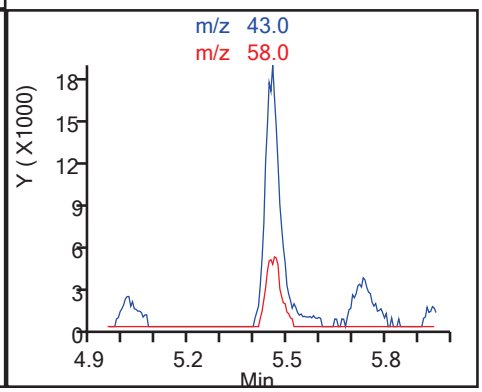



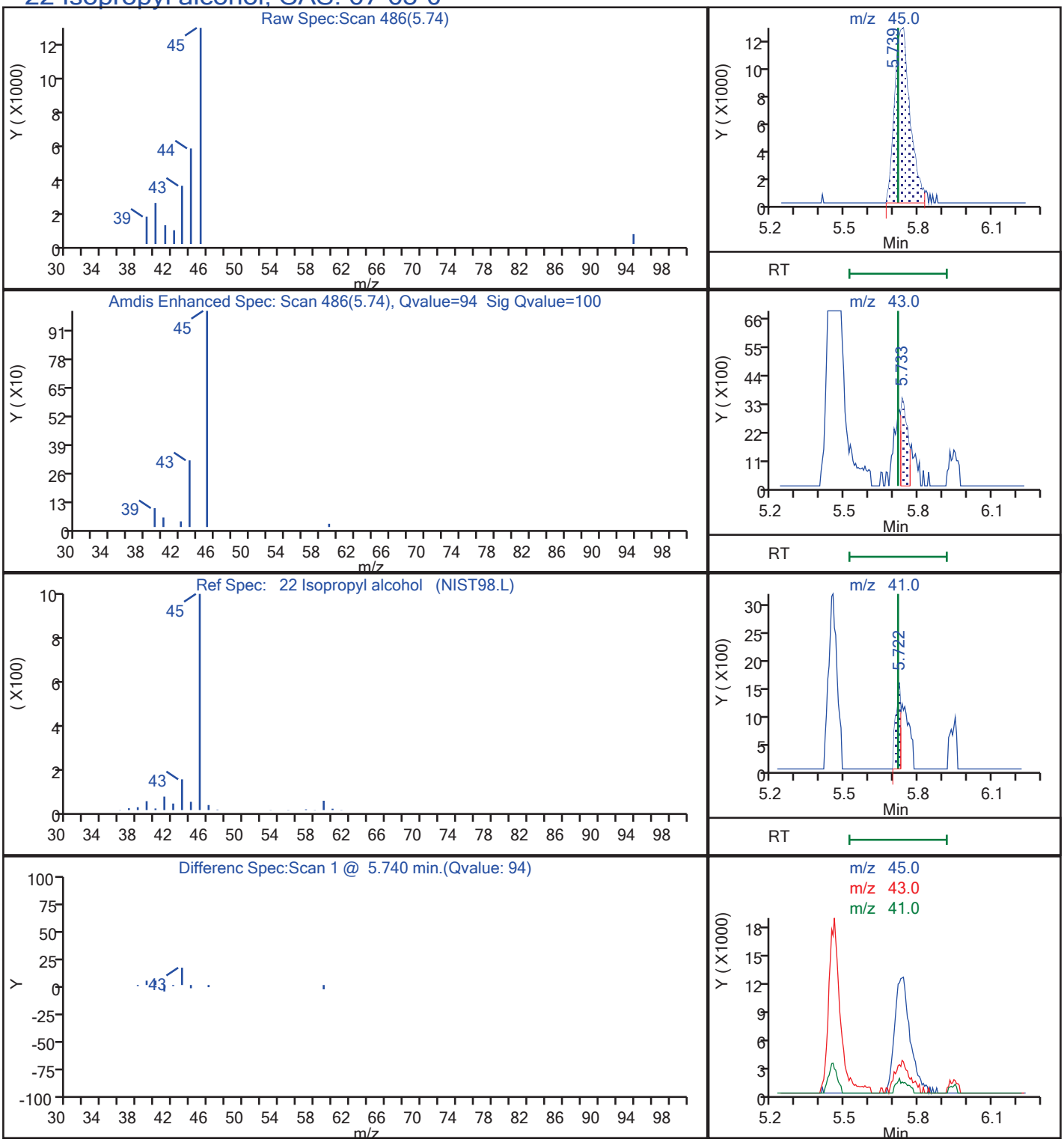
Report Date: 09-Mar-2021 12:06:08 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR16.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 06-Mar-2021 00:57:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52962-A-1 | Lab Sample ID: | 570-52962-1 | | |
| Client ID: | LC864 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0



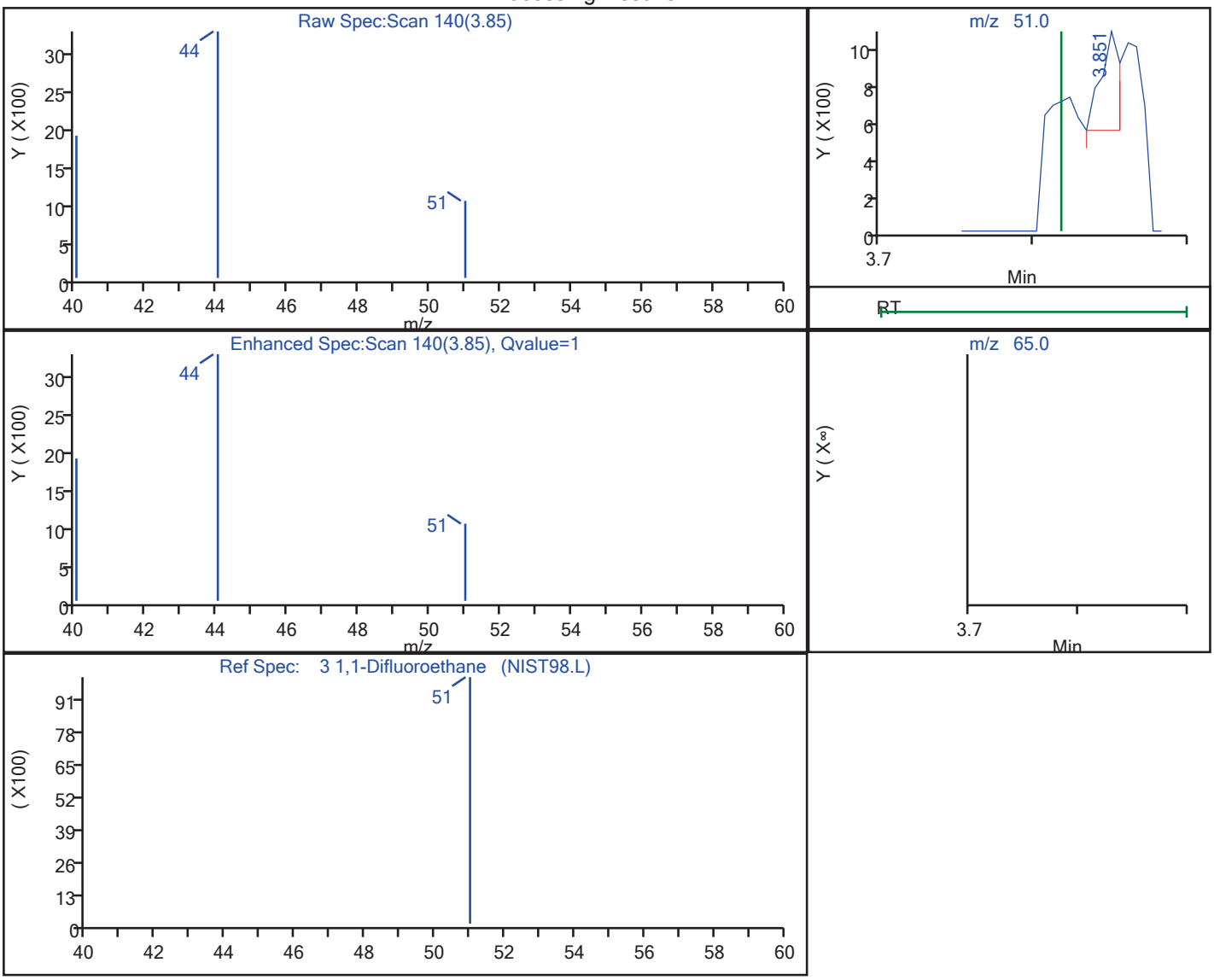
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR16.D | | | | |
| Injection Date: | 06-Mar-2021 00:57:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52962-A-1 | Lab Sample ID: | 570-52962-1 | | |
| Client ID: | LC864 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 3 1,1-Difluoroethane, CAS: 75-37-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.85 | 51.00 | 440 | 0.010162 |
| 3.82 | 65.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 12:01:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

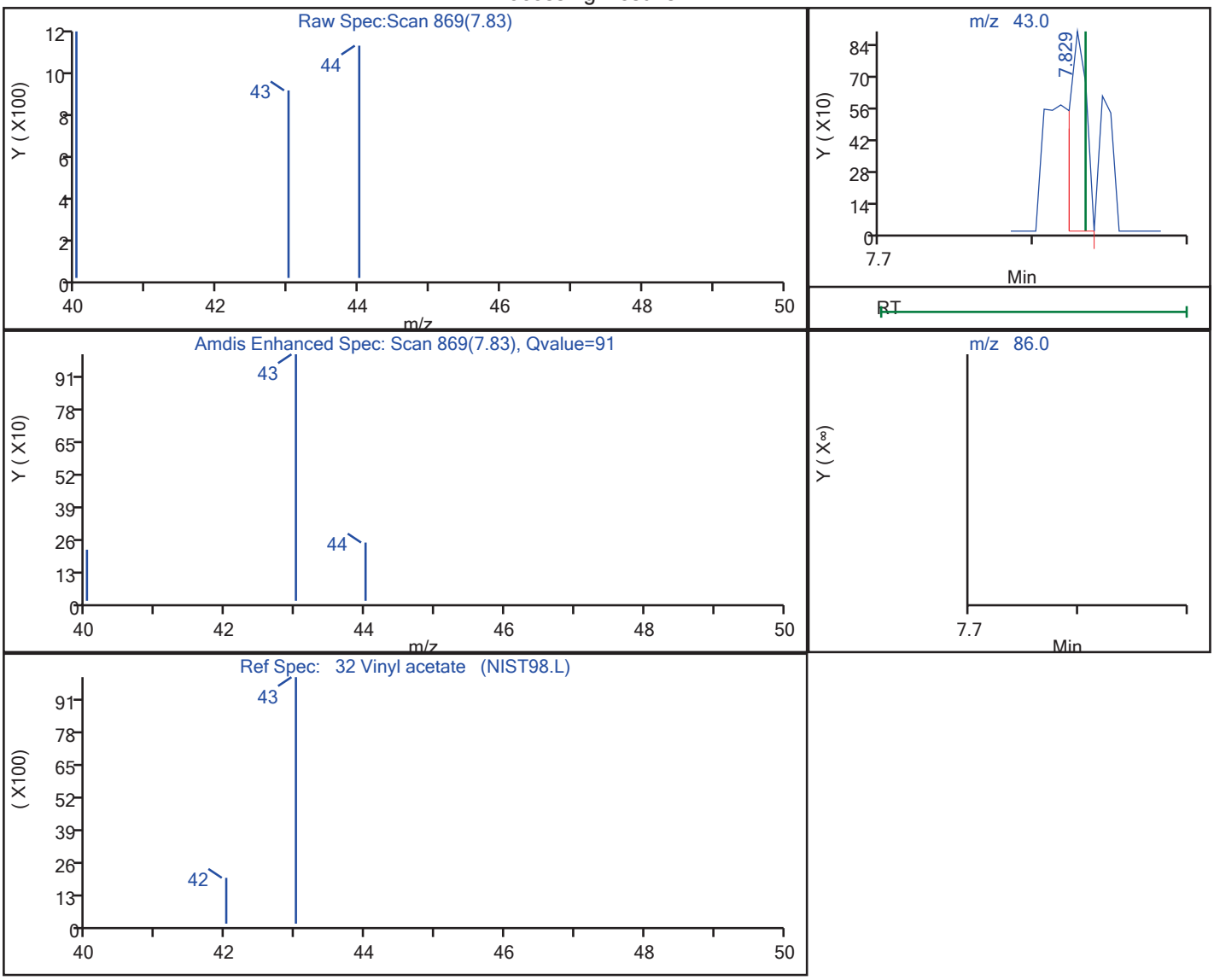
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210309-40401.b\KKK05MAR16.D | | | | |
| Injection Date: | 06-Mar-2021 00:57:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-52962-A-1 | Lab Sample ID: | 570-52962-1 | | |
| Client ID: | LC864 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 12 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 32 Vinyl acetate, CAS: 108-05-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.83 | 43.00 | 686 | 0.007925 |
| 7.83 | 86.00 | 0 | |

Reviewer: rhoadesw, 09-Mar-2021 12:02:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-52962-1

SDG No.:

Client Sample ID: LC864 | Lab Sample ID: 570-52962-1

Matrix: Air | Lab File ID: KKK10MAR12.D

Analysis Method: TO-15 | Date Collected: 03/05/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/10/2021 18:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 135214 | Units: ppb v/v

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 100 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 97 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 98 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR12.D
Lims ID: 570-52962-A-1
Client ID: LC864
Sample Type: Client
Inject. Date: 10-Mar-2021 18:38:30 ALS Bottle#: 3 Worklist Smp#: 12
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-52962-A-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 11-Mar-2021 11:49:09 Calib Date: 10-Mar-2021 15:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR09.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1620

First Level Reviewer: rhoadesw Date: 11-Mar-2021 11:44:24

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.818 | | | | ND | |
| 7 Dichlorodifluoromethane | 85 | | 3.960 | | | | ND | |
| 8 Chloromethane | 50 | | 4.107 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.211 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.314 | | | | ND | |
| 16 Bromomethane | 94 | | 4.686 | | | | ND | U |
| 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| 20 Acetone | 43 | 5.444 | 5.455 | -0.011 | 96 | 17249 | 0.1615 | |
| 21 Trichlorofluoromethane | 101 | | 5.586 | | | | ND | |
| 22 Isopropyl alcohol | 45 | 5.717 | 5.728 | -0.011 | 85 | 3364 | 0.0283 | |
| 24 1,1-Dichloroethene | 61 | | 6.224 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.339 | 6.350 | -0.011 | 89 | 7468 | 0.1254 | |
| 27 Carbon disulfide | 76 | | 6.655 | | | | ND | |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.845 | | | | ND | |
| 33 2-Butanone (MEK) | 43 | | 8.134 | | | | ND | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.794 | 8.821 | -0.027 | 87 | 1611665 | 25.0 | |
| 38 Chloroform | 83 | | 8.991 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.787 | 9.814 | -0.027 | 0 | 1903357 | 25.1 | |
| 42 1,2-Dichloroethane | 62 | | 9.962 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.295 | | | | ND | |
| 44 Benzene | 78 | | 10.928 | | | | ND | |
| 45 Carbon tetrachloride | 117 | | 11.124 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.446 | 11.473 | -0.027 | 93 | 5904230 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.117 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.390 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.466 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.819 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.682 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.933 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.216 | 15.238 | -0.022 | 93 | 5849736 | 24.6 | |
| 60 Toluene | 91 | | 15.402 | | | | ND | |
| 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.068 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.488 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.355 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.490 | 18.501 | -0.011 | 85 | 5345370 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.577 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.347 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.701 | | | | ND | |
| 71 Bromoform | 173 | | 19.712 | | | | ND | |
| 73 Styrene | 104 | | 20.394 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.564 | | | | ND | |
| 75 o-Xylene | 91 | | 20.602 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.507 | 21.513 | -0.006 | 93 | 3863940 | 24.1 | |
| 82 4-Ethyltoluene | 105 | | 23.314 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.510 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.432 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.454 | | | | ND | |
| 87 Benzyl chloride | 91 | | 24.705 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.901 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.860 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.178 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.247 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

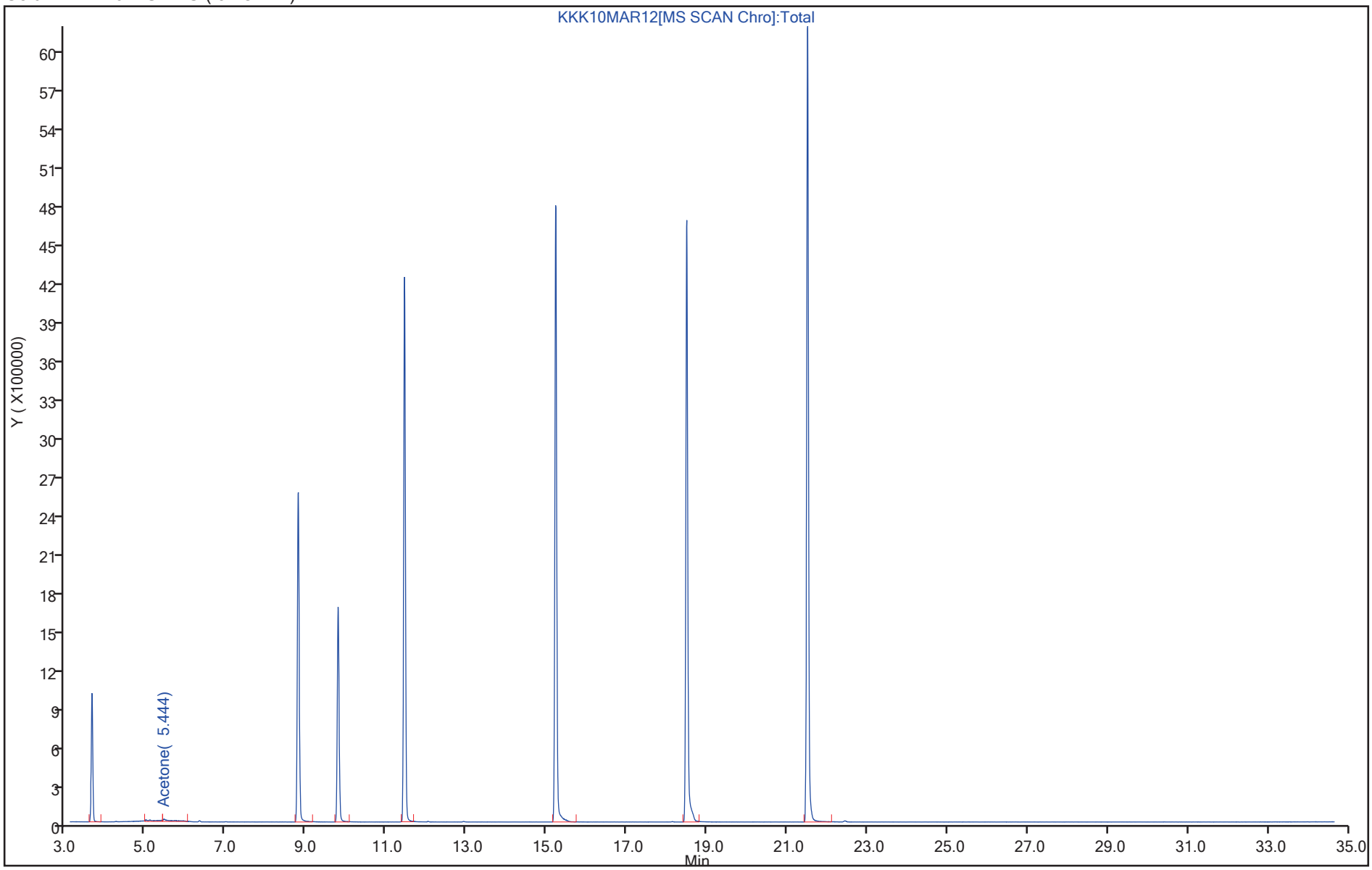
Report Date: 11-Mar-2021 11:49:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR12.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 10-Mar-2021 18:38:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-52962-A-1 | Lab Sample ID: | 570-52962-1 | Worklist Smp#: | 12 |
| Client ID: | LC864 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53393-1

SDG No.:

Client Sample ID: LC1114 | Lab Sample ID: 570-53393-1

Matrix: Air | Lab File ID: KKK11MAR07.D

Analysis Method: TO-15 | Date Collected: 03/10/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/11/2021 14:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 135493 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53393-1

SDG No.:

Client Sample ID: LC1114 | Lab Sample ID: 570-53393-1

Matrix: Air | Lab File ID: KKK11MAR07.D

Analysis Method: TO-15 | Date Collected: 03/10/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/11/2021 14:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 135493 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 100 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 98 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 99 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D
Lims ID: 570-53393-A-1
Client ID: LC1114
Sample Type: Client
Inject. Date: 11-Mar-2021 14:59:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53393-A-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 12-Mar-2021 11:14:23 Calib Date: 10-Mar-2021 15:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR09.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1634

First Level Reviewer: rhoadesw Date: 12-Mar-2021 10:52:45

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.818 | | | | ND | |
| 7 Dichlorodifluoromethane | 85 | | 3.960 | | | | ND | |
| 8 Chloromethane | 50 | | 4.107 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.211 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.315 | | | | ND | |
| 16 Bromomethane | 94 | | 4.686 | | | | ND | U |
| 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| 20 Acetone | 43 | 5.438 | 5.460 | -0.022 | 28 | 4077 | 0.0388 | |
| 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| 22 Isopropyl alcohol | 45 | | 5.717 | | | | ND | U |
| 24 1,1-Dichloroethene | 61 | | 6.224 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.328 | 6.355 | -0.027 | 89 | 7458 | 0.1273 | M |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| 27 Carbon disulfide | 76 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.839 | | | | ND | |
| 33 2-Butanone (MEK) | 43 | | 8.134 | | | | ND | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.789 | 8.811 | -0.022 | 88 | 1585253 | 25.0 | |
| 38 Chloroform | 83 | | 8.980 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.782 | 9.809 | -0.027 | 0 | 1872316 | 25.1 | |
| 42 1,2-Dichloroethane | 62 | | 9.962 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | | 10.928 | | | | ND | |
| 45 Carbon tetrachloride | 117 | | 11.124 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.440 | 11.468 | -0.028 | 94 | 5847084 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.112 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.385 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.461 | | | | ND | |

| | Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|---|
| | 55 cis-1,3-Dichloropropene | 75 | | 13.809 | | | | ND | |
| | 57 trans-1,3-Dichloropropene | 75 | | 14.671 | | | | ND | |
| | 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ | 59 Toluene-d8 (Surr) | 98 | 15.216 | 15.233 | -0.017 | 93 | 5817349 | 24.7 | |
| | 60 Toluene | 91 | | 15.402 | | | | ND | |
| | 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| | 63 Chlorodibromomethane | 129 | | 16.062 | | | | ND | |
| | 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| | 67 Tetrachloroethene | 166 | | 17.344 | | | | ND | |
| * | 68 Chlorobenzene-d5 | 117 | 18.485 | 18.496 | -0.011 | 85 | 5295336 | 25.0 | |
| | 69 Chlorobenzene | 112 | | 18.572 | | | | ND | |
| | 70 Ethylbenzene | 91 | | 19.341 | | | | ND | |
| | 72 m-Xylene & p-Xylene | 91 | | 19.707 | | | | ND | |
| | 71 Bromoform | 173 | | 19.707 | | | | ND | |
| | 73 Styrene | 104 | | 20.389 | | | | ND | |
| | 74 1,1,2,2-Tetrachloroethane | 83 | | 20.558 | | | | ND | |
| | 75 o-Xylene | 91 | | 20.596 | | | | ND | |
| $ | 78 4-Bromofluorobenzene (Surr) | 95 | 21.502 | 21.513 | -0.011 | 93 | 3878697 | 24.5 | |
| | 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| | 83 1,3,5-Trimethylbenzene | 105 | | 23.516 | | | | ND | |
| | 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| | 86 1,2,4-Trimethylbenzene | 105 | | 24.449 | | | | ND | |
| | 87 Benzyl chloride | 91 | | 24.711 | | | | ND | |
| | 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| | 89 1,4-Dichlorobenzene | 146 | | 24.896 | | | | ND | |
| | 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| | 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| | 94 n-Butylbenzene | 91 | | 26.648 | | | | ND | |
| | 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.871 | | | | ND | |
| | 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| | 99 Hexachlorobutadiene | 225 | | 31.247 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

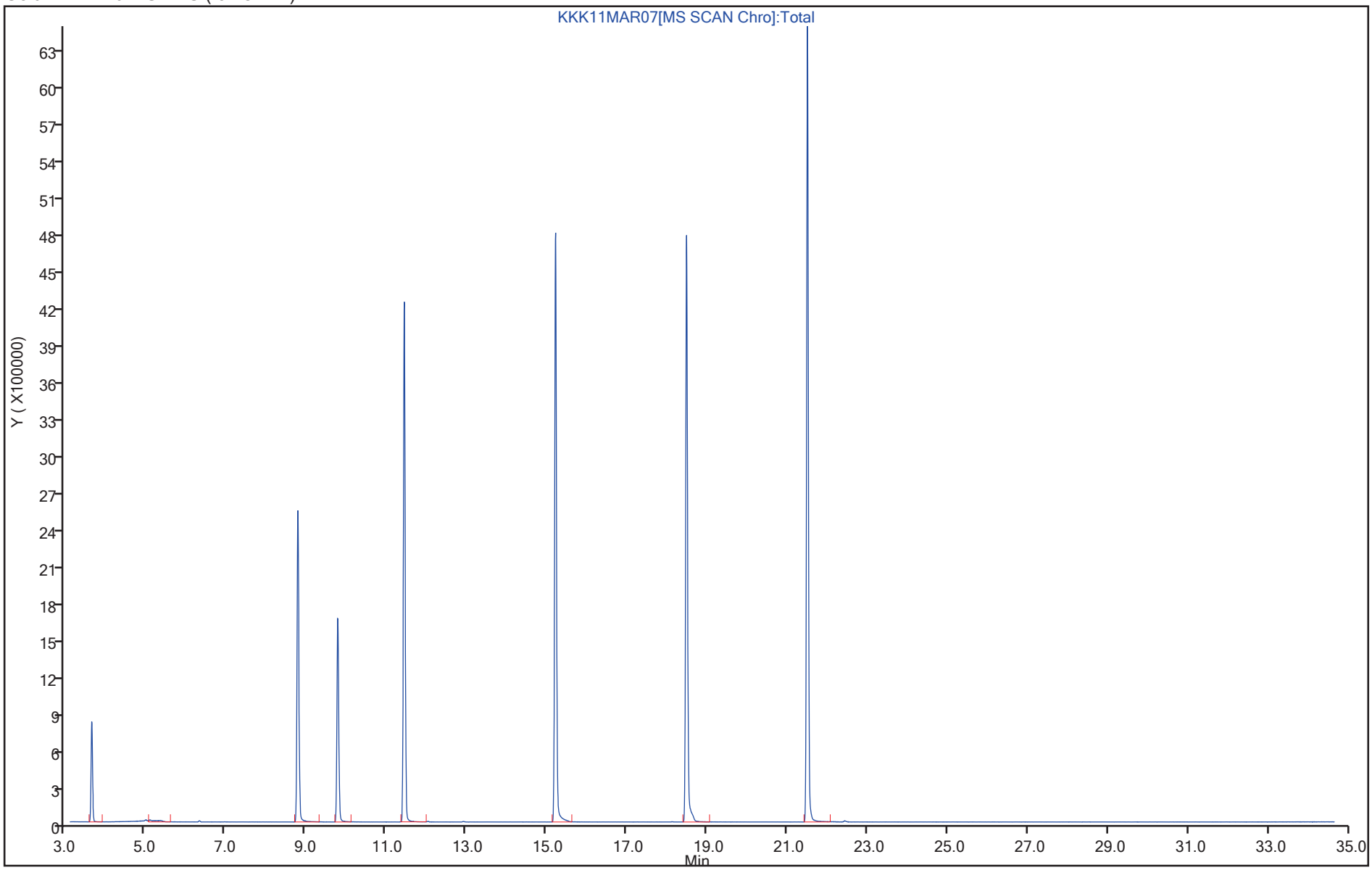
Report Date: 12-Mar-2021 11:14:30 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Mar-2021 14:59:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-53393-A-1 | Lab Sample ID: | 570-53393-1 | Worklist Smp#: | 7 |
| Client ID: | LC1114 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



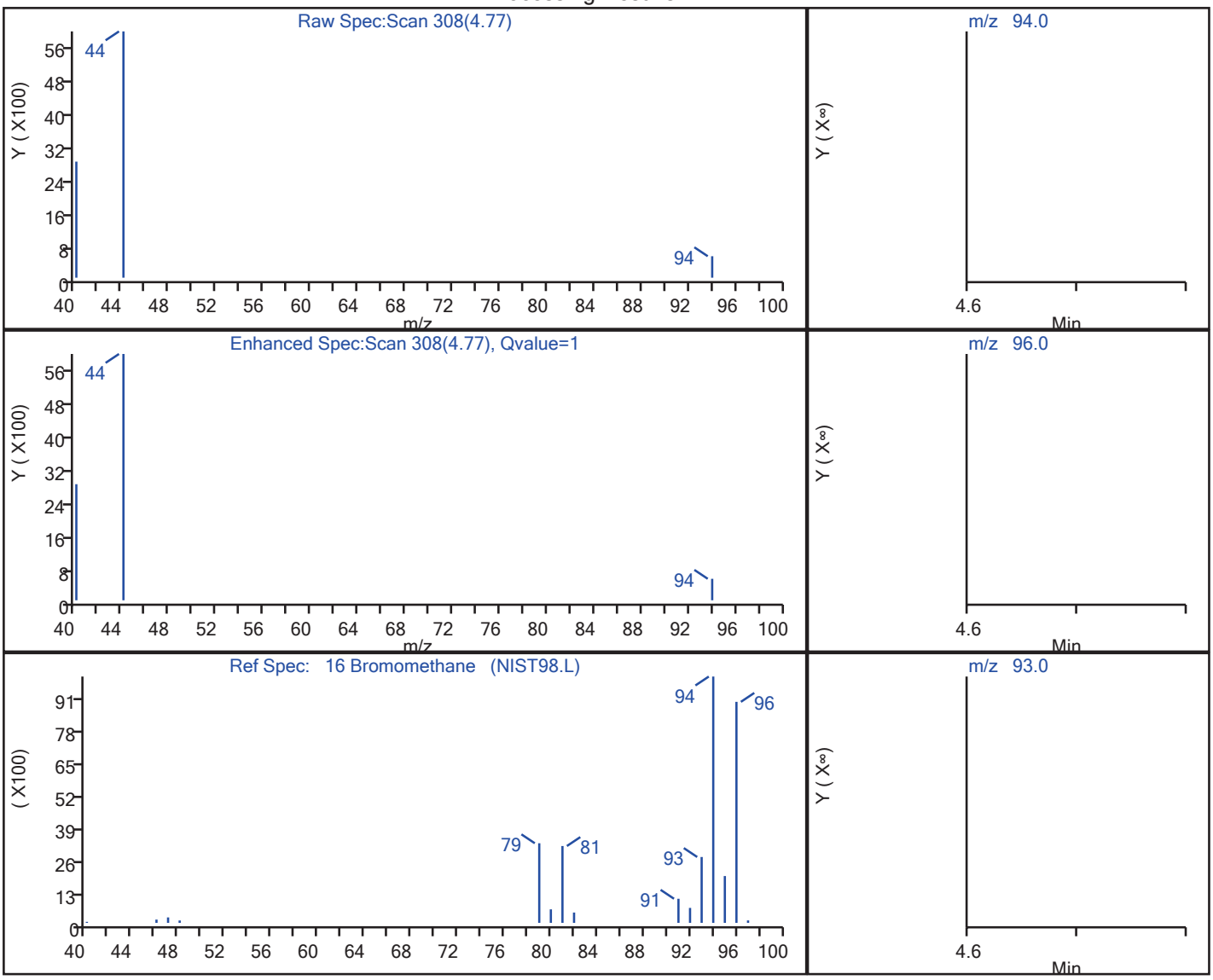
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D | | | | |
| Injection Date: | 11-Mar-2021 14:59:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53393-A-1 | Lab Sample ID: | 570-53393-1 | | |
| Client ID: | LC1114 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 16 Bromomethane, CAS: 74-83-9

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.77 | 94.00 | 171 | 0.002643 |
| 4.69 | 96.00 | 0 | |
| 4.69 | 93.00 | 0 | |

Reviewer: rhoadesw, 12-Mar-2021 10:52:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

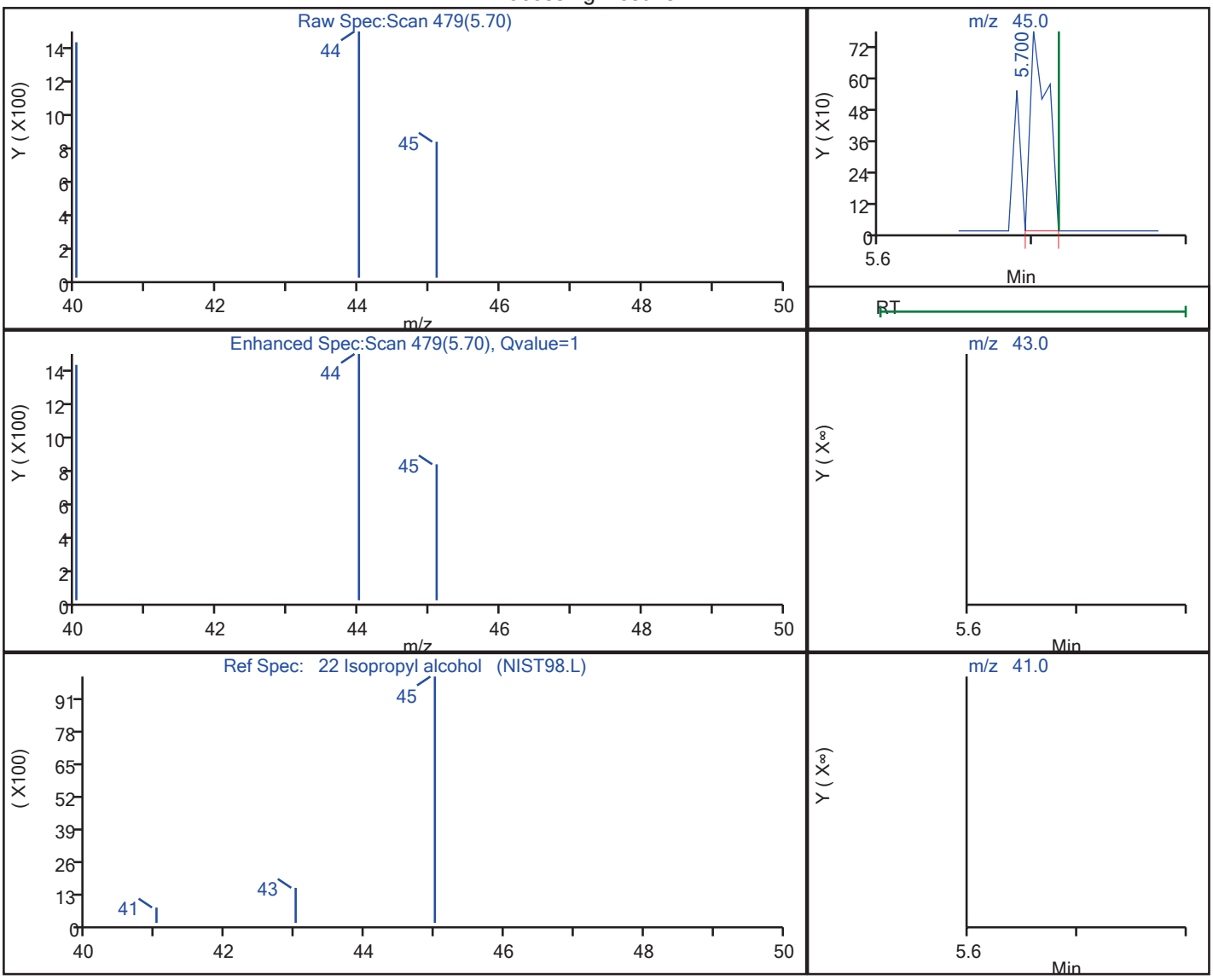
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D | | | | |
| Injection Date: | 11-Mar-2021 14:59:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53393-A-1 | Lab Sample ID: | 570-53393-1 | | |
| Client ID: | LC1114 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.70 | 45.00 | 607 | 0.005193 |
| 5.73 | 43.00 | 0 | |
| 5.73 | 41.00 | 0 | |

Reviewer: rhoadesw, 12-Mar-2021 10:52:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

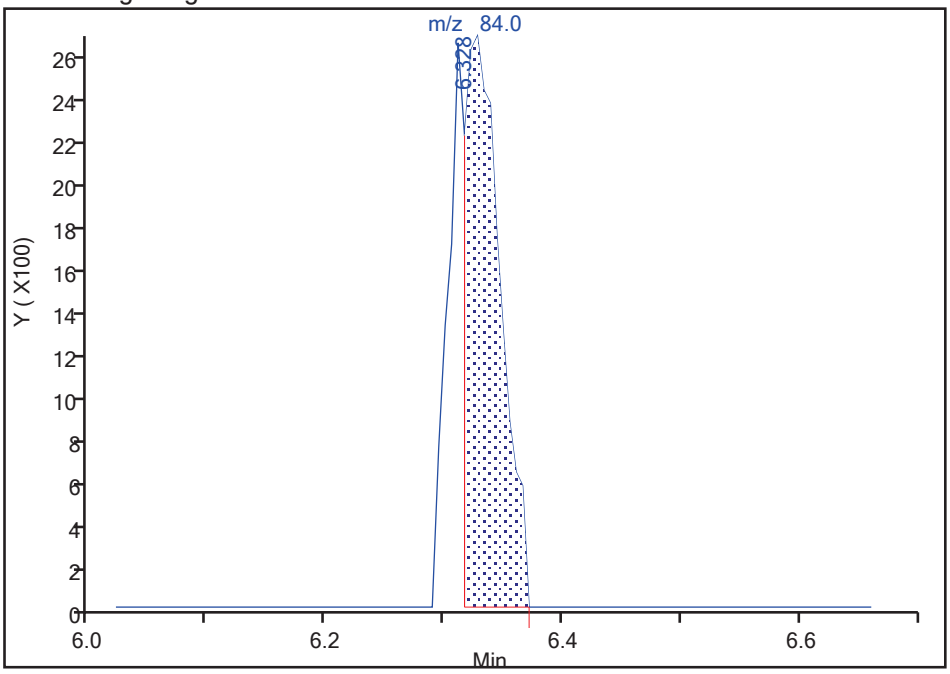
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR07.D | | | | |
| Injection Date: | 11-Mar-2021 14:59:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53393-A-1 | Lab Sample ID: | 570-53393-1 | | |
| Client ID: | LC1114 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 25 Methylene Chloride, CAS: 75-09-2

Signal: 1

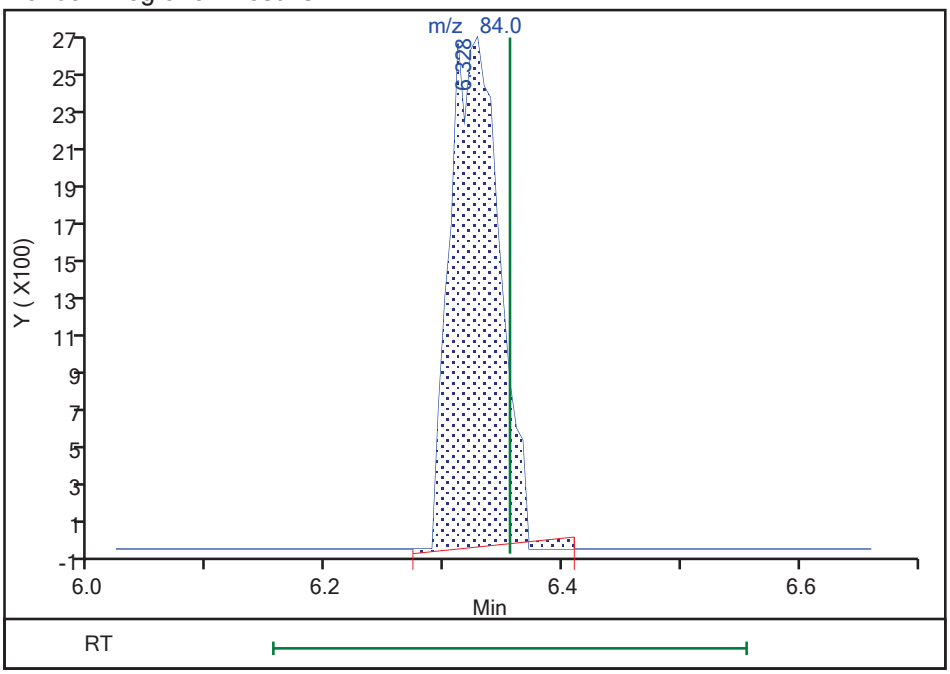
Processing Integration Results

RT: 6.33
Area: 5564
Amount: 0.094951
Amount Units: ppb v/v




Manual Integration Results

RT: 6.33
Area: 7458
Amount: 0.127273
Amount Units: ppb v/v




Reviewer: rhoadesw, 12-Mar-2021 10:52:32
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience Job No.: 570-53468-1

SDG No.:

Client Sample ID: LC984 Lab Sample ID: 570-53468-1

Matrix: Air Lab File ID: KKK11MAR08.D

Analysis Method: TO-15 Date Collected: 03/11/2021 00:00

Sample wt/vol: 400(mL) Date Analyzed: 03/11/2021 15:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 135493 Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53468-1

SDG No.:

Client Sample ID: LC984 | Lab Sample ID: 570-53468-1

Matrix: Air | Lab File ID: KKK11MAR08.D

Analysis Method: TO-15 | Date Collected: 03/11/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/11/2021 15:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 135493 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 100 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 98 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 100 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR08.D
Lims ID: 570-53468-A-1
Client ID: LC984
Sample Type: Client
Inject. Date: 11-Mar-2021 15:52:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53468-A-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 12-Mar-2021 11:14:23 Calib Date: 10-Mar-2021 15:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR09.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1634

First Level Reviewer: rhoadesw Date: 12-Mar-2021 10:53:13

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.818 | | | | ND | |
| 7 Dichlorodifluoromethane | 85 | | 3.960 | | | | ND | |
| 8 Chloromethane | 50 | | 4.107 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.211 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.315 | | | | ND | |
| 16 Bromomethane | 94 | | 4.686 | | | | ND | |
| 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| 20 Acetone | 43 | 5.515 | 5.460 | 0.055 | 100 | 20318 | 0.1921 | |
| 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| 22 Isopropyl alcohol | 45 | | 5.717 | | | | ND | U |
| 24 1,1-Dichloroethene | 61 | | 6.224 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.372 | 6.355 | 0.017 | 79 | 7183 | 0.1217 | M |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| 27 Carbon disulfide | 76 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.839 | | | | ND | |
| 33 2-Butanone (MEK) | 43 | 8.199 | 8.134 | 0.065 | 97 | 8802 | 0.1058 | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.832 | 8.811 | 0.021 | 87 | 1596308 | 25.0 | |
| 38 Chloroform | 83 | | 8.980 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.825 | 9.809 | 0.016 | 0 | 1869938 | 24.9 | |
| 42 1,2-Dichloroethane | 62 | | 9.962 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | | 10.928 | | | | ND | |
| 45 Carbon tetrachloride | 117 | | 11.124 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.484 | 11.468 | 0.016 | 93 | 5826848 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.112 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.385 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.461 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.809 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.671 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.244 | 15.233 | 0.011 | 93 | 5893736 | 25.1 | |
| 60 Toluene | 91 | | 15.402 | | | | ND | |
| 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.062 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.344 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.507 | 18.496 | 0.011 | 85 | 5355680 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.572 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.341 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.707 | | | | ND | |
| 71 Bromoform | 173 | | 19.707 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.558 | | | | ND | |
| 75 o-Xylene | 91 | | 20.596 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.518 | 21.513 | 0.005 | 94 | 3938645 | 24.6 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.516 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.449 | | | | ND | |
| 87 Benzyl chloride | 91 | | 24.711 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.896 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.648 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.871 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.247 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

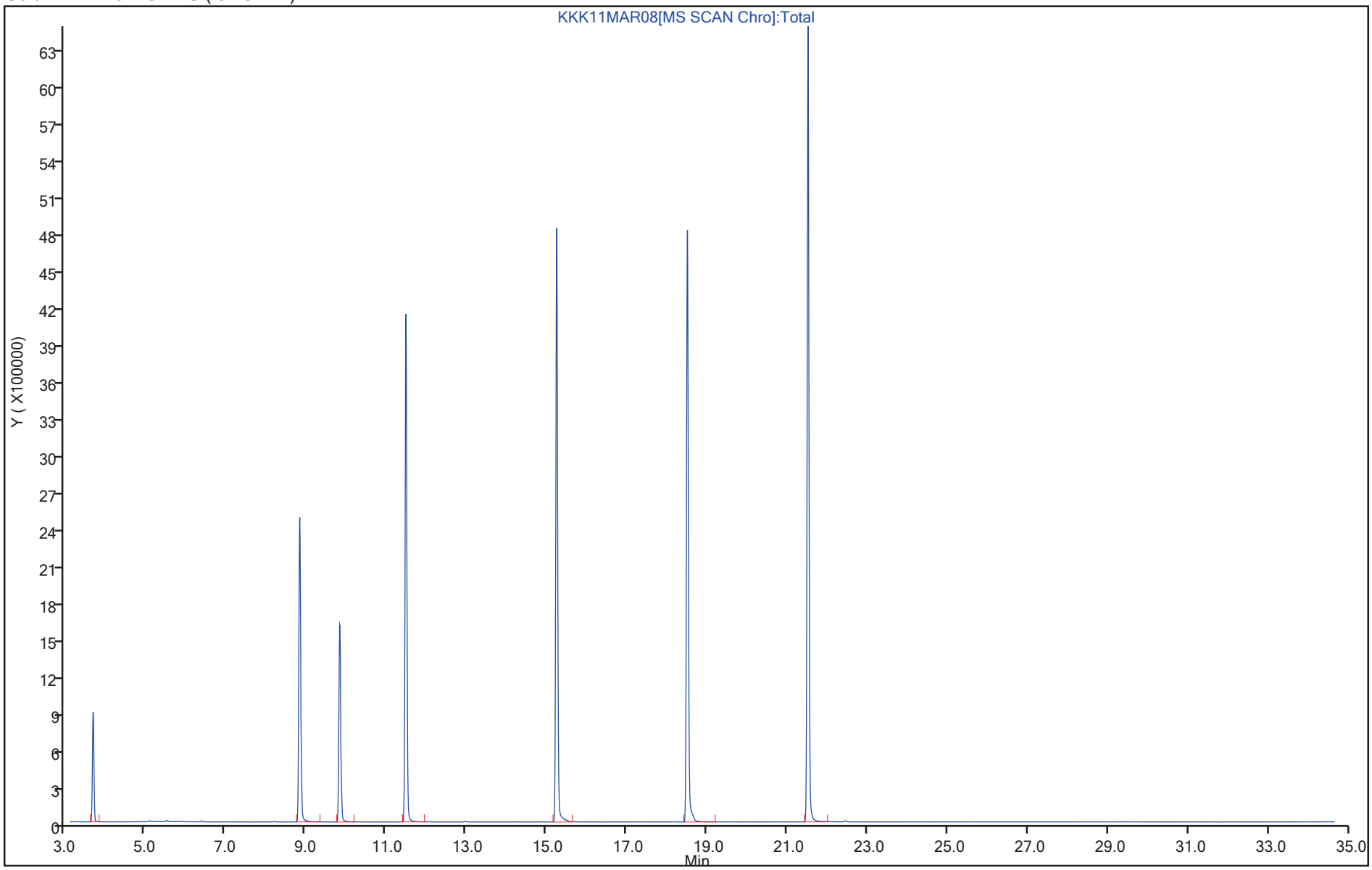
Report Date: 12-Mar-2021 11:14:31 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR08.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Mar-2021 15:52:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-53468-A-1 | Lab Sample ID: | 570-53468-1 | Worklist Smp#: | 8 |
| Client ID: | LC984 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 8 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



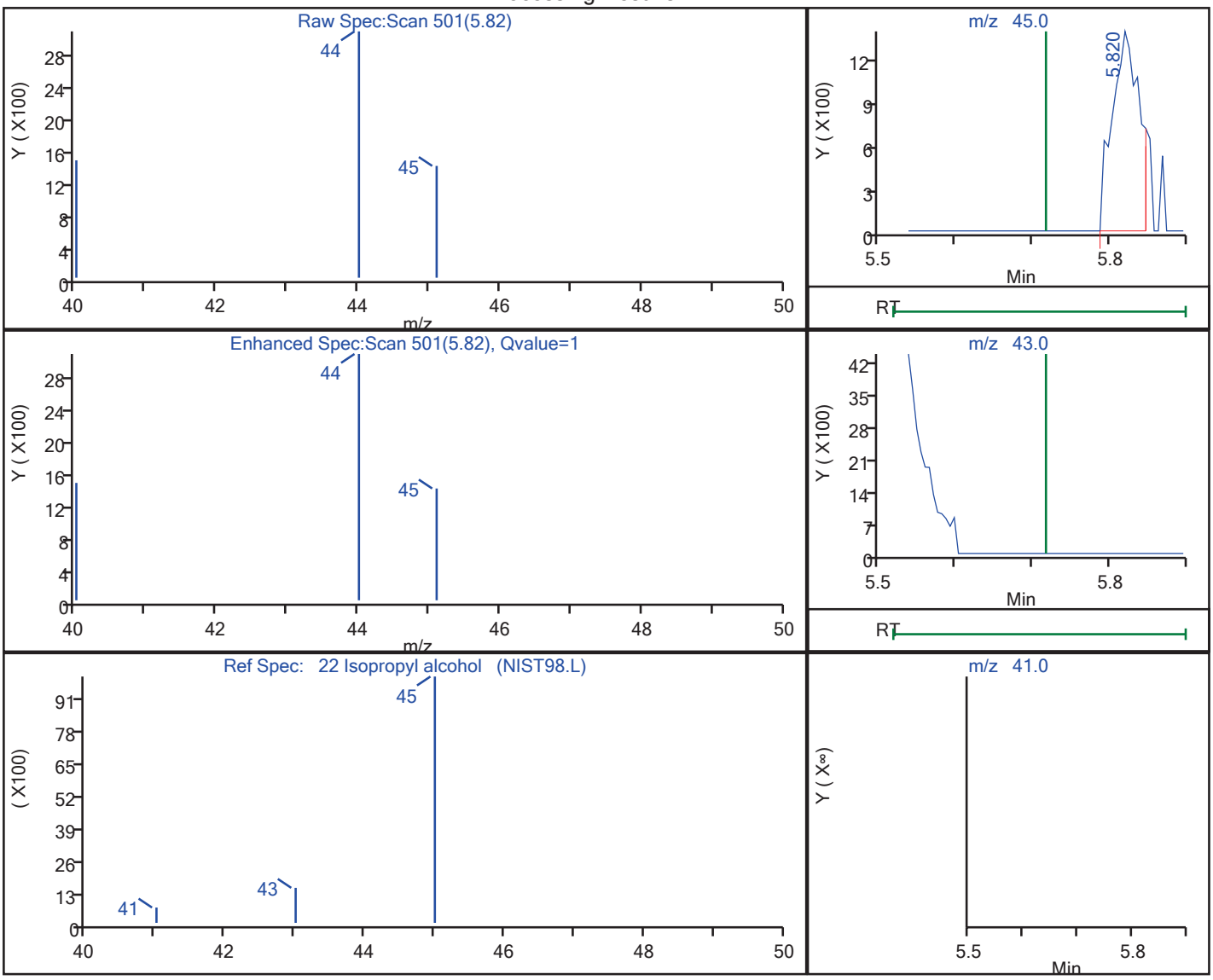
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR08.D | | | | |
| Injection Date: | 11-Mar-2021 15:52:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53468-A-1 | Lab Sample ID: | 570-53468-1 | | |
| Client ID: | LC984 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 8 | Worklist Smp#: | 8 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.82 | 45.00 | 3383 | 0.028744 |
| 5.73 | 43.00 | 0 | |
| 5.73 | 41.00 | 0 | |

Reviewer: rhoadesw, 12-Mar-2021 10:52:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

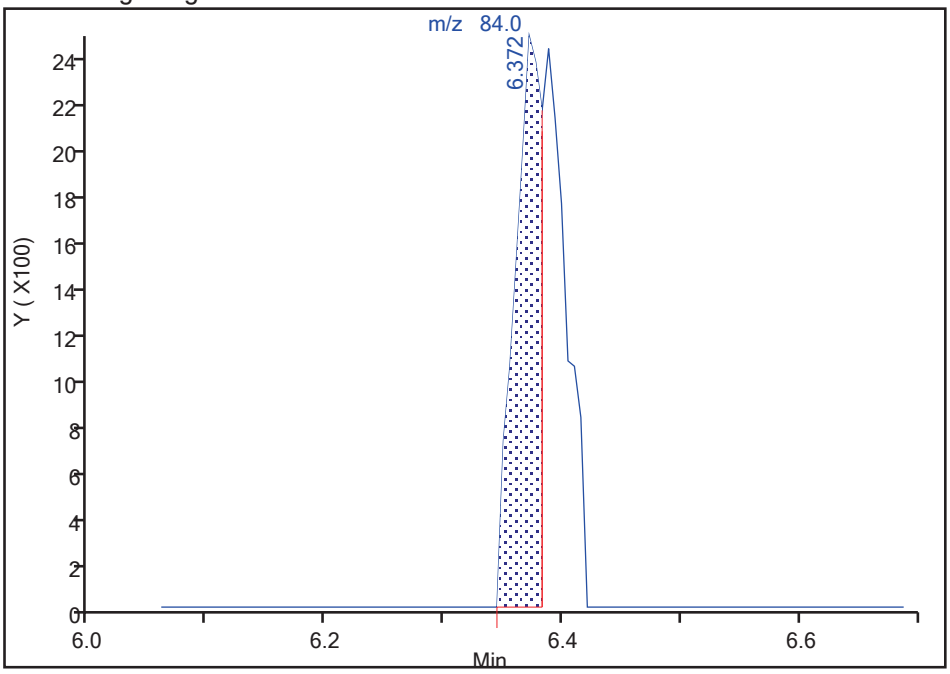
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR08.D | | | | |
| Injection Date: | 11-Mar-2021 15:52:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53468-A-1 | Lab Sample ID: | 570-53468-1 | | |
| Client ID: | LC984 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 8 | Worklist Smp#: | 8 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 25 Methylene Chloride, CAS: 75-09-2

Signal: 1

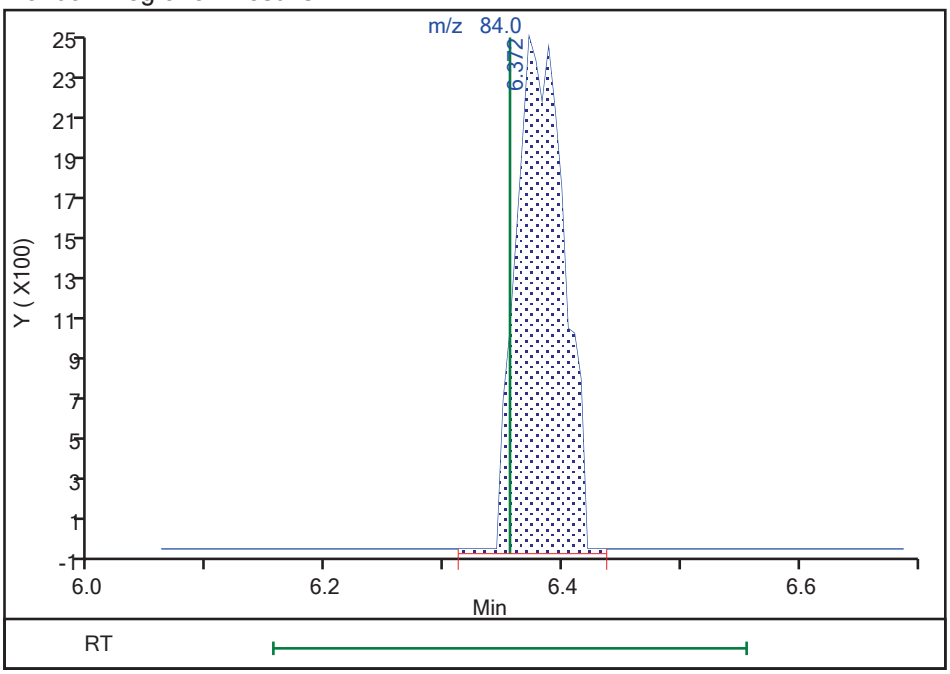
Processing Integration Results

RT: 6.37
Area: 3991
Amount: 0.067636
Amount Units: ppb v/v




Manual Integration Results

RT: 6.37
Area: 7183
Amount: 0.121731
Amount Units: ppb v/v




Reviewer: rhoadesw, 12-Mar-2021 10:53:03
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53469-1

SDG No.:

Client Sample ID: LC1188 | Lab Sample ID: 570-53469-1

Matrix: Air | Lab File ID: KKK11MAR09.D

Analysis Method: TO-15 | Date Collected: 03/11/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/11/2021 16:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 135493 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | ND | | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | ND | | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53469-1

SDG No.:

Client Sample ID: LC1188 | Lab Sample ID: 570-53469-1

Matrix: Air | Lab File ID: KKK11MAR09.D

Analysis Method: TO-15 | Date Collected: 03/11/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/11/2021 16:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 135493 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 100 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 100 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR09.D
Lims ID: 570-53469-A-1
Client ID: LC1188
Sample Type: Client
Inject. Date: 11-Mar-2021 16:44:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53469-A-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 12-Mar-2021 11:14:23 Calib Date: 10-Mar-2021 15:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR09.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1634

First Level Reviewer: rhoadesw Date: 12-Mar-2021 10:53:47

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 3 1,1-Difluoroethane | 51 | | 3.818 | | | | ND | |
| 7 Dichlorodifluoromethane | 85 | | 3.960 | | | | ND | |
| 8 Chloromethane | 50 | | 4.107 | | | | ND | |
| 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.211 | | | | ND | |
| 12 Vinyl chloride | 62 | | 4.315 | | | | ND | |
| 16 Bromomethane | 94 | | 4.686 | | | | ND | |
| 17 Chloroethane | 64 | | 4.849 | | | | ND | |
| 20 Acetone | 43 | 5.499 | 5.460 | 0.039 | 100 | 17298 | 0.1643 | |
| 21 Trichlorofluoromethane | 101 | | 5.591 | | | | ND | |
| 22 Isopropyl alcohol | 45 | | 5.717 | | | | ND | MU |
| 24 1,1-Dichloroethene | 61 | | 6.224 | | | | ND | |
| 25 Methylene Chloride | 84 | 6.366 | 6.355 | 0.011 | 86 | 6872 | 0.1170 | |
| 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 6.655 | | | | ND | |
| 27 Carbon disulfide | 76 | | 6.661 | | | | ND | |
| 29 trans-1,2-Dichloroethene | 96 | | 7.381 | | | | ND | |
| 30 1,1-Dichloroethane | 63 | | 7.616 | | | | ND | |
| 31 Methyl tert-butyl ether | 73 | | 7.725 | | | | ND | |
| 32 Vinyl acetate | 43 | | 7.839 | | | | ND | |
| 33 2-Butanone (MEK) | 43 | 8.161 | 8.134 | 0.027 | 99 | 9634 | 0.1163 | |
| 34 cis-1,2-Dichloroethene | 96 | | 8.614 | | | | ND | |
| * 35 Chlorobromomethane (IS) | 130 | 8.816 | 8.811 | 0.005 | 87 | 1588929 | 25.0 | |
| 38 Chloroform | 83 | | 8.980 | | | | ND | |
| $ 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.809 | 9.809 | 0.000 | 0 | 1866826 | 25.0 | |
| 42 1,2-Dichloroethane | 62 | | 9.962 | | | | ND | |
| 43 1,1,1-Trichloroethane | 97 | | 10.289 | | | | ND | |
| 44 Benzene | 78 | | 10.928 | | | | ND | |
| 45 Carbon tetrachloride | 117 | | 11.124 | | | | ND | |
| * 47 1,4-Difluorobenzene | 114 | 11.468 | 11.468 | 0.000 | 93 | 5827245 | 25.0 | |
| 49 1,2-Dichloropropane | 63 | | 12.112 | | | | ND | |
| 50 Dichlorobromomethane | 83 | | 12.385 | | | | ND | |
| 52 Trichloroethene | 95 | | 12.461 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.809 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.671 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.922 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.233 | 15.233 | 0.000 | 93 | 5856428 | 24.9 | |
| 60 Toluene | 91 | | 15.402 | | | | ND | |
| 61 2-Hexanone | 58 | | 15.920 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.062 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.482 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 17.344 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 18.501 | 18.496 | 0.005 | 85 | 5341679 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.572 | | | | ND | |
| 70 Ethylbenzene | 91 | | 19.341 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.707 | | | | ND | |
| 71 Bromoform | 173 | | 19.707 | | | | ND | |
| 73 Styrene | 104 | | 20.389 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.558 | | | | ND | |
| 75 o-Xylene | 91 | | 20.596 | | | | ND | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.513 | 21.513 | 0.000 | 97 | 3952386 | 24.7 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.516 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | | 24.449 | | | | ND | |
| 87 Benzyl chloride | 91 | | 24.711 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.896 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.648 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.871 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.247 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

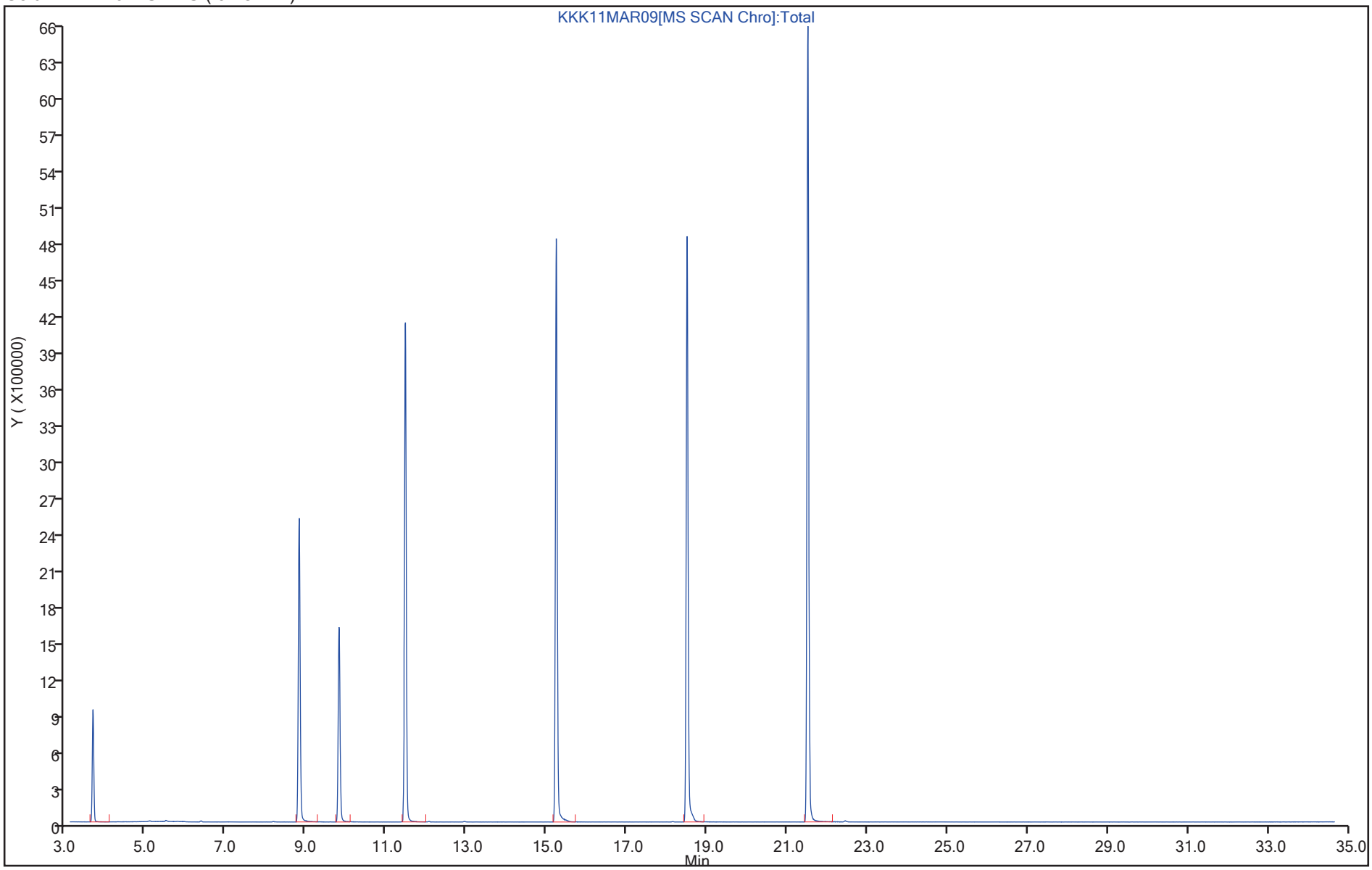
Report Date: 12-Mar-2021 11:14:32 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR09.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Mar-2021 16:44:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-53469-A-1 | Lab Sample ID: | 570-53469-1 | Worklist Smp#: | 9 |
| Client ID: | LC1188 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 9 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

Column: Rxi-624Sil MS ( 0.18 mm)



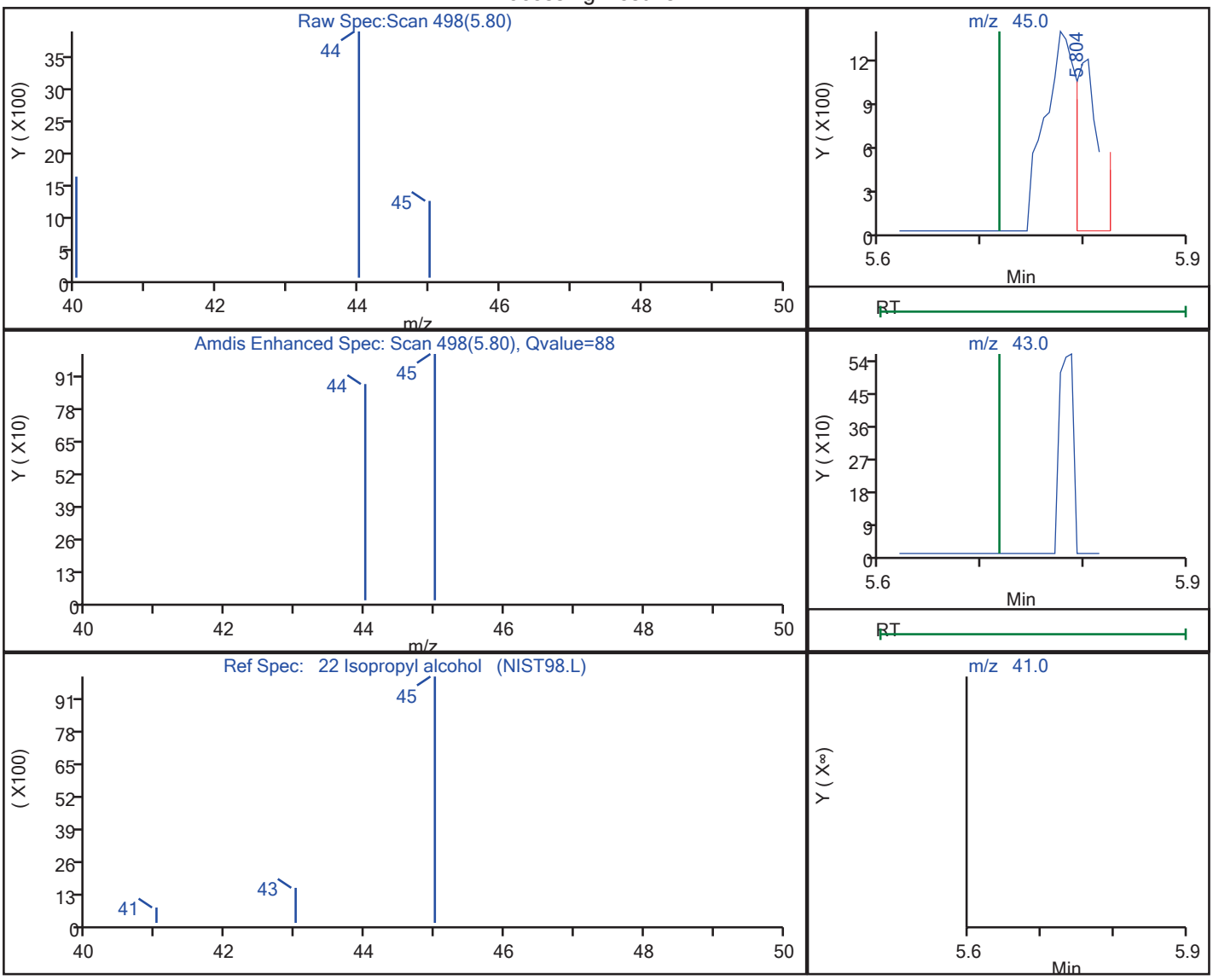
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210312-40672.b\KKK11MAR09.D | | | | |
| Injection Date: | 11-Mar-2021 16:44:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53469-A-1 | Lab Sample ID: | 570-53469-1 | | |
| Client ID: | LC1188 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 9 | Worklist Smp#: | 9 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 22 Isopropyl alcohol, CAS: 67-63-0

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.80 | 45.00 | 1713 | 0.014622 |
| 5.73 | 43.00 | 0 | |
| 5.73 | 41.00 | 0 | |

Reviewer: rhoadesw, 12-Mar-2021 10:53:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience Job No.: 570-53852-1

SDG No.:

Client Sample ID: LC1033 Lab Sample ID: 570-53852-1

Matrix: Air Lab File ID: KKK16MAR07.D

Analysis Method: TO-15 Date Collected: 03/14/2021 00:00

Sample wt/vol: 400(mL) Date Analyzed: 03/16/2021 14:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 136550 Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.50 | 0.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.17 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.5 | 0.30 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.50 | 0.14 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.50 | 0.10 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.50 | 0.18 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 2.0 | 0.37 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.66 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1.5 | 0.33 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | ND | | 1.5 | 0.29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.50 | 0.17 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.50 | 0.15 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.50 | 0.14 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.50 | 0.20 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.50 | 0.24 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.50 | 0.25 |
| 78-93-3 | 2-Butanone | ND | | 1.5 | 0.41 |
| 591-78-6 | 2-Hexanone | ND | | 1.5 | 0.64 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.50 | 0.25 |
| 67-64-1 | Acetone | 1.8 | J | 2.0 | 0.40 |
| 71-43-2 | Benzene | ND | | 0.50 | 0.16 |
| 100-44-7 | Benzyl chloride | ND | | 1.5 | 0.51 |
| 75-27-4 | Bromodichloromethane | ND | | 0.50 | 0.11 |
| 75-25-2 | Bromoform | ND | | 0.50 | 0.17 |
| 74-83-9 | Bromomethane | ND | | 0.50 | 0.14 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.50 | 0.14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.50 | 0.22 |
| 75-15-0 | Carbon disulfide | 0.24 | J | 2.0 | 0.19 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.50 | 0.21 |
| 108-90-7 | Chlorobenzene | ND | | 0.50 | 0.13 |
| 75-00-3 | Chloroethane | ND | | 0.50 | 0.17 |
| 67-66-3 | Chloroform | ND | | 0.50 | 0.16 |
| 74-87-3 | Chloromethane | ND | | 0.50 | 0.16 |
| 124-48-1 | Dibromochloromethane | ND | | 0.50 | 0.16 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53852-1

SDG No.:

Client Sample ID: LC1033 | Lab Sample ID: 570-53852-1

Matrix: Air | Lab File ID: KKK16MAR07.D

Analysis Method: TO-15 | Date Collected: 03/14/2021 00:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 14:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136550 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.50 | 0.20 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 2.0 | 0.19 |
| 100-41-4 | Ethylbenzene | ND | | 0.50 | 0.25 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1.5 | 0.58 |
| 67-63-0 | Isopropanol | ND | | 5.0 | 0.39 |
| 75-09-2 | Methylene Chloride | ND | | 5.0 | 0.54 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 2.0 | 0.34 |
| 104-51-8 | n-Butylbenzene | ND | | 1.5 | 0.43 |
| 95-47-6 | o-Xylene | ND | | 0.50 | 0.20 |
| 179601-23-1 | m,p-Xylene | ND | | 2.0 | 0.63 |
| 135-98-8 | sec-Butylbenzene | ND | | 1.5 | 0.29 |
| 100-42-5 | Styrene | ND | | 1.5 | 0.53 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.50 | 0.13 |
| 10061-02-6 | t-1,3-Dichloropropene | ND | | 1.0 | 0.21 |
| 98-06-6 | tert-Butylbenzene | ND | | 1.5 | 0.27 |
| 127-18-4 | Tetrachloroethene | ND | | 0.50 | 0.17 |
| 108-88-3 | Toluene | ND | | 0.50 | 0.13 |
| 79-01-6 | Trichloroethene | ND | | 0.50 | 0.18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1.0 | 0.24 |
| 108-05-4 | Vinyl acetate | ND | | 2.0 | 0.35 |
| 75-01-4 | Vinyl chloride | ND | | 0.50 | 0.16 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 101 | | 70-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 67-131 |
| 2037-26-5 | Toluene-d8 (Surr) | 101 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D
Lims ID: 570-53852-A-1
Client ID: LC1033
Sample Type: Client
Inject. Date: 16-Mar-2021 14:49:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53852-A-1
Misc. Info.: a_TO15_IS/SS_00006
Operator ID: 12gr Instrument ID: GCMSKKK

Method: \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\AIRMS_GCMSKKK.m
Limit Group: MSV - TO14A TO15
Last Update: 17-Mar-2021 10:08:57 Calib Date: 10-Mar-2021 15:51:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSKKK\20210311-40585.b\KKK10MAR09.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1623

First Level Reviewer: rhoadesw Date: 17-Mar-2021 10:03:11

| | Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|---|
| | 3 1,1-Difluoroethane | 51 | | 3.829 | | | | ND | U |
| | 7 Dichlorodifluoromethane | 85 | 3.971 | 3.965 | 0.006 | 85 | 3045 | 0.0210 | |
| | 8 Chloromethane | 50 | 4.123 | 4.118 | 0.005 | 86 | 2655 | 0.0693 | |
| | 9 1,2-Dichloro-1,1,2,2-tetrafluoro | 135 | | 4.222 | | | | ND | |
| | 12 Vinyl chloride | 62 | | 4.325 | | | | ND | |
| | 16 Bromomethane | 94 | | 4.702 | | | | ND | |
| | 17 Chloroethane | 64 | | 4.860 | | | | ND | |
| | 20 Acetone | 43 | 5.477 | 5.488 | -0.011 | 97 | 186094 | 1.76 | |
| | 21 Trichlorofluoromethane | 101 | 5.597 | 5.608 | -0.011 | 1 | 599 | 0.002815 | |
| | 22 Isopropyl alcohol | 45 | 5.771 | 5.760 | 0.011 | 95 | 17975 | 0.1525 | |
| | 24 1,1-Dichloroethene | 61 | | 6.246 | | | | ND | |
| | 25 Methylene Chloride | 84 | 6.371 | 6.372 | -0.001 | 88 | 9057 | 0.1533 | |
| | 26 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | 6.672 | 6.677 | -0.005 | 36 | 384 | 0.002905 | |
| | 27 Carbon disulfide | 76 | 6.672 | 6.677 | -0.005 | 99 | 41349 | 0.2435 | |
| | 29 trans-1,2-Dichloroethene | 96 | | 7.403 | | | | ND | |
| | 30 1,1-Dichloroethane | 63 | | 7.632 | | | | ND | |
| | 31 Methyl tert-butyl ether | 73 | | 7.747 | | | | ND | |
| | 32 Vinyl acetate | 43 | | 7.867 | | | | ND | U |
| | 33 2-Butanone (MEK) | 43 | 8.161 | 8.156 | 0.005 | 98 | 27855 | 0.3344 | |
| | 34 cis-1,2-Dichloroethene | 96 | | 8.630 | | | | ND | |
| * | 35 Chlorobromomethane (IS) | 130 | 8.827 | 8.832 | -0.005 | 88 | 1598432 | 25.0 | |
| | 38 Chloroform | 83 | | 9.002 | | | | ND | |
| $ | 41 1,2-Dichloroethane-d4 (Surr) | 65 | 9.825 | 9.831 | -0.006 | 0 | 1893491 | 25.2 | |
| | 42 1,2-Dichloroethane | 62 | | 9.978 | | | | ND | |
| | 43 1,1,1-Trichloroethane | 97 | | 10.306 | | | | ND | |
| | 44 Benzene | 78 | 10.938 | 10.944 | -0.006 | 85 | 6859 | 0.0442 | |
| | 45 Carbon tetrachloride | 117 | | 11.140 | | | | ND | |
| * | 47 1,4-Difluorobenzene | 114 | 11.473 | 11.484 | -0.011 | 94 | 5875629 | 25.0 | |
| | 49 1,2-Dichloropropane | 63 | | 12.128 | | | | ND | |
| | 50 Dichlorobromomethane | 83 | | 12.406 | | | | ND | |
| | 52 Trichloroethene | 95 | | 12.483 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 55 cis-1,3-Dichloropropene | 75 | | 13.830 | | | | ND | |
| 57 trans-1,3-Dichloropropene | 75 | | 14.687 | | | | ND | |
| 58 1,1,2-Trichloroethane | 83 | | 14.933 | | | | ND | |
| $ 59 Toluene-d8 (Surr) | 98 | 15.238 | 15.244 | -0.006 | 93 | 5969733 | 25.2 | |
| 60 Toluene | 91 | 15.407 | 15.407 | 0.000 | 99 | 10155 | 0.0515 | |
| 61 2-Hexanone | 58 | | 15.937 | | | | ND | |
| 63 Chlorodibromomethane | 129 | | 16.073 | | | | ND | |
| 64 Ethylene Dibromide | 107 | | 16.493 | | | | ND | |
| 67 Tetrachloroethene | 166 | 17.361 | 17.361 | 0.000 | 62 | 1276 | 0.0120 | |
| * 68 Chlorobenzene-d5 | 117 | 18.501 | 18.507 | -0.006 | 85 | 5371549 | 25.0 | |
| 69 Chlorobenzene | 112 | | 18.588 | | | | ND | |
| 70 Ethylbenzene | 91 | 19.352 | 19.352 | 0.000 | 91 | 5735 | 0.0227 | M |
| 71 Bromoform | 173 | | 19.718 | | | | ND | |
| 72 m-Xylene & p-Xylene | 91 | | 19.723 | | | | ND | |
| 73 Styrene | 104 | | 20.400 | | | | ND | |
| 74 1,1,2,2-Tetrachloroethane | 83 | | 20.564 | | | | ND | |
| 75 o-Xylene | 91 | 20.613 | 20.602 | 0.011 | 1 | 2049 | 0.0101 | |
| $ 78 4-Bromofluorobenzene (Surr) | 95 | 21.513 | 21.518 | -0.005 | 93 | 3998587 | 24.9 | |
| 82 4-Ethyltoluene | 105 | | 23.319 | | | | ND | U |
| 83 1,3,5-Trimethylbenzene | 105 | | 23.515 | | | | ND | |
| 85 tert-Butylbenzene | 119 | | 24.438 | | | | ND | |
| 86 1,2,4-Trimethylbenzene | 105 | 24.454 | 24.454 | 0.000 | 1 | 449 | 0.001714 | |
| 87 Benzyl chloride | 91 | | 24.710 | | | | ND | |
| 88 1,3-Dichlorobenzene | 146 | | 24.721 | | | | ND | |
| 89 1,4-Dichlorobenzene | 146 | | 24.896 | | | | ND | |
| 91 sec-Butylbenzene | 105 | | 25.114 | | | | ND | |
| 93 1,2-Dichlorobenzene | 146 | | 25.720 | | | | ND | |
| 94 n-Butylbenzene | 91 | | 26.647 | | | | ND | |
| 95 1,2-Dibromo-3-Chloropropane | 157 | | 26.866 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 30.183 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 31.242 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_TO15_IS/SS_00006 Amount Added: 100.00 Units: mL Run Reagent

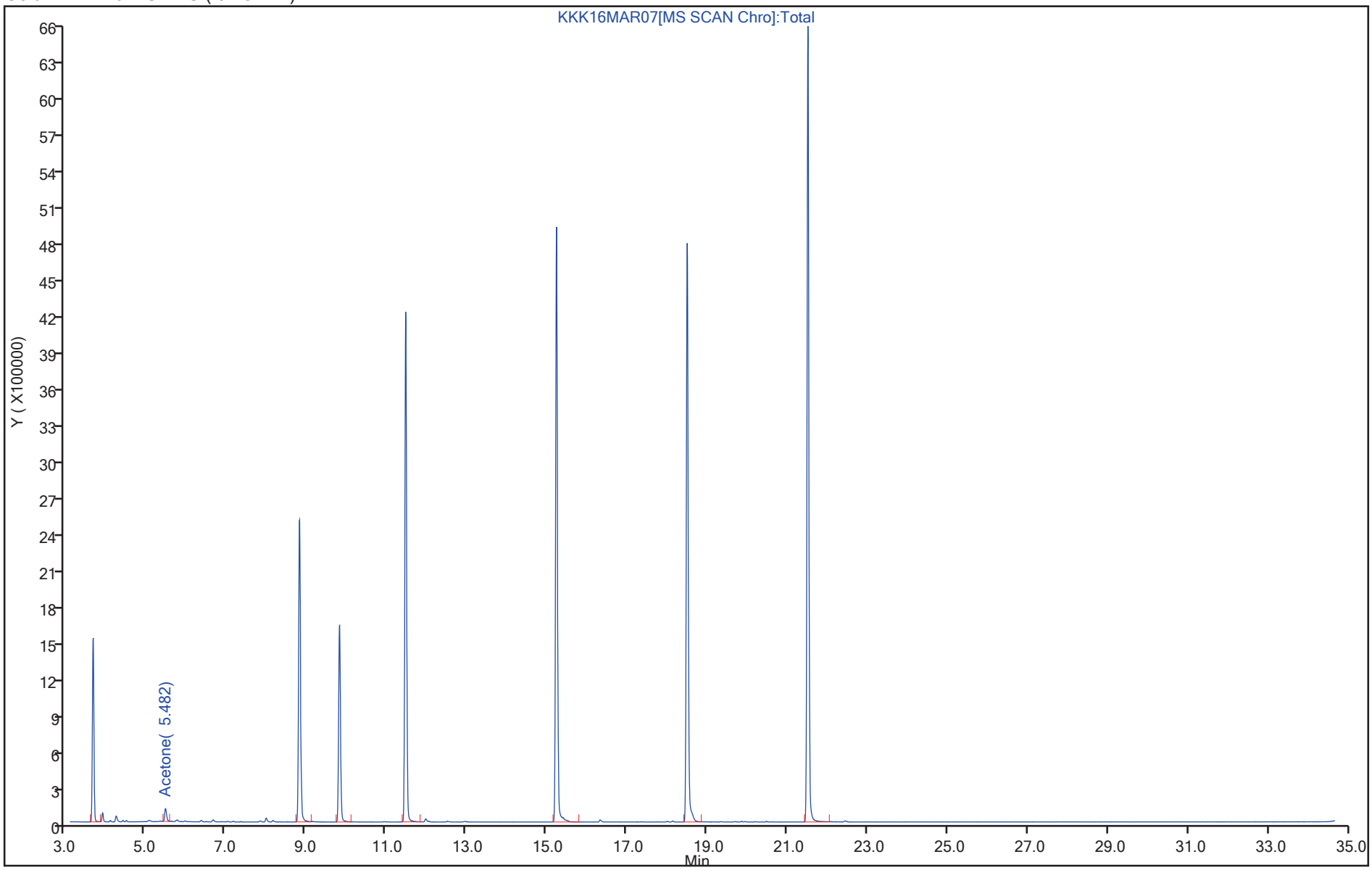
Report Date: 17-Mar-2021 10:09:06 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | Operator ID: | 12gr |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | Worklist Smp#: | 7 |
| Client ID: | LC1033 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |

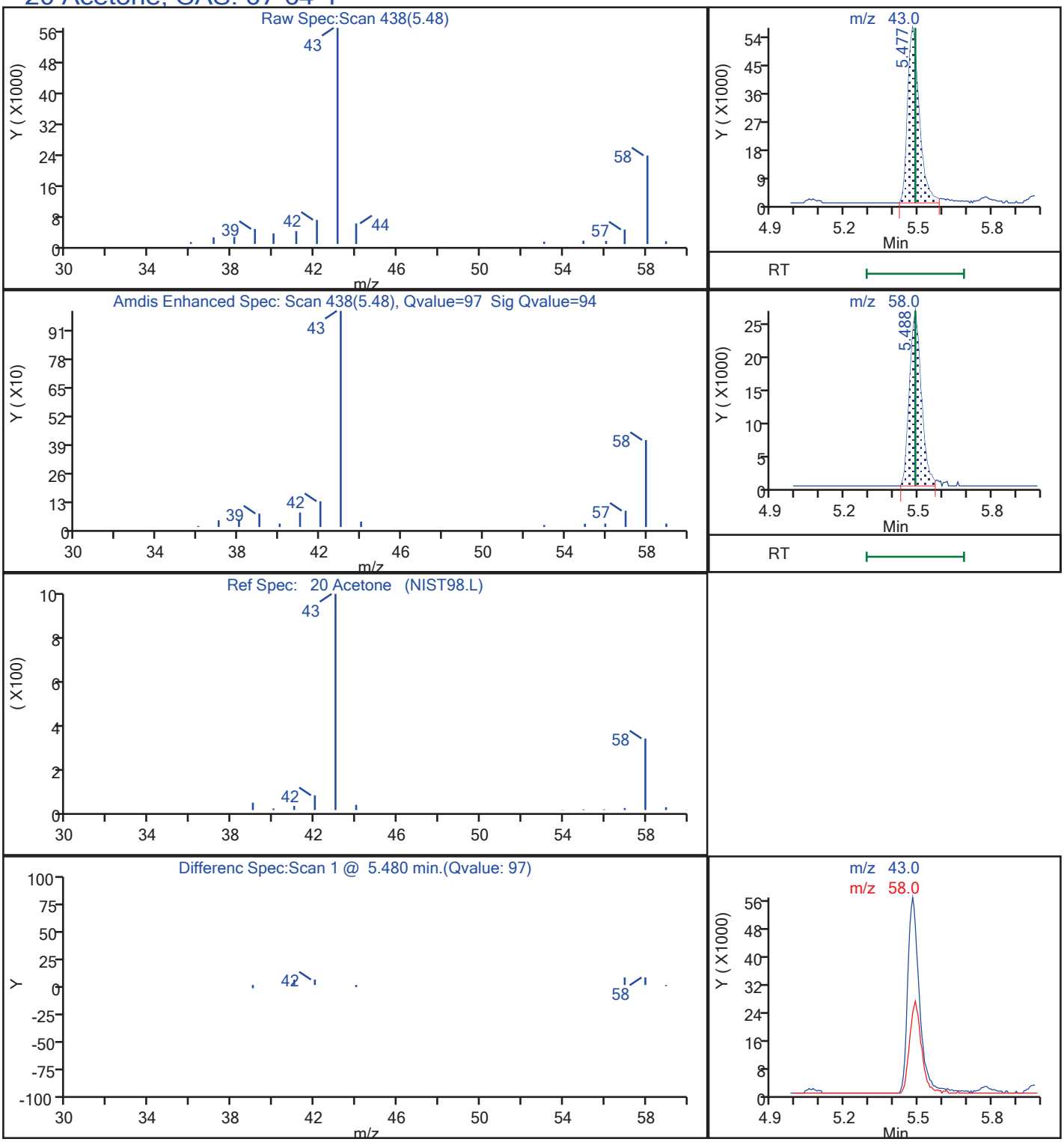
Column: Rxi-624Sil MS ( 0.18 mm)



Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

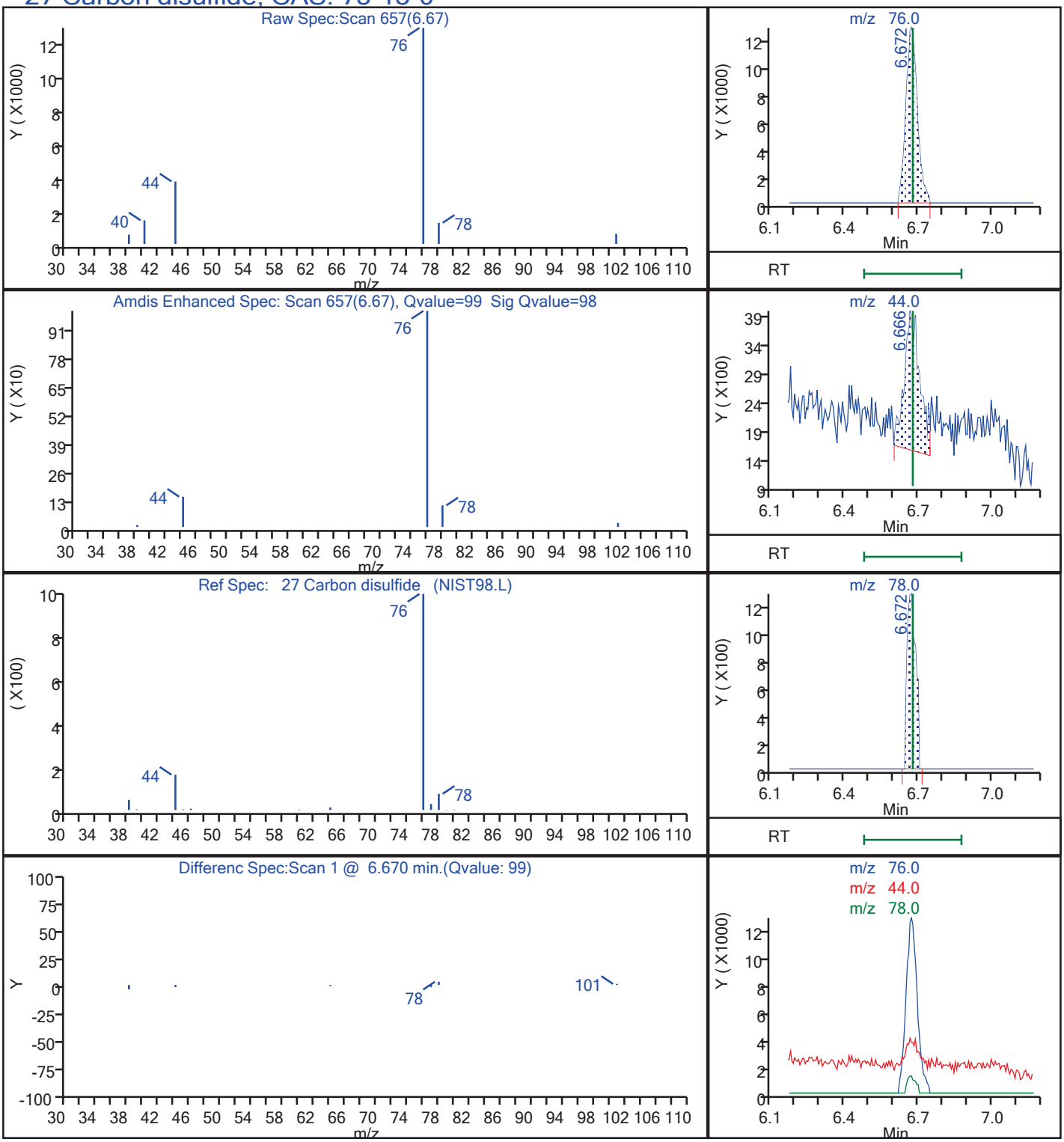
## 20 Acetone, CAS: 67-64-1



Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 27 Carbon disulfide, CAS: 75-15-0



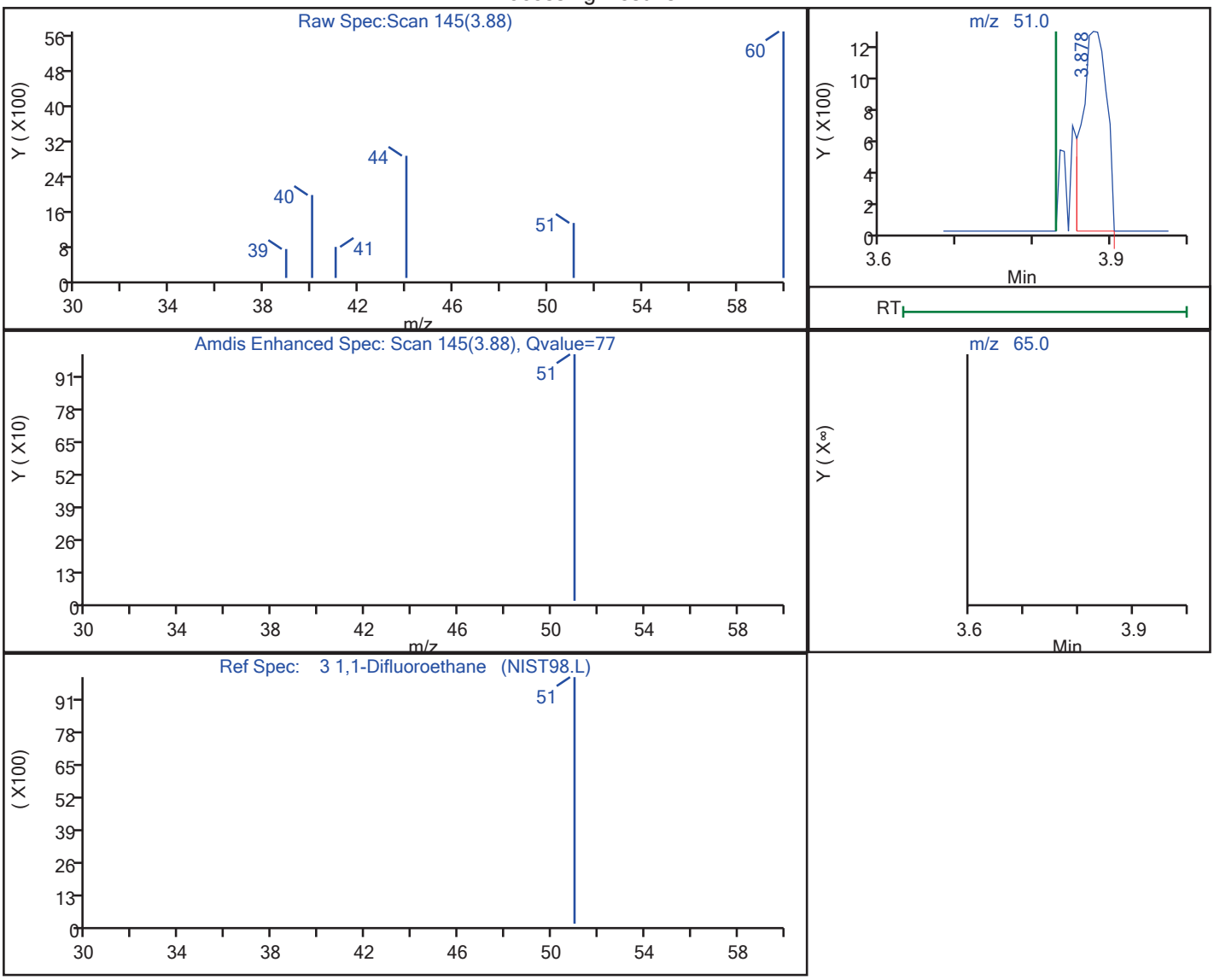
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 3 1,1-Difluoroethane, CAS: 75-37-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.88 | 51.00 | 2777 | 0.055065 |
| 3.83 | 65.00 | 0 | |

Reviewer: rhoadesw, 17-Mar-2021 10:02:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

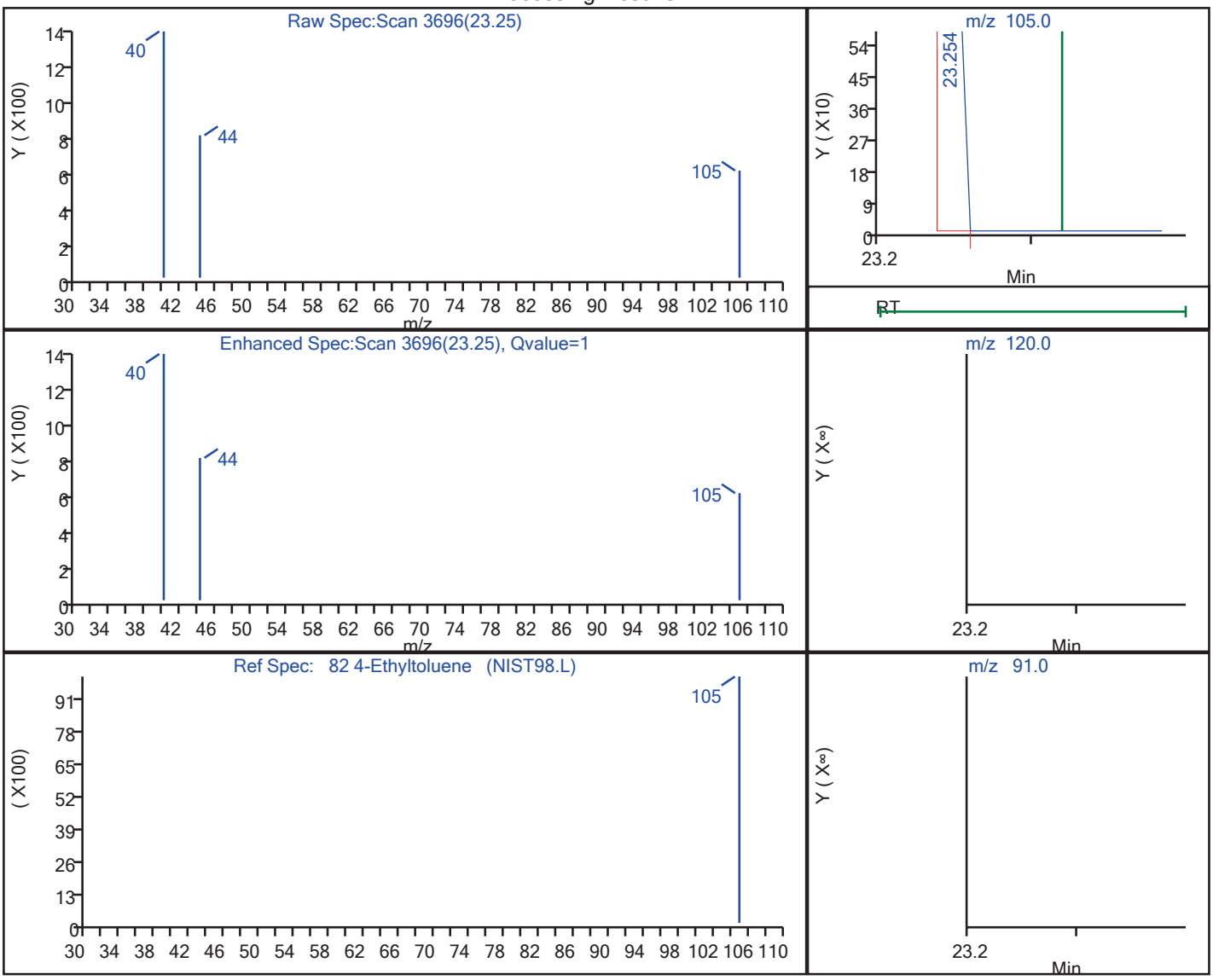
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 82 4-Ethyltoluene, CAS: 622-96-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 23.25 | 105.00 | 521 | 0.001785 |
| 23.32 | 120.00 | 0 | |
| 23.32 | 91.00 | 0 | |

Reviewer: rhoadesw, 17-Mar-2021 10:01:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Calscience LLC

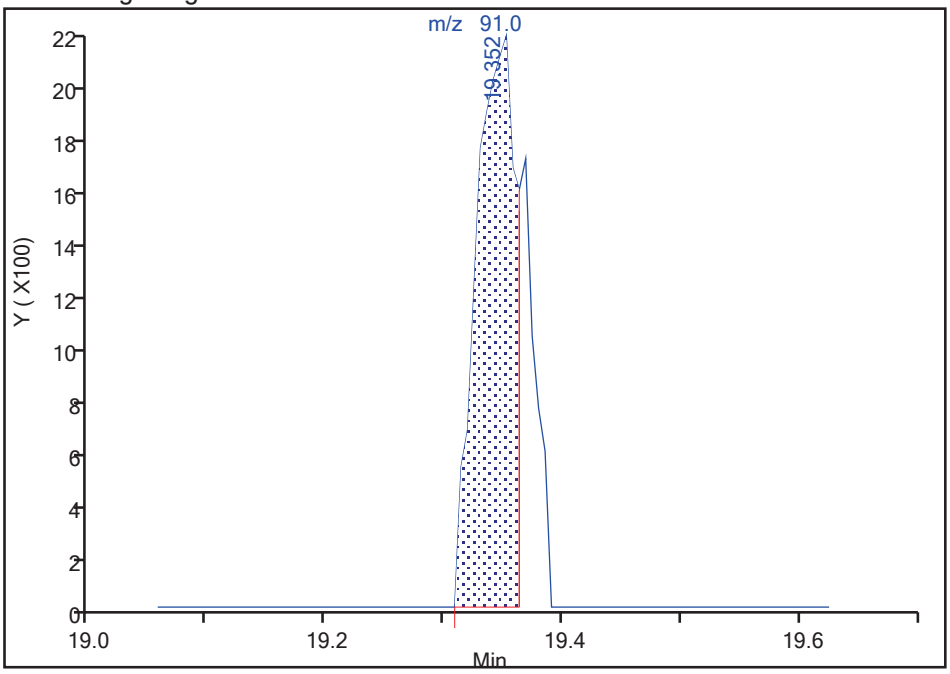
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 70 Ethylbenzene, CAS: 100-41-4

Signal: 1

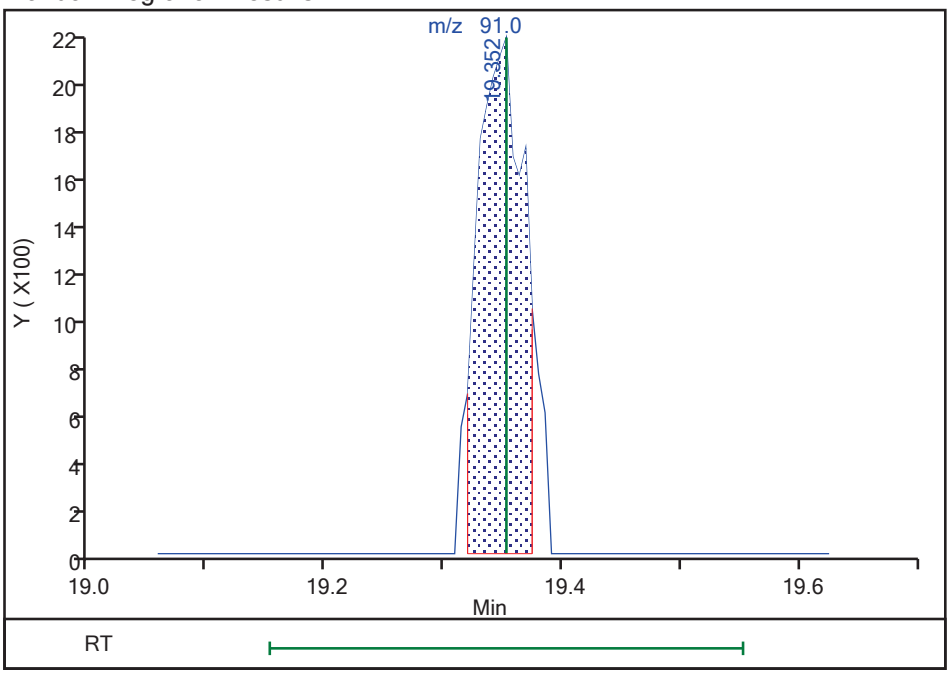
Processing Integration Results

RT: 19.35
Area: 5025
Amount: 0.019893
Amount Units: ppb v/v




Manual Integration Results

RT: 19.35
Area: 5735
Amount: 0.022704
Amount Units: ppb v/v




Reviewer: rhoadesw, 17-Mar-2021 10:02:00
Audit Action: Manually Integrated Audit Reason: Baseline

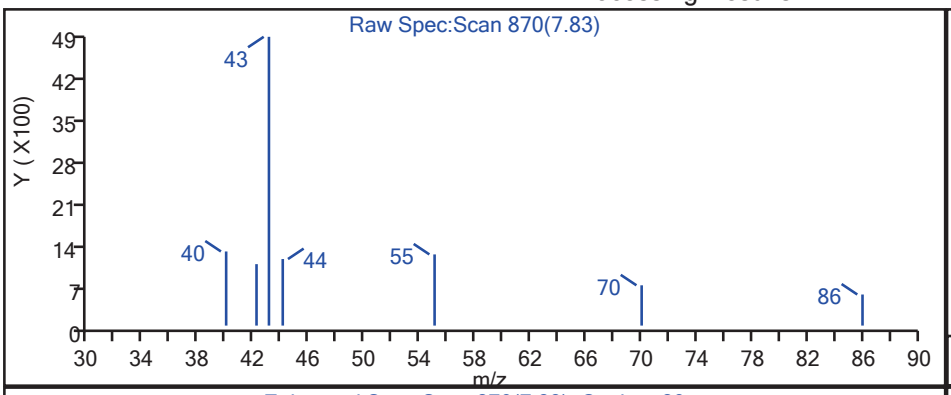
User Disabled Compound Report

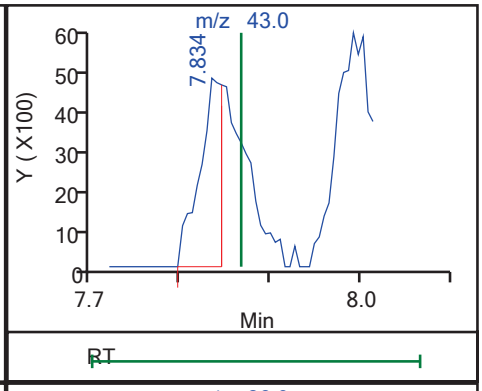
Eurofins Calscience LLC

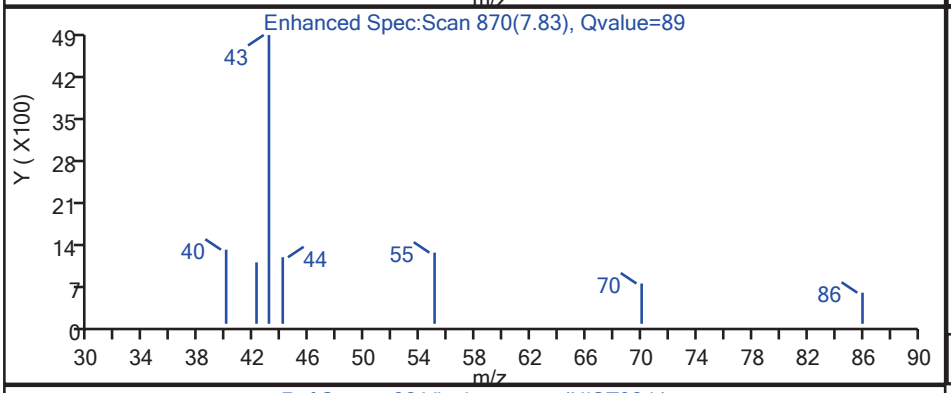
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSKKK\20210317-40987.b\KKK16MAR07.D | | | | |
| Injection Date: | 16-Mar-2021 14:49:30 | Instrument ID: | GCMSKKK | | |
| Lims ID: | 570-53852-A-1 | Lab Sample ID: | 570-53852-1 | | |
| Client ID: | LC1033 | | | | |
| Operator ID: | 12gr | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSKKK | Limit Group: | MSV - TO14A TO15 | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

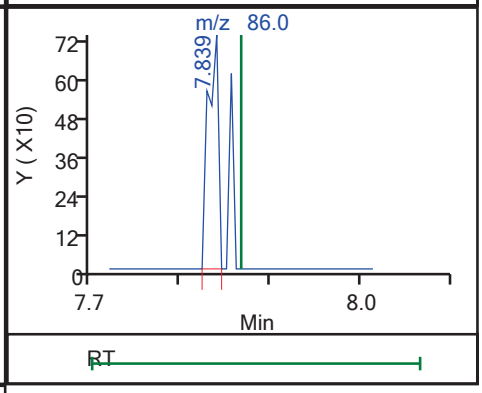
## 32 Vinyl acetate, CAS: 108-05-4

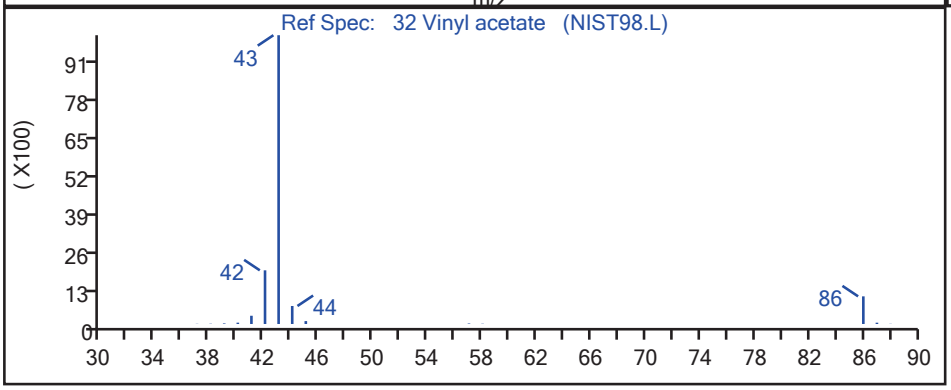
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.83 | 43.00 | 8524 | 0.083799 |
| 7.84 | 86.00 | 596 | |

Reviewer: rhoadesw, 17-Mar-2021 10:02:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-281107-1
Client Project/Site: Baldwin Park

For:
Terracon Consultants Inc
1355 E Cooley Dr
Suite C
Colton, California 92324

Attn: Todd McFarland

*Authorized for release by:*
*4/3/2021 5:45:56 AM*

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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Client Sample Results . . . . . 8
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# Sample Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281107-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 440-281107-1 | IAS-1 | Air | 03/24/21 16:25 | 03/25/21 19:00 | Air Canister (6-Liter) #D555 |
| 440-281107-2 | IAS-2 | Air | 03/24/21 16:27 | 03/25/21 19:00 | Air Canister (6-Liter) #D464 |
| 440-281107-3 | IAS-3 | Air | 03/24/21 16:28 | 03/25/21 19:00 | Air Canister (6-Liter) #D489 |
| 440-281107-4 | IAS-4 | Air | 03/24/21 16:29 | 03/25/21 19:00 | Air Canister (6-Liter) #SIM093 |
| 440-281107-5 | OAS-1 | Air | 03/24/21 16:37 | 03/25/21 19:00 | Air Canister (6-Liter) #D593 |
| 440-281107-6 | OAS-2 | Air | 03/24/21 16:39 | 03/25/21 19:00 | Air Canister (6-Liter) #D477 |

## Job ID: 440-281106-1

### Laboratory: Eurofins Calscience Irvine

**Narrative**

**Job Narrative**
**440-281106-1**

**Comments**
mo awwitional co. . entsh

**Receipt**
Tpe sa. vles k ere recei3ewon 5S27S2021 P:00 j Mh Unless otperk ise notewbelok , tpe sa. vles arri3ewin goowconwitionhTpe te. verature of tpe cooler at receivt k as 18l8° Ch

**Air Toxics**
mo analytical or quality issues k ere notew, otper tpan tpose wescribewin tpe DefinitionsSGlossary vageh

# Detection Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281107-1

## Client Sample ID: IAS-1 — Lab Sample ID: 440-281107-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.57 | | 0.21 | 0.077 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| 1,1-Difluoroethane | 1.3 | | 0.75 | 0.33 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| 1,2,4-Trimethylbenzene | 0.90 | | 0.27 | 0.098 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| 1,2-Dichloroethane | 0.14 | | 0.11 | 0.076 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| 1,3,5-Trimethylbenzene | 0.25 | | 0.14 | 0.065 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| 4-Ethyltoluene | 0.25 | J | 0.27 | 0.070 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Benzene | 0.95 | | 0.089 | 0.046 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Bromodichloromethane | 0.081 | J | 0.19 | 0.073 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Carbon tetrachloride | 0.61 | | 0.35 | 0.28 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Chlorobenzene | 0.91 | | 0.26 | 0.088 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Chloroform | 0.19 | | 0.14 | 0.066 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Chloromethane | 0.78 | | 0.057 | 0.029 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Dichlorodifluoromethane | 2.7 | | 0.14 | 0.055 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Ethylbenzene | 0.53 | | 0.12 | 0.059 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| m,p-Xylene | 1.8 | | 0.24 | 0.13 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Methylene Chloride | 2.1 | | 0.19 | 0.10 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| o-Xylene | 0.72 | | 0.12 | 0.062 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Tetrachloroethene | 0.24 | | 0.19 | 0.11 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Toluene | 21 | | 0.21 | 0.064 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Trichloroethene | 1.2 | | 0.15 | 0.11 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |
| Trichlorofluoromethane | 1.6 | | 0.16 | 0.051 | ug/m3 | 1.1111 | | TO-15 SIM | Total/NA |

## Client Sample ID: IAS-2 — Lab Sample ID: 440-281107-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.52 | | 0.19 | 0.070 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2,4-Trimethylbenzene | 1.6 | | 0.25 | 0.088 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2-Dichloroethane | 0.19 | | 0.10 | 0.068 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,3,5-Trimethylbenzene | 0.47 | | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 4-Ethyltoluene | 0.41 | | 0.25 | 0.063 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Benzene | 0.72 | | 0.080 | 0.041 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Carbon tetrachloride | 0.57 | | 0.31 | 0.25 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chlorobenzene | 4.0 | | 0.23 | 0.080 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloroform | 0.19 | | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloromethane | 0.89 | | 0.052 | 0.026 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Dichlorodifluoromethane | 2.6 | | 0.12 | 0.049 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Ethylbenzene | 0.62 | | 0.11 | 0.053 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| m,p-Xylene | 2.2 | | 0.22 | 0.11 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Methylene Chloride | 4.5 | | 0.17 | 0.090 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| o-Xylene | 0.95 | | 0.11 | 0.056 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Tetrachloroethene | 0.33 | | 0.17 | 0.098 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Trichloroethene | 4.6 | | 0.13 | 0.095 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Trichlorofluoromethane | 1.6 | | 0.14 | 0.046 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,1-Difluoroethane - DL | 31 | | 4.2 | 1.9 | ug/m3 | 6.25 | | TO-15 SIM | Total/NA |
| Toluene - DL | 88 | | 1.2 | 0.36 | ug/m3 | 6.25 | | TO-15 SIM | Total/NA |

## Client Sample ID: IAS-3 — Lab Sample ID: 440-281107-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.52 | | 0.19 | 0.070 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2,4-Trimethylbenzene | 0.97 | | 0.25 | 0.088 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2-Dichloroethane | 0.15 | | 0.10 | 0.068 | ug/m3 | 1 | | TO-15 SIM | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins Calscience Irvine

## Client Sample ID: IAS-3 (Continued)

## Lab Sample ID: 440-281107-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | 0.29 | | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 4-Ethyltoluene | 0.26 | | 0.25 | 0.063 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Benzene | 0.66 | | 0.080 | 0.041 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Carbon tetrachloride | 0.56 | | 0.31 | 0.25 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chlorobenzene | 2.0 | | 0.23 | 0.080 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloroform | 0.14 | | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloromethane | 0.84 | | 0.052 | 0.026 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Dichlorodifluoromethane | 2.7 | | 0.12 | 0.049 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Ethylbenzene | 0.45 | | 0.11 | 0.053 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| m,p-Xylene | 1.6 | | 0.22 | 0.11 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Methylene Chloride | 2.3 | | 0.17 | 0.090 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| o-Xylene | 0.67 | | 0.11 | 0.056 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Tetrachloroethene | 0.22 | | 0.17 | 0.098 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Trichloroethene | 2.4 | | 0.13 | 0.095 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Trichlorofluoromethane | 1.5 | | 0.14 | 0.046 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Toluene - DL | 33 | | 2.9 | 0.90 | ug/m3 | 15.5 | | TO-15 SIM | Total/NA |
| 1,1-Difluoroethane - DL2 | 210 | | 13 | 5.8 | ug/m3 | 19.375 | | TO-15 SIM | Total/NA |

## Client Sample ID: IAS-4

## Lab Sample ID: 440-281107-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.54 | | 0.19 | 0.070 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2,4-Trimethylbenzene | 0.62 | | 0.25 | 0.088 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2-Dichloroethane | 0.11 | | 0.10 | 0.068 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,3,5-Trimethylbenzene | 0.18 | | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 4-Ethyltoluene | 0.18 | J | 0.25 | 0.063 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Benzene | 0.64 | | 0.080 | 0.041 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Carbon tetrachloride | 0.58 | | 0.31 | 0.25 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chlorobenzene | 0.62 | | 0.23 | 0.080 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloroform | 0.12 | | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloromethane | 0.86 | | 0.052 | 0.026 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Dichlorodifluoromethane | 2.7 | | 0.12 | 0.049 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Ethylbenzene | 0.33 | | 0.11 | 0.053 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| m,p-Xylene | 1.1 | | 0.22 | 0.11 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Methylene Chloride | 1.3 | | 0.17 | 0.090 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| o-Xylene | 0.47 | | 0.11 | 0.056 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Tetrachloroethene | 0.16 | J | 0.17 | 0.098 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Toluene | 14 | | 0.19 | 0.058 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Trichloroethene | 0.82 | | 0.13 | 0.095 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Trichlorofluoromethane | 1.6 | | 0.14 | 0.046 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,1-Difluoroethane - DL | 39 | | 2.1 | 0.93 | ug/m3 | 3.125 | | TO-15 SIM | Total/NA |

## Client Sample ID: OAS-1

## Lab Sample ID: 440-281107-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.57 | | 0.19 | 0.070 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2,4-Trimethylbenzene | 0.21 | J | 0.25 | 0.088 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2-Dichloroethane | 0.12 | | 0.10 | 0.068 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,3,5-Trimethylbenzene | 0.069 | J | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 4-Ethyltoluene | 0.076 | J | 0.25 | 0.063 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Benzene | 0.48 | | 0.080 | 0.041 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Carbon tetrachloride | 0.53 | | 0.31 | 0.25 | ug/m3 | 1 | | TO-15 SIM | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: OAS-1 (Continued)

## Lab Sample ID: 440-281107-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | 0.11 | J | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloromethane | 0.69 | | 0.052 | 0.026 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Dichlorodifluoromethane | 2.8 | | 0.12 | 0.049 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Ethylbenzene | 0.17 | | 0.11 | 0.053 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| m,p-Xylene | 0.50 | | 0.22 | 0.11 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Methylene Chloride | 0.49 | | 0.17 | 0.090 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| o-Xylene | 0.21 | | 0.11 | 0.056 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Tetrachloroethene | 0.13 | J | 0.17 | 0.098 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Toluene | 1.0 | | 0.19 | 0.058 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Trichlorofluoromethane | 1.6 | | 0.14 | 0.046 | ug/m3 | 1 | | TO-15 SIM | Total/NA |

## Client Sample ID: OAS-2

## Lab Sample ID: 440-281107-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.53 | | 0.19 | 0.070 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2,4-Trimethylbenzene | 0.21 | J | 0.25 | 0.088 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,2-Dichloroethane | 0.095 | J | 0.10 | 0.068 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 1,3,5-Trimethylbenzene | 0.061 | J | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| 4-Ethyltoluene | 0.069 | J | 0.25 | 0.063 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Benzene | 0.45 | | 0.080 | 0.041 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Carbon tetrachloride | 0.57 | | 0.31 | 0.25 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloroform | 0.10 | J | 0.12 | 0.059 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Chloromethane | 0.75 | | 0.052 | 0.026 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Dichlorodifluoromethane | 2.7 | | 0.12 | 0.049 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Ethylbenzene | 0.16 | | 0.11 | 0.053 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| m,p-Xylene | 0.46 | | 0.22 | 0.11 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Methylene Chloride | 0.62 | | 0.17 | 0.090 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| o-Xylene | 0.20 | | 0.11 | 0.056 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Tetrachloroethene | 0.12 | J | 0.17 | 0.098 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Toluene | 0.87 | | 0.19 | 0.058 | ug/m3 | 1 | | TO-15 SIM | Total/NA |
| Trichlorofluoromethane | 1.5 | | 0.14 | 0.046 | ug/m3 | 1 | | TO-15 SIM | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: IAS-1

**Lab Sample ID: 440-281107-1**

**Date Collected: 03/24/21 16:25**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

### Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 0.15 | 0.062 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.19 | 0.12 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **1,1,2-Trichloro-1,2,2-trifluoroethane** | **0.57** | | 0.21 | 0.077 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| 1,1,2-Trichloroethane | ND | | 0.15 | 0.093 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| 1,1-Dichloroethane | ND | | 0.11 | 0.052 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| 1,1-Dichloroethene | ND | | 0.11 | 0.055 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **1,1-Difluoroethane** | **1.3** | | 0.75 | 0.33 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **1,2,4-Trimethylbenzene** | **0.90** | | 0.27 | 0.098 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **1,2-Dichloroethane** | **0.14** | | 0.11 | 0.076 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **1,3,5-Trimethylbenzene** | **0.25** | | 0.14 | 0.065 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **4-Ethyltoluene** | **0.25** | **J** | 0.27 | 0.070 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Benzene** | **0.95** | | 0.089 | 0.046 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Bromodichloromethane** | **0.081** | **J** | 0.19 | 0.073 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Carbon tetrachloride** | **0.61** | | 0.35 | 0.28 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Chlorobenzene** | **0.91** | | 0.26 | 0.088 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| Chloroethane | ND | | 0.073 | 0.057 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Chloroform** | **0.19** | | 0.14 | 0.066 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Chloromethane** | **0.78** | | 0.057 | 0.029 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| cis-1,2-Dichloroethene | ND | | 0.11 | 0.063 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| Dibromochloromethane | ND | | 0.24 | 0.097 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Dichlorodifluoromethane** | **2.7** | | 0.14 | 0.055 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Ethylbenzene** | **0.53** | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| Hexachloro-1,3-butadiene | ND | | 1.2 | 0.59 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **m,p-Xylene** | **1.8** | | 0.24 | 0.13 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Methylene Chloride** | **2.1** | | 0.19 | 0.10 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.10 | 0.042 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **o-Xylene** | **0.72** | | 0.12 | 0.062 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Tetrachloroethene** | **0.24** | | 0.19 | 0.11 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Toluene** | **21** | | 0.21 | 0.064 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| trans-1,2-Dichloroethene | ND | | 0.11 | 0.048 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Trichloroethene** | **1.2** | | 0.15 | 0.11 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| **Trichlorofluoromethane** | **1.6** | | 0.16 | 0.051 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |
| Vinyl chloride | ND | | 0.14 | 0.064 | ug/m3 | | | 04/01/21 10:51 | 1.1111 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *112* | | *61 - 130* | | *04/01/21 10:51* | *1.1111* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *59 - 130* | | *04/01/21 10:51* | *1.1111* |
| *Toluene-d8 (Surr)* | *107* | | *70 - 130* | | *04/01/21 10:51* | *1.1111* |

## Client Sample ID: IAS-2

**Lab Sample ID: 440-281107-2**

**Date Collected: 03/24/21 16:27**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

### Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 0.14 | 0.056 | ug/m3 | | | 04/01/21 19:24 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.17 | 0.11 | ug/m3 | | | 04/01/21 19:24 | 1 |

## Client Sample ID: IAS-2

**Date Collected: 03/24/21 16:27**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

## Lab Sample ID: 440-281107-2

**Matrix: Air**

### Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,1,2-Trichloro-1,2,2-trifluoroethane** | **0.52** | | 0.19 | 0.070 | ug/m3 | | | 04/01/21 19:24 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.14 | 0.084 | ug/m3 | | | 04/01/21 19:24 | 1 |
| 1,1-Dichloroethane | ND | | 0.10 | 0.047 | ug/m3 | | | 04/01/21 19:24 | 1 |
| 1,1-Dichloroethene | ND | | 0.099 | 0.050 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **1,2,4-Trimethylbenzene** | **1.6** | | 0.25 | 0.088 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **1,2-Dichloroethane** | **0.19** | | 0.10 | 0.068 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **1,3,5-Trimethylbenzene** | **0.47** | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **4-Ethyltoluene** | **0.41** | | 0.25 | 0.063 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Benzene** | **0.72** | | 0.080 | 0.041 | ug/m3 | | | 04/01/21 19:24 | 1 |
| Bromodichloromethane | ND | | 0.17 | 0.066 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Carbon tetrachloride** | **0.57** | | 0.31 | 0.25 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Chlorobenzene** | **4.0** | | 0.23 | 0.080 | ug/m3 | | | 04/01/21 19:24 | 1 |
| Chloroethane | ND | | 0.066 | 0.052 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Chloroform** | **0.19** | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Chloromethane** | **0.89** | | 0.052 | 0.026 | ug/m3 | | | 04/01/21 19:24 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.099 | 0.056 | ug/m3 | | | 04/01/21 19:24 | 1 |
| Dibromochloromethane | ND | | 0.21 | 0.088 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Dichlorodifluoromethane** | **2.6** | | 0.12 | 0.049 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Ethylbenzene** | **0.62** | | 0.11 | 0.053 | ug/m3 | | | 04/01/21 19:24 | 1 |
| Hexachloro-1,3-butadiene | ND | | 1.1 | 0.53 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **m,p-Xylene** | **2.2** | | 0.22 | 0.11 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Methylene Chloride** | **4.5** | | 0.17 | 0.090 | ug/m3 | | | 04/01/21 19:24 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.090 | 0.038 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **o-Xylene** | **0.95** | | 0.11 | 0.056 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Tetrachloroethene** | **0.33** | | 0.17 | 0.098 | ug/m3 | | | 04/01/21 19:24 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.099 | 0.043 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Trichloroethene** | **4.6** | | 0.13 | 0.095 | ug/m3 | | | 04/01/21 19:24 | 1 |
| **Trichlorofluoromethane** | **1.6** | | 0.14 | 0.046 | ug/m3 | | | 04/01/21 19:24 | 1 |
| Vinyl chloride | ND | | 0.13 | 0.058 | ug/m3 | | | 04/01/21 19:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *61 - 130* | | *04/01/21 19:24* | *1* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *59 - 130* | | *04/01/21 19:24* | *1* |
| *Toluene-d8 (Surr)* | *107* | | *70 - 130* | | *04/01/21 19:24* | *1* |

### Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,1-Difluoroethane** | **31** | | 4.2 | 1.9 | ug/m3 | | | 04/02/21 09:16 | 6.25 |
| **Toluene** | **88** | | 1.2 | 0.36 | ug/m3 | | | 04/02/21 09:16 | 6.25 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *61 - 130* | | *04/02/21 09:16* | *6.25* |
| *4-Bromofluorobenzene (Surr)* | *86* | | *59 - 130* | | *04/02/21 09:16* | *6.25* |
| *Toluene-d8 (Surr)* | *105* | | *70 - 130* | | *04/02/21 09:16* | *6.25* |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281107-1

**Client Sample ID: IAS-3**
**Date Collected: 03/24/21 16:28**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

**Lab Sample ID: 440-281107-3**
**Matrix: Air**

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 0.14 | 0.056 | ug/m3 | | | 04/01/21 20:16 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.17 | 0.11 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **1,1,2-Trichloro-1,2,2-trifluoroethane** | **0.52** | | 0.19 | 0.070 | ug/m3 | | | 04/01/21 20:16 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.14 | 0.084 | ug/m3 | | | 04/01/21 20:16 | 1 |
| 1,1-Dichloroethane | ND | | 0.10 | 0.047 | ug/m3 | | | 04/01/21 20:16 | 1 |
| 1,1-Dichloroethene | ND | | 0.099 | 0.050 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **1,2,4-Trimethylbenzene** | **0.97** | | 0.25 | 0.088 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **1,2-Dichloroethane** | **0.15** | | 0.10 | 0.068 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **1,3,5-Trimethylbenzene** | **0.29** | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **4-Ethyltoluene** | **0.26** | | 0.25 | 0.063 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Benzene** | **0.66** | | 0.080 | 0.041 | ug/m3 | | | 04/01/21 20:16 | 1 |
| Bromodichloromethane | ND | | 0.17 | 0.066 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Carbon tetrachloride** | **0.56** | | 0.31 | 0.25 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Chlorobenzene** | **2.0** | | 0.23 | 0.080 | ug/m3 | | | 04/01/21 20:16 | 1 |
| Chloroethane | ND | | 0.066 | 0.052 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Chloroform** | **0.14** | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Chloromethane** | **0.84** | | 0.052 | 0.026 | ug/m3 | | | 04/01/21 20:16 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.099 | 0.056 | ug/m3 | | | 04/01/21 20:16 | 1 |
| Dibromochloromethane | ND | | 0.21 | 0.088 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Dichlorodifluoromethane** | **2.7** | | 0.12 | 0.049 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Ethylbenzene** | **0.45** | | 0.11 | 0.053 | ug/m3 | | | 04/01/21 20:16 | 1 |
| Hexachloro-1,3-butadiene | ND | | 1.1 | 0.53 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **m,p-Xylene** | **1.6** | | 0.22 | 0.11 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Methylene Chloride** | **2.3** | | 0.17 | 0.090 | ug/m3 | | | 04/01/21 20:16 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.090 | 0.038 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **o-Xylene** | **0.67** | | 0.11 | 0.056 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Tetrachloroethene** | **0.22** | | 0.17 | 0.098 | ug/m3 | | | 04/01/21 20:16 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.099 | 0.043 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Trichloroethene** | **2.4** | | 0.13 | 0.095 | ug/m3 | | | 04/01/21 20:16 | 1 |
| **Trichlorofluoromethane** | **1.5** | | 0.14 | 0.046 | ug/m3 | | | 04/01/21 20:16 | 1 |
| Vinyl chloride | ND | | 0.13 | 0.058 | ug/m3 | | | 04/01/21 20:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *61 - 130* | | *04/01/21 20:16* | *1* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *59 - 130* | | *04/01/21 20:16* | *1* |
| *Toluene-d8 (Surr)* | *107* | | *70 - 130* | | *04/01/21 20:16* | *1* |

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Toluene** | **33** | | 2.9 | 0.90 | ug/m3 | | | 04/02/21 10:38 | 15.5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *116* | | *61 - 130* | | *04/02/21 10:38* | *15.5* |
| *4-Bromofluorobenzene (Surr)* | *81* | | *59 - 130* | | *04/02/21 10:38* | *15.5* |
| *Toluene-d8 (Surr)* | *102* | | *70 - 130* | | *04/02/21 10:38* | *15.5* |

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL2

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,1-Difluoroethane** | **210** | | 13 | 5.8 | ug/m3 | | | 04/02/21 12:05 | 19.375 |

## Client Sample ID: IAS-3

**Lab Sample ID: 440-281107-3**

**Date Collected: 03/24/21 16:28**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *116* | | *61 - 130* | | *04/02/21 12:05* | *19.375* |
| *Toluene-d8 (Surr)* | *106* | | *70 - 130* | | *04/02/21 12:05* | *19.375* |

## Client Sample ID: IAS-4

**Lab Sample ID: 440-281107-4**

**Date Collected: 03/24/21 16:29**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

### Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 0.14 | 0.056 | ug/m3 | | | 04/01/21 21:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.17 | 0.11 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **1,1,2-Trichloro-1,2,2-trifluoroethane** | **0.54** | | 0.19 | 0.070 | ug/m3 | | | 04/01/21 21:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.14 | 0.084 | ug/m3 | | | 04/01/21 21:09 | 1 |
| 1,1-Dichloroethane | ND | | 0.10 | 0.047 | ug/m3 | | | 04/01/21 21:09 | 1 |
| 1,1-Dichloroethene | ND | | 0.099 | 0.050 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **1,2,4-Trimethylbenzene** | **0.62** | | 0.25 | 0.088 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **1,2-Dichloroethane** | **0.11** | | 0.10 | 0.068 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **1,3,5-Trimethylbenzene** | **0.18** | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **4-Ethyltoluene** | **0.18** | **J** | 0.25 | 0.063 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Benzene** | **0.64** | | 0.080 | 0.041 | ug/m3 | | | 04/01/21 21:09 | 1 |
| Bromodichloromethane | ND | | 0.17 | 0.066 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Carbon tetrachloride** | **0.58** | | 0.31 | 0.25 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Chlorobenzene** | **0.62** | | 0.23 | 0.080 | ug/m3 | | | 04/01/21 21:09 | 1 |
| Chloroethane | ND | | 0.066 | 0.052 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Chloroform** | **0.12** | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Chloromethane** | **0.86** | | 0.052 | 0.026 | ug/m3 | | | 04/01/21 21:09 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.099 | 0.056 | ug/m3 | | | 04/01/21 21:09 | 1 |
| Dibromochloromethane | ND | | 0.21 | 0.088 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Dichlorodifluoromethane** | **2.7** | | 0.12 | 0.049 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Ethylbenzene** | **0.33** | | 0.11 | 0.053 | ug/m3 | | | 04/01/21 21:09 | 1 |
| Hexachloro-1,3-butadiene | ND | | 1.1 | 0.53 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **m,p-Xylene** | **1.1** | | 0.22 | 0.11 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Methylene Chloride** | **1.3** | | 0.17 | 0.090 | ug/m3 | | | 04/01/21 21:09 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.090 | 0.038 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **o-Xylene** | **0.47** | | 0.11 | 0.056 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Tetrachloroethene** | **0.16** | **J** | 0.17 | 0.098 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Toluene** | **14** | | 0.19 | 0.058 | ug/m3 | | | 04/01/21 21:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.099 | 0.043 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Trichloroethene** | **0.82** | | 0.13 | 0.095 | ug/m3 | | | 04/01/21 21:09 | 1 |
| **Trichlorofluoromethane** | **1.6** | | 0.14 | 0.046 | ug/m3 | | | 04/01/21 21:09 | 1 |
| Vinyl chloride | ND | | 0.13 | 0.058 | ug/m3 | | | 04/01/21 21:09 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *112* | | *61 - 130* | | *04/01/21 21:09* | *1* |
| *4-Bromofluorobenzene (Surr)* | *93* | | *59 - 130* | | *04/01/21 21:09* | *1* |
| *Toluene-d8 (Surr)* | *109* | | *70 - 130* | | *04/01/21 21:09* | *1* |

## Client Sample ID: IAS-4

**Lab Sample ID: 440-281107-4**

**Date Collected: 03/24/21 16:29**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

### Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,1-Difluoroethane** | **39** | | 2.1 | 0.93 | ug/m3 | | | 04/02/21 09:58 | 3.125 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *120* | | *61 - 130* | | *04/02/21 09:58* | *3.125* |
| *4-Bromofluorobenzene (Surr)* | *89* | | *59 - 130* | | *04/02/21 09:58* | *3.125* |
| *Toluene-d8 (Surr)* | *108* | | *70 - 130* | | *04/02/21 09:58* | *3.125* |

## Client Sample ID: OAS-1

**Lab Sample ID: 440-281107-5**

**Date Collected: 03/24/21 16:37**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

### Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 0.14 | 0.056 | ug/m3 | | | 04/01/21 22:10 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.17 | 0.11 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **1,1,2-Trichloro-1,2,2-trifluoroethane** | **0.57** | | 0.19 | 0.070 | ug/m3 | | | 04/01/21 22:10 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.14 | 0.084 | ug/m3 | | | 04/01/21 22:10 | 1 |
| 1,1-Dichloroethane | ND | | 0.10 | 0.047 | ug/m3 | | | 04/01/21 22:10 | 1 |
| 1,1-Dichloroethene | ND | | 0.099 | 0.050 | ug/m3 | | | 04/01/21 22:10 | 1 |
| 1,1-Difluoroethane | ND | | 0.68 | 0.30 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **1,2,4-Trimethylbenzene** | **0.21** | **J** | 0.25 | 0.088 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **1,2-Dichloroethane** | **0.12** | | 0.10 | 0.068 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **1,3,5-Trimethylbenzene** | **0.069** | **J** | 0.12 | 0.059 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **4-Ethyltoluene** | **0.076** | **J** | 0.25 | 0.063 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Benzene** | **0.48** | | 0.080 | 0.041 | ug/m3 | | | 04/01/21 22:10 | 1 |
| Bromodichloromethane | ND | | 0.17 | 0.066 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Carbon tetrachloride** | **0.53** | | 0.31 | 0.25 | ug/m3 | | | 04/01/21 22:10 | 1 |
| Chlorobenzene | ND | | 0.23 | 0.080 | ug/m3 | | | 04/01/21 22:10 | 1 |
| Chloroethane | ND | | 0.066 | 0.052 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Chloroform** | **0.11** | **J** | 0.12 | 0.059 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Chloromethane** | **0.69** | | 0.052 | 0.026 | ug/m3 | | | 04/01/21 22:10 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.099 | 0.056 | ug/m3 | | | 04/01/21 22:10 | 1 |
| Dibromochloromethane | ND | | 0.21 | 0.088 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Dichlorodifluoromethane** | **2.8** | | 0.12 | 0.049 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Ethylbenzene** | **0.17** | | 0.11 | 0.053 | ug/m3 | | | 04/01/21 22:10 | 1 |
| Hexachloro-1,3-butadiene | ND | | 1.1 | 0.53 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **m,p-Xylene** | **0.50** | | 0.22 | 0.11 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Methylene Chloride** | **0.49** | | 0.17 | 0.090 | ug/m3 | | | 04/01/21 22:10 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.090 | 0.038 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **o-Xylene** | **0.21** | | 0.11 | 0.056 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Tetrachloroethene** | **0.13** | **J** | 0.17 | 0.098 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Toluene** | **1.0** | | 0.19 | 0.058 | ug/m3 | | | 04/01/21 22:10 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.099 | 0.043 | ug/m3 | | | 04/01/21 22:10 | 1 |
| Trichloroethene | ND | | 0.13 | 0.095 | ug/m3 | | | 04/01/21 22:10 | 1 |
| **Trichlorofluoromethane** | **1.6** | | 0.14 | 0.046 | ug/m3 | | | 04/01/21 22:10 | 1 |
| Vinyl chloride | ND | | 0.13 | 0.058 | ug/m3 | | | 04/01/21 22:10 | 1 |

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281107-1

## Client Sample ID: OAS-1

**Lab Sample ID: 440-281107-5**

**Date Collected: 03/24/21 16:37**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 113 | | 61 - 130 | | 04/01/21 22:10 | 1 |
| 4-Bromofluorobenzene (Surr) | 88 | | 59 - 130 | | 04/01/21 22:10 | 1 |
| Toluene-d8 (Surr) | 110 | | 70 - 130 | | 04/01/21 22:10 | 1 |

## Client Sample ID: OAS-2

**Lab Sample ID: 440-281107-6**

**Date Collected: 03/24/21 16:39**
**Matrix: Air**
**Date Received: 03/25/21 19:00**
**Sample Container: Summa Canister 6L**

### Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 0.14 | 0.056 | ug/m3 | | | 04/01/21 23:02 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.17 | 0.11 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **1,1,2-Trichloro-1,2,2-trifluoroethane** | **0.53** | | 0.19 | 0.070 | ug/m3 | | | 04/01/21 23:02 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.14 | 0.084 | ug/m3 | | | 04/01/21 23:02 | 1 |
| 1,1-Dichloroethane | ND | | 0.10 | 0.047 | ug/m3 | | | 04/01/21 23:02 | 1 |
| 1,1-Dichloroethene | ND | | 0.099 | 0.050 | ug/m3 | | | 04/01/21 23:02 | 1 |
| 1,1-Difluoroethane | ND | | 0.68 | 0.30 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **1,2,4-Trimethylbenzene** | **0.21** | **J** | 0.25 | 0.088 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **1,2-Dichloroethane** | **0.095** | **J** | 0.10 | 0.068 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **1,3,5-Trimethylbenzene** | **0.061** | **J** | 0.12 | 0.059 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **4-Ethyltoluene** | **0.069** | **J** | 0.25 | 0.063 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Benzene** | **0.45** | | 0.080 | 0.041 | ug/m3 | | | 04/01/21 23:02 | 1 |
| Bromodichloromethane | ND | | 0.17 | 0.066 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Carbon tetrachloride** | **0.57** | | 0.31 | 0.25 | ug/m3 | | | 04/01/21 23:02 | 1 |
| Chlorobenzene | ND | | 0.23 | 0.080 | ug/m3 | | | 04/01/21 23:02 | 1 |
| Chloroethane | ND | | 0.066 | 0.052 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Chloroform** | **0.10** | **J** | 0.12 | 0.059 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Chloromethane** | **0.75** | | 0.052 | 0.026 | ug/m3 | | | 04/01/21 23:02 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.099 | 0.056 | ug/m3 | | | 04/01/21 23:02 | 1 |
| Dibromochloromethane | ND | | 0.21 | 0.088 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Dichlorodifluoromethane** | **2.7** | | 0.12 | 0.049 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Ethylbenzene** | **0.16** | | 0.11 | 0.053 | ug/m3 | | | 04/01/21 23:02 | 1 |
| Hexachloro-1,3-butadiene | ND | | 1.1 | 0.53 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **m,p-Xylene** | **0.46** | | 0.22 | 0.11 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Methylene Chloride** | **0.62** | | 0.17 | 0.090 | ug/m3 | | | 04/01/21 23:02 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.090 | 0.038 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **o-Xylene** | **0.20** | | 0.11 | 0.056 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Tetrachloroethene** | **0.12** | **J** | 0.17 | 0.098 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Toluene** | **0.87** | | 0.19 | 0.058 | ug/m3 | | | 04/01/21 23:02 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.099 | 0.043 | ug/m3 | | | 04/01/21 23:02 | 1 |
| Trichloroethene | ND | | 0.13 | 0.095 | ug/m3 | | | 04/01/21 23:02 | 1 |
| **Trichlorofluoromethane** | **1.5** | | 0.14 | 0.046 | ug/m3 | | | 04/01/21 23:02 | 1 |
| Vinyl chloride | ND | | 0.13 | 0.058 | ug/m3 | | | 04/01/21 23:02 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 113 | | 61 - 130 | | 04/01/21 23:02 | 1 |
| 4-Bromofluorobenzene (Surr) | 85 | | 59 - 130 | | 04/01/21 23:02 | 1 |
| Toluene-d8 (Surr) | 107 | | 70 - 130 | | 04/01/21 23:02 | 1 |

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

**Matrix: Air** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | DCA | BFB | TOL | | | | | | |
| Lab Sample ID | Client Sample ID | (61-130) | (59-130) | (70-130) | | | | | | |
| 440-28110C-1 | l3B-1 | 112 | 50 | 10C | | | | | | |
| 440-28110C-2 | l3B-2 | 116 | 56 | 10C | | | | | | |
| 440-28110C-2 - D7 | l3B-2 | 116 | 8L | 106 | | | | | | |
| 440-28110C-m | l3B-m | 114 | 56 | 10C | | | | | | |
| 440-28110C-m- D7 | l3B-m | 11L | 81 | 102 | | | | | | |
| 440-28110C-m- D72 | l3B-m | 11L | | 10L | | | | | | |
| 440-28110C-4 | l3B-4 | 112 | 5m | 105 | | | | | | |
| 440-28110C-4 - D7 | l3B-4 | 120 | 85 | 108 | | | | | | |
| 440-28110C-6 | p 3B-1 | 11m | 88 | 110 | | | | | | |
| 440-28110C-L | p 3B-2 | 11m | 86 | 10C | | | | | | |
| 7l B 6C0-1m584CS6 | 7cb l ot Taoi BcMhin | 116 | 100 | 100 | | | | | | |
| 7l B 6C0-14015m8C | 7cb l ot Taoi BcMhin | 11C | 100 | 5C | | | | | | |
| 7l BD 6C0-1m584CSL | 7cb l ot Taoi BcMhin DPh | 11L | 55 | 108 | | | | | | |
| 7l BD 6C0-14015m88 | 7cb l ot Taoi BcMhin DPh | 11C | 100 | 104 | | | | | | |
| Ad 6C0-1m584CS5 | AnT=owdict 9 | 11m | C5 | 10m | | | | | | |
| Ad 6C0-14015m810 | AnT=owdict 9 | 11m | C5 | 104 | | | | | | |

**Surrogate Legend**

Dl 3 , 1(2-Dcs=ioaonT=ct n-w4 )BPaaF
df d , 4-daoMoziPoaobnt Ont n )BPaaF
r p 7 , roiPnt n-w8 )BPaaF

# Method Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281107-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| TO-15 SIM | Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) | EPA-21 | ECL 2 |

**Protocol References:**

EPA-21 = "Compendium Of Methods For The Determination Of Toxic Organic Compounds In Ambient Air", Second Edition, EPA/625/R-96/010B, January 1999

**Laboratory References:**

ECL 2 = Eurofins Calscience LLC  Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Client Sample ID: IAS-1
**Date Collected: 03/24/21 16:25**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281107-1
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 SIM | | 1.1111 | 250 mL | 250 mL | 139847 | 04/01/21 10:51 | UJHY | ECL 2 |

## Client Sample ID: IAS-2
**Date Collected: 03/24/21 16:27**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281107-2
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 SIM | | 1 | 250 mL | 250 mL | 140193 | 04/01/21 19:24 | UJHY | ECL 2 |
| Total/NA | Analysis | TO-15 SIM | DL | 6.25 | 250 mL | 250 mL | 140193 | 04/02/21 09:16 | UJHY | ECL 2 |

## Client Sample ID: IAS-3
**Date Collected: 03/24/21 16:28**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281107-3
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 SIM | | 1 | 250 mL | 250 mL | 140193 | 04/01/21 20:16 | UJHY | ECL 2 |
| Total/NA | Analysis | TO-15 SIM | DL | 15.5 | 250 mL | 250 mL | 140193 | 04/02/21 10:38 | UJHY | ECL 2 |
| Total/NA | Analysis | TO-15 SIM | DL2 | 19.375 | 250 mL | 250 mL | 140193 | 04/02/21 12:05 | UJHY | ECL 2 |

## Client Sample ID: IAS-4
**Date Collected: 03/24/21 16:29**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281107-4
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 SIM | | 1 | 250 mL | 250 mL | 140193 | 04/01/21 21:09 | UJHY | ECL 2 |
| Total/NA | Analysis | TO-15 SIM | DL | 3.125 | 250 mL | 250 mL | 140193 | 04/02/21 09:58 | UJHY | ECL 2 |

## Client Sample ID: OAS-1
**Date Collected: 03/24/21 16:37**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281107-5
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 SIM | | 1 | 250 mL | 250 mL | 140193 | 04/01/21 22:10 | UJHY | ECL 2 |

## Client Sample ID: OAS-2
**Date Collected: 03/24/21 16:39**
**Date Received: 03/25/21 19:00**

## Lab Sample ID: 440-281107-6
**Matrix: Air**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | TO-15 SIM | | 1 | 250 mL | 250 mL | 140193 | 04/01/21 23:02 | UJHY | ECL 2 |

**Laboratory References:**

ECL 2 = Eurofins Calscience LLC  Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

**Lab Sample ID: MB 570-139847/9**
**Matrix: Air**
**Analysis Batch: 139847**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 0.14 | 0.056 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.17 | 0.11 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.19 | 0.070 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.14 | 0.084 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,1-Dichloroethane | ND | | 0.10 | 0.047 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,1-Dichloroethene | ND | | 0.099 | 0.050 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,1-Difluoroethane | ND | | 0.68 | 0.30 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.25 | 0.088 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,2-Dichloroethane | ND | | 0.10 | 0.068 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.12 | 0.059 | ug/m3 | | | 03/31/21 18:33 | 1 |
| 4-Ethyltoluene | ND | | 0.25 | 0.063 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Benzene | ND | | 0.080 | 0.041 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Bromodichloromethane | ND | | 0.17 | 0.066 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Carbon tetrachloride | ND | | 0.31 | 0.25 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Chlorobenzene | ND | | 0.23 | 0.080 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Chloroethane | ND | | 0.066 | 0.052 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Chloroform | ND | | 0.12 | 0.059 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Chloromethane | ND | | 0.052 | 0.026 | ug/m3 | | | 03/31/21 18:33 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.099 | 0.056 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Dibromochloromethane | ND | | 0.21 | 0.088 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Dichlorodifluoromethane | ND | | 0.12 | 0.049 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Ethylbenzene | ND | | 0.11 | 0.053 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Hexachloro-1,3-butadiene | ND | | 1.1 | 0.53 | ug/m3 | | | 03/31/21 18:33 | 1 |
| m,p-Xylene | ND | | 0.22 | 0.11 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Methylene Chloride | ND | | 0.17 | 0.090 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.090 | 0.038 | ug/m3 | | | 03/31/21 18:33 | 1 |
| o-Xylene | ND | | 0.11 | 0.056 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Tetrachloroethene | ND | | 0.17 | 0.098 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Toluene | ND | | 0.19 | 0.058 | ug/m3 | | | 03/31/21 18:33 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.099 | 0.043 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Trichloroethene | ND | | 0.13 | 0.095 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Trichlorofluoromethane | ND | | 0.14 | 0.046 | ug/m3 | | | 03/31/21 18:33 | 1 |
| Vinyl chloride | ND | | 0.13 | 0.058 | ug/m3 | | | 03/31/21 18:33 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *61 - 130* | | *03/31/21 18:33* | *1* |
| *4-Bromofluorobenzene (Surr)* | *79* | | *59 - 130* | | *03/31/21 18:33* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *70 - 130* | | *03/31/21 18:33* | *1* |

**Lab Sample ID: LCS 570-139847/5**
**Matrix: Air**
**Analysis Batch: 139847**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 2.73 | 2.87 | | ug/m3 | | 105 | 70 - 137 |
| 1,1,2,2-Tetrachloroethane | 3.43 | 3.01 | | ug/m3 | | 88 | 57 - 154 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 3.83 | 3.47 | | ug/m3 | | 91 | 69 - 137 |

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

**Lab Sample ID: LCS 570-139847/5**
**Matrix: Air**
**Analysis Batch: 139847**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloroethane | 2.73 | 2.49 | | ug/m3 | | 91 | 65 - 151 |
| 1,1-Dichloroethane | 2.02 | 1.73 | | ug/m3 | | 86 | 67 - 133 |
| 1,1-Dichloroethene | 1.98 | 1.67 | | ug/m3 | | 84 | 57 - 142 |
| 1,1-Difluoroethane | 1.35 | 1.22 | | ug/m3 | | 91 | 55 - 130 |
| 1,2,4-Trimethylbenzene | 2.46 | 2.18 | | ug/m3 | | 89 | 49 - 134 |
| 1,2-Dichloroethane | 2.02 | 2.26 | | ug/m3 | | 112 | 70 - 141 |
| 1,3,5-Trimethylbenzene | 2.46 | 2.09 | | ug/m3 | | 85 | 48 - 139 |
| 4-Ethyltoluene | 2.46 | 2.20 | | ug/m3 | | 90 | 49 - 137 |
| Benzene | 1.60 | 1.44 | | ug/m3 | | 90 | 54 - 162 |
| Bromodichloromethane | 3.35 | 3.59 | | ug/m3 | | 107 | 69 - 149 |
| Carbon tetrachloride | 3.15 | 3.40 | | ug/m3 | | 108 | 70 - 136 |
| Chlorobenzene | 2.30 | 2.12 | | ug/m3 | | 92 | 69 - 143 |
| Chloroethane | 1.32 | 1.07 | | ug/m3 | | 81 | 62 - 134 |
| Chloroform | 2.44 | 2.37 | | ug/m3 | | 97 | 65 - 142 |
| Chloromethane | 1.03 | 0.834 | | ug/m3 | | 81 | 64 - 130 |
| cis-1,2-Dichloroethene | 1.98 | 1.66 | | ug/m3 | | 84 | 61 - 130 |
| Dibromochloromethane | 4.26 | 4.30 | | ug/m3 | | 101 | 70 - 151 |
| Dichlorodifluoromethane | 2.47 | 2.61 | | ug/m3 | | 106 | 68 - 141 |
| Ethylbenzene | 2.17 | 1.84 | | ug/m3 | | 85 | 54 - 141 |
| Hexachloro-1,3-butadiene | 5.33 | 5.74 | | ug/m3 | | 108 | 32 - 172 |
| m,p-Xylene | 4.34 | 3.81 | | ug/m3 | | 88 | 56 - 142 |
| Methylene Chloride | 1.74 | 1.36 | | ug/m3 | | 78 | 56 - 130 |
| Methyl-t-Butyl Ether (MTBE) | 1.80 | 1.48 | | ug/m3 | | 82 | 51 - 137 |
| o-Xylene | 2.17 | 1.85 | | ug/m3 | | 85 | 55 - 142 |
| Tetrachloroethene | 3.39 | 3.21 | | ug/m3 | | 95 | 65 - 154 |
| Toluene | 1.88 | 1.61 | | ug/m3 | | 85 | 59 - 147 |
| trans-1,2-Dichloroethene | 1.98 | 1.68 | | ug/m3 | | 85 | 63 - 135 |
| Trichloroethene | 2.69 | 2.71 | | ug/m3 | | 101 | 69 - 157 |
| Trichlorofluoromethane | 2.81 | 3.00 | | ug/m3 | | 107 | 69 - 139 |
| Vinyl chloride | 1.28 | 1.05 | | ug/m3 | | 82 | 63 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *61 - 130* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *59 - 130* |
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* |

**Lab Sample ID: LCSD 570-139847/6**
**Matrix: Air**
**Analysis Batch: 139847**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 2.73 | 2.90 | | ug/m3 | | 106 | 70 - 137 | 1 | 20 |
| 1,1,2,2-Tetrachloroethane | 3.43 | 2.98 | | ug/m3 | | 87 | 57 - 154 | 1 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 3.83 | 3.52 | | ug/m3 | | 92 | 69 - 137 | 1 | 20 |
| 1,1,2-Trichloroethane | 2.73 | 2.56 | | ug/m3 | | 94 | 65 - 151 | 3 | 20 |
| 1,1-Dichloroethane | 2.02 | 1.72 | | ug/m3 | | 85 | 67 - 133 | 0 | 20 |

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-139847/6**
**Matrix: Air**
**Analysis Batch: 139847**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | | | 1.98 | 1.60 | | ug/m3 | | 81 | 57 - 142 | 5 | 20 |
| 1,1-Difluoroethane | | | 1.35 | 1.33 | | ug/m3 | | 99 | 55 - 130 | 9 | 21 |
| 1,2,4-Trimethylbenzene | | | 2.46 | 2.14 | | ug/m3 | | 87 | 49 - 134 | 2 | 20 |
| 1,2-Dichloroethane | | | 2.02 | 2.25 | | ug/m3 | | 111 | 70 - 141 | 0 | 20 |
| 1,3,5-Trimethylbenzene | | | 2.46 | 2.04 | | ug/m3 | | 83 | 48 - 139 | 3 | 21 |
| 4-Ethyltoluene | | | 2.46 | 2.12 | | ug/m3 | | 86 | 49 - 137 | 4 | 20 |
| Benzene | | | 1.60 | 1.42 | | ug/m3 | | 89 | 54 - 162 | 1 | 20 |
| Bromodichloromethane | | | 3.35 | 3.51 | | ug/m3 | | 105 | 69 - 149 | 2 | 20 |
| Carbon tetrachloride | | | 3.15 | 3.42 | | ug/m3 | | 109 | 70 - 136 | 1 | 20 |
| Chlorobenzene | | | 2.30 | 2.14 | | ug/m3 | | 93 | 69 - 143 | 1 | 20 |
| Chloroethane | | | 1.32 | 1.03 | | ug/m3 | | 78 | 62 - 134 | 4 | 21 |
| Chloroform | | | 2.44 | 2.38 | | ug/m3 | | 97 | 65 - 142 | 0 | 20 |
| Chloromethane | | | 1.03 | 0.804 | | ug/m3 | | 78 | 64 - 130 | 4 | 25 |
| cis-1,2-Dichloroethene | | | 1.98 | 1.68 | | ug/m3 | | 85 | 61 - 130 | 1 | 20 |
| Dibromochloromethane | | | 4.26 | 4.38 | | ug/m3 | | 103 | 70 - 151 | 2 | 20 |
| Dichlorodifluoromethane | | | 2.47 | 2.54 | | ug/m3 | | 103 | 68 - 141 | 3 | 20 |
| Ethylbenzene | | | 2.17 | 1.83 | | ug/m3 | | 84 | 54 - 141 | 1 | 20 |
| Hexachloro-1,3-butadiene | | | 5.33 | 5.18 | | ug/m3 | | 97 | 32 - 172 | 10 | 30 |
| m,p-Xylene | | | 4.34 | 3.76 | | ug/m3 | | 87 | 56 - 142 | 1 | 20 |
| Methylene Chloride | | | 1.74 | 1.31 | | ug/m3 | | 75 | 56 - 130 | 4 | 21 |
| Methyl-t-Butyl Ether (MTBE) | | | 1.80 | 1.50 | | ug/m3 | | 83 | 51 - 137 | 1 | 20 |
| o-Xylene | | | 2.17 | 1.81 | | ug/m3 | | 84 | 55 - 142 | 2 | 20 |
| Tetrachloroethene | | | 3.39 | 3.26 | | ug/m3 | | 96 | 65 - 154 | 2 | 20 |
| Toluene | | | 1.88 | 1.64 | | ug/m3 | | 87 | 59 - 147 | 2 | 20 |
| trans-1,2-Dichloroethene | | | 1.98 | 1.71 | | ug/m3 | | 86 | 63 - 135 | 1 | 20 |
| Trichloroethene | | | 2.69 | 2.68 | | ug/m3 | | 100 | 69 - 157 | 1 | 20 |
| Trichlorofluoromethane | | | 2.81 | 2.91 | | ug/m3 | | 104 | 69 - 139 | 3 | 20 |
| Vinyl chloride | | | 1.28 | 1.04 | | ug/m3 | | 82 | 63 - 133 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *116* | | *61 - 130* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *59 - 130* |
| *Toluene-d8 (Surr)* | *108* | | *70 - 130* |

**Lab Sample ID: MB 570-140193/10**
**Matrix: Air**
**Analysis Batch: 140193**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 0.14 | 0.056 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.17 | 0.11 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.19 | 0.070 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 1,1,2-Trichloroethane | ND | | 0.14 | 0.084 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 1,1-Dichloroethane | ND | | 0.10 | 0.047 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 1,1-Dichloroethene | ND | | 0.099 | 0.050 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 1,1-Difluoroethane | ND | | 0.68 | 0.30 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 0.25 | 0.088 | ug/m3 | | | 04/01/21 18:33 | 1 |

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

**Lab Sample ID: MB 570-140193/10**
**Matrix: Air**
**Analysis Batch: 140193**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | ND | | 0.10 | 0.068 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 18:33 | 1 |
| 4-Ethyltoluene | ND | | 0.25 | 0.063 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Benzene | ND | | 0.080 | 0.041 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Bromodichloromethane | ND | | 0.17 | 0.066 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Carbon tetrachloride | ND | | 0.31 | 0.25 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Chlorobenzene | ND | | 0.23 | 0.080 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Chloroethane | ND | | 0.066 | 0.052 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Chloroform | ND | | 0.12 | 0.059 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Chloromethane | ND | | 0.052 | 0.026 | ug/m3 | | | 04/01/21 18:33 | 1 |
| cis-1,2-Dichloroethene | ND | | 0.099 | 0.056 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Dibromochloromethane | ND | | 0.21 | 0.088 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Dichlorodifluoromethane | ND | | 0.12 | 0.049 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Ethylbenzene | ND | | 0.11 | 0.053 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Hexachloro-1,3-butadiene | ND | | 1.1 | 0.53 | ug/m3 | | | 04/01/21 18:33 | 1 |
| m,p-Xylene | ND | | 0.22 | 0.11 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Methylene Chloride | ND | | 0.17 | 0.090 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.090 | 0.038 | ug/m3 | | | 04/01/21 18:33 | 1 |
| o-Xylene | ND | | 0.11 | 0.056 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Tetrachloroethene | ND | | 0.17 | 0.098 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Toluene | ND | | 0.19 | 0.058 | ug/m3 | | | 04/01/21 18:33 | 1 |
| trans-1,2-Dichloroethene | ND | | 0.099 | 0.043 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Trichloroethene | ND | | 0.13 | 0.095 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Trichlorofluoromethane | ND | | 0.14 | 0.046 | ug/m3 | | | 04/01/21 18:33 | 1 |
| Vinyl chloride | ND | | 0.13 | 0.058 | ug/m3 | | | 04/01/21 18:33 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *61 - 130* | | *04/01/21 18:33* | *1* |
| *4-Bromofluorobenzene (Surr)* | *79* | | *59 - 130* | | *04/01/21 18:33* | *1* |
| *Toluene-d8 (Surr)* | *104* | | *70 - 130* | | *04/01/21 18:33* | *1* |

**Lab Sample ID: LCS 570-140193/7**
**Matrix: Air**
**Analysis Batch: 140193**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 2.73 | 3.37 | | ug/m3 | | 124 | 70 - 137 |
| 1,1,2,2-Tetrachloroethane | 3.43 | 3.58 | | ug/m3 | | 104 | 57 - 154 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 3.83 | 4.04 | | ug/m3 | | 105 | 69 - 137 |
| 1,1,2-Trichloroethane | 2.73 | 3.01 | | ug/m3 | | 110 | 65 - 151 |
| 1,1-Dichloroethane | 2.02 | 2.02 | | ug/m3 | | 100 | 67 - 133 |
| 1,1-Dichloroethene | 1.98 | 1.77 | | ug/m3 | | 89 | 57 - 142 |
| 1,1-Difluoroethane | 1.35 | 1.11 | | ug/m3 | | 82 | 55 - 130 |
| 1,2,4-Trimethylbenzene | 2.46 | 2.48 | | ug/m3 | | 101 | 49 - 134 |
| 1,2-Dichloroethane | 2.02 | 2.65 | | ug/m3 | | 131 | 70 - 141 |
| 1,3,5-Trimethylbenzene | 2.46 | 2.34 | | ug/m3 | | 95 | 48 - 139 |

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

**Lab Sample ID: LCS 570-140193/7**
**Matrix: Air**
**Analysis Batch: 140193**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 4-Ethyltoluene | 2.46 | 2.45 | | ug/m3 | | 100 | 49 - 137 |
| Benzene | 1.60 | 1.73 | | ug/m3 | | 108 | 54 - 162 |
| Bromodichloromethane | 3.35 | 4.25 | | ug/m3 | | 127 | 69 - 149 |
| Carbon tetrachloride | 3.15 | 4.04 | | ug/m3 | | 128 | 70 - 136 |
| Chlorobenzene | 2.30 | 2.40 | | ug/m3 | | 104 | 69 - 143 |
| Chloroethane | 1.32 | 1.11 | | ug/m3 | | 85 | 62 - 134 |
| Chloroform | 2.44 | 2.75 | | ug/m3 | | 113 | 65 - 142 |
| Chloromethane | 1.03 | 0.845 | | ug/m3 | | 82 | 64 - 130 |
| cis-1,2-Dichloroethene | 1.98 | 1.91 | | ug/m3 | | 96 | 61 - 130 |
| Dibromochloromethane | 4.26 | 5.17 | | ug/m3 | | 121 | 70 - 151 |
| Dichlorodifluoromethane | 2.47 | 2.92 | | ug/m3 | | 118 | 68 - 141 |
| Ethylbenzene | 2.17 | 2.14 | | ug/m3 | | 98 | 54 - 141 |
| Hexachloro-1,3-butadiene | 5.33 | 5.66 | | ug/m3 | | 106 | 32 - 172 |
| m,p-Xylene | 4.34 | 4.58 | | ug/m3 | | 105 | 56 - 142 |
| Methylene Chloride | 1.74 | 1.45 | | ug/m3 | | 83 | 56 - 130 |
| Methyl-t-Butyl Ether (MTBE) | 1.80 | 1.68 | | ug/m3 | | 93 | 51 - 137 |
| o-Xylene | 2.17 | 2.27 | | ug/m3 | | 104 | 55 - 142 |
| Tetrachloroethene | 3.39 | 3.78 | | ug/m3 | | 111 | 65 - 154 |
| Toluene | 1.88 | 1.98 | | ug/m3 | | 105 | 59 - 147 |
| trans-1,2-Dichloroethene | 1.98 | 1.94 | | ug/m3 | | 98 | 63 - 135 |
| Trichloroethene | 2.69 | 3.00 | | ug/m3 | | 112 | 69 - 157 |
| Trichlorofluoromethane | 2.81 | 3.38 | | ug/m3 | | 120 | 69 - 139 |
| Vinyl chloride | 1.28 | 1.16 | | ug/m3 | | 90 | 63 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *61 - 130* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *59 - 130* |
| *Toluene-d8 (Surr)* | *97* | | *70 - 130* |

**Lab Sample ID: LCSD 570-140193/8**
**Matrix: Air**
**Analysis Batch: 140193**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 2.73 | 3.41 | | ug/m3 | | 125 | 70 - 137 | 1 | 20 |
| 1,1,2,2-Tetrachloroethane | 3.43 | 3.56 | | ug/m3 | | 104 | 57 - 154 | 0 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 3.83 | 4.07 | | ug/m3 | | 106 | 69 - 137 | 1 | 20 |
| 1,1,2-Trichloroethane | 2.73 | 3.02 | | ug/m3 | | 111 | 65 - 151 | 1 | 20 |
| 1,1-Dichloroethane | 2.02 | 2.05 | | ug/m3 | | 101 | 67 - 133 | 1 | 20 |
| 1,1-Dichloroethene | 1.98 | 1.80 | | ug/m3 | | 91 | 57 - 142 | 2 | 20 |
| 1,1-Difluoroethane | 1.35 | 1.08 | | ug/m3 | | 80 | 55 - 130 | 3 | 21 |
| 1,2,4-Trimethylbenzene | 2.46 | 2.52 | | ug/m3 | | 103 | 49 - 134 | 2 | 20 |
| 1,2-Dichloroethane | 2.02 | 2.69 | | ug/m3 | | 133 | 70 - 141 | 1 | 20 |
| 1,3,5-Trimethylbenzene | 2.46 | 2.32 | | ug/m3 | | 94 | 48 - 139 | 1 | 21 |
| 4-Ethyltoluene | 2.46 | 2.44 | | ug/m3 | | 99 | 49 - 137 | 0 | 20 |
| Benzene | 1.60 | 1.73 | | ug/m3 | | 108 | 54 - 162 | 0 | 20 |

## Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-140193/8**
**Matrix: Air**
**Analysis Batch: 140193**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | | | 3.35 | 4.29 | | ug/m3 | | 128 | 69 - 149 | 1 | 20 |
| Carbon tetrachloride | | | 3.15 | 4.05 | | ug/m3 | | 129 | 70 - 136 | 0 | 20 |
| Chlorobenzene | | | 2.30 | 2.43 | | ug/m3 | | 105 | 69 - 143 | 1 | 20 |
| Chloroethane | | | 1.32 | 1.14 | | ug/m3 | | 86 | 62 - 134 | 2 | 21 |
| Chloroform | | | 2.44 | 2.79 | | ug/m3 | | 114 | 65 - 142 | 2 | 20 |
| Chloromethane | | | 1.03 | 0.820 | | ug/m3 | | 79 | 64 - 130 | 3 | 25 |
| cis-1,2-Dichloroethene | | | 1.98 | 1.97 | | ug/m3 | | 99 | 61 - 130 | 3 | 20 |
| Dibromochloromethane | | | 4.26 | 5.22 | | ug/m3 | | 122 | 70 - 151 | 1 | 20 |
| Dichlorodifluoromethane | | | 2.47 | 2.91 | | ug/m3 | | 118 | 68 - 141 | 0 | 20 |
| Ethylbenzene | | | 2.17 | 2.12 | | ug/m3 | | 98 | 54 - 141 | 1 | 20 |
| Hexachloro-1,3-butadiene | | | 5.33 | 5.86 | | ug/m3 | | 110 | 32 - 172 | 3 | 30 |
| m,p-Xylene | | | 4.34 | 4.55 | | ug/m3 | | 105 | 56 - 142 | 1 | 20 |
| Methylene Chloride | | | 1.74 | 1.43 | | ug/m3 | | 83 | 56 - 130 | 1 | 21 |
| Methyl-t-Butyl Ether (MTBE) | | | 1.80 | 1.69 | | ug/m3 | | 94 | 51 - 137 | 1 | 20 |
| o-Xylene | | | 2.17 | 2.23 | | ug/m3 | | 103 | 55 - 142 | 1 | 20 |
| Tetrachloroethene | | | 3.39 | 3.83 | | ug/m3 | | 113 | 65 - 154 | 1 | 20 |
| Toluene | | | 1.88 | 2.01 | | ug/m3 | | 107 | 59 - 147 | 2 | 20 |
| trans-1,2-Dichloroethene | | | 1.98 | 1.97 | | ug/m3 | | 99 | 63 - 135 | 2 | 20 |
| Trichloroethene | | | 2.69 | 3.07 | | ug/m3 | | 114 | 69 - 157 | 2 | 20 |
| Trichlorofluoromethane | | | 2.81 | 3.35 | | ug/m3 | | 119 | 69 - 139 | 1 | 20 |
| Vinyl chloride | | | 1.28 | 1.13 | | ug/m3 | | 88 | 63 - 133 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *61 - 130* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *59 - 130* |
| *Toluene-d8 (Surr)* | *104* | | *70 - 130* |

# QC Association Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281107-1

## Air - GC/MS VOA

### Analysis Batch: 139847

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281107-1 | IAS-1 | Total/NA | Air | TO-15 SIM | |
| MB 570-139847/9 | Method Blank | Total/NA | Air | TO-15 SIM | |
| LCS 570-139847/5 | Lab Control Sample | Total/NA | Air | TO-15 SIM | |
| LCSD 570-139847/6 | Lab Control Sample Dup | Total/NA | Air | TO-15 SIM | |

### Analysis Batch: 140193

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-281107-2 | IAS-2 | Total/NA | Air | TO-15 SIM | |
| 440-281107-2 - DL | IAS-2 | Total/NA | Air | TO-15 SIM | |
| 440-281107-3 | IAS-3 | Total/NA | Air | TO-15 SIM | |
| 440-281107-3 - DL | IAS-3 | Total/NA | Air | TO-15 SIM | |
| 440-281107-3 - DL2 | IAS-3 | Total/NA | Air | TO-15 SIM | |
| 440-281107-4 | IAS-4 | Total/NA | Air | TO-15 SIM | |
| 440-281107-4 - DL | IAS-4 | Total/NA | Air | TO-15 SIM | |
| 440-281107-5 | OAS-1 | Total/NA | Air | TO-15 SIM | |
| 440-281107-6 | OAS-2 | Total/NA | Air | TO-15 SIM | |
| MB 570-140193/10 | Method Blank | Total/NA | Air | TO-15 SIM | |
| LCS 570-140193/7 | Lab Control Sample | Total/NA | Air | TO-15 SIM | |
| LCSD 570-140193/8 | Lab Control Sample Dup | Total/NA | Air | TO-15 SIM | |

# Definitions/Glossary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281107-1

## Qualifiers

### Air - GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: Terracon Consultants Inc
Project/Site: Baldwin Park

Job ID: 440-281107-1

## Laboratory: Eurofins Calscience LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | SCAQMD LAP | 17LA0919 | 11-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| TO-15 SIM | | Air | 1,1,1-Trichloroethane |
| TO-15 SIM | | Air | 1,1,2,2-Tetrachloroethane |
| TO-15 SIM | | Air | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| TO-15 SIM | | Air | 1,1,2-Trichloroethane |
| TO-15 SIM | | Air | 1,1-Dichloroethane |
| TO-15 SIM | | Air | 1,1-Dichloroethene |
| TO-15 SIM | | Air | 1,1-Difluoroethane |
| TO-15 SIM | | Air | 1,2,4-Trimethylbenzene |
| TO-15 SIM | | Air | 1,2-Dichloroethane |
| TO-15 SIM | | Air | 1,3,5-Trimethylbenzene |
| TO-15 SIM | | Air | 4-Ethyltoluene |
| TO-15 SIM | | Air | Benzene |
| TO-15 SIM | | Air | Bromodichloromethane |
| TO-15 SIM | | Air | Carbon tetrachloride |
| TO-15 SIM | | Air | Chlorobenzene |
| TO-15 SIM | | Air | Chloroethane |
| TO-15 SIM | | Air | Chloroform |
| TO-15 SIM | | Air | Chloromethane |
| TO-15 SIM | | Air | cis-1,2-Dichloroethene |
| TO-15 SIM | | Air | Dibromochloromethane |
| TO-15 SIM | | Air | Dichlorodifluoromethane |
| TO-15 SIM | | Air | Ethylbenzene |
| TO-15 SIM | | Air | Hexachloro-1,3-butadiene |
| TO-15 SIM | | Air | m,p-Xylene |
| TO-15 SIM | | Air | Methylene Chloride |
| TO-15 SIM | | Air | Methyl-t-Butyl Ether (MTBE) |
| TO-15 SIM | | Air | o-Xylene |
| TO-15 SIM | | Air | Tetrachloroethene |
| TO-15 SIM | | Air | Toluene |
| TO-15 SIM | | Air | trans-1,2-Dichloroethene |
| TO-15 SIM | | Air | Trichloroethene |
| TO-15 SIM | | Air | Trichlorofluoromethane |
| TO-15 SIM | | Air | Vinyl chloride |

| | | | |
|---|---|---|---|
| California | State | 2944 | 09-30-21 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| TO-15 SIM | | Air | 1,1,1-Trichloroethane |
| TO-15 SIM | | Air | 1,1,2,2-Tetrachloroethane |
| TO-15 SIM | | Air | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| TO-15 SIM | | Air | 1,1,2-Trichloroethane |
| TO-15 SIM | | Air | 1,1-Dichloroethane |
| TO-15 SIM | | Air | 1,1-Dichloroethene |
| TO-15 SIM | | Air | 1,1-Difluoroethane |
| TO-15 SIM | | Air | 1,2,4-Trimethylbenzene |

## Laboratory: Eurofins Calscience LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | State | 2944 | 09-30-21 |
| TO-15 SIM | Air | 1,2-Dichloroethane | |
| TO-15 SIM | Air | 1,3,5-Trimethylbenzene | |
| TO-15 SIM | Air | 4-Ethyltoluene | |
| TO-15 SIM | Air | Benzene | |
| TO-15 SIM | Air | Bromodichloromethane | |
| TO-15 SIM | Air | Carbon tetrachloride | |
| TO-15 SIM | Air | Chlorobenzene | |
| TO-15 SIM | Air | Chloroethane | |
| TO-15 SIM | Air | Chloroform | |
| TO-15 SIM | Air | Chloromethane | |
| TO-15 SIM | Air | cis-1,2-Dichloroethene | |
| TO-15 SIM | Air | Dibromochloromethane | |
| TO-15 SIM | Air | Dichlorodifluoromethane | |
| TO-15 SIM | Air | Ethylbenzene | |
| TO-15 SIM | Air | Hexachloro-1,3-butadiene | |
| TO-15 SIM | Air | m,p-Xylene | |
| TO-15 SIM | Air | Methylene Chloride | |
| TO-15 SIM | Air | Methyl-t-Butyl Ether (MTBE) | |
| TO-15 SIM | Air | o-Xylene | |
| TO-15 SIM | Air | Tetrachloroethene | |
| TO-15 SIM | Air | Toluene | |
| TO-15 SIM | Air | trans-1,2-Dichloroethene | |
| TO-15 SIM | Air | Trichloroethene | |
| TO-15 SIM | Air | Trichlorofluoromethane | |
| TO-15 SIM | Air | Vinyl chloride | |

# CHAIN OF CUSTODY RECORD

**Terracon**
Consulting Engineers & Scientists

Laboratory: EUROFINS / CALSCIENCE
Address:
Phone:
Office Location: COLTON - CA
Contact: DANIELLE ROBERTS
Project Manager: TODD MCFARLAND
PO/SO #: CB21P020

Sampler's Name: JOSÉ MARIN
Sampler's Signature:

Project Number: CB21P020
Project Name: BALDWIN PARK

ANALYSIS REQUESTED: 6+2 SUMMA; # TO-15 FULL LIST

LAB USE ONLY
DUE DATE.
TEMP OF COOLER WHEN RECEIVED (°C)
Page 1 of 1

| Matrix | Date | Time | Comp | Grab | Identifying Marks of Sample(s) | Start Depth | End Depth | No. Type of Containers | Lab Sample ID |
|---|---|---|---|---|---|---|---|---|---|
| A | 3/24/21 | 1625 | 8hr | | IAS-1 | | | X | |
| | | 1627 | | | IAS-2 | | | X | |
| | | 1628 | | | IAS-3 | | | X | |
| | | 1629 | | | IAS-4 | | | X | |
| | | 1637 | | | OAS-1 | | | X | |
| ↓ | ↓ | 1639 | ↓ | | OAS-2 | | | X | |

440-281107 Chain of Custody

TURNAROUND TIME: ☒ Normal 5D ☐ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist: ☐ Yes ☐ No

| Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 3 25-21 | 1440 | | 3/25 | 14:40 |
| | 3/25/21 | 1601 | William Rivera | 3/25/21 | 1601 |
| CWR | 3/25/21 | 1900 | | | |
| | | | Olga Morales | 3/25/21 | 1900 |

NOTES
5 DAY TAT
REPORT UG/M3
LEAK CHECK 1,1-DFA (DFE)

Matrix: WW Wastewater; W Water; S Soil; L Liquid; A Air Bag; C Charcoal Tube; SL Sludge; O Oil
Container: VOA 40 ml vial; A/G Amber Glass 1 L; 250 ml Glass wide mouth; P/O Plastic or other



EC-IRU

N \Environmental\Forms
Rev 6/30/2017

186/188 #93

**Eurofins Calscience Irvine**
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone 949-261-1022 Fax: 949-260-3297

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Roberts, Danielle C | Carrier Tracking No(s): | COC No: 440-167341 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Danielle Roberts@Eurofinset.com | State of Origin: California | Page: Page 1 of 1 |
| Company: Eurofins Calscience LLC | | Accreditations Required (See note): SCAQMD LAP - California, State - California | | Job #: 440-281107-1 |
| Address: 7440 Lincoln Way | Due Date Requested: 3/31/2021 | | | |
| City: Garden Grove | TAT Requested (days): | | | |
| State Zip: CA, 92841 | | | | |
| Phone: 714-895-5494(Tel) 714-894-7501(Fax) | PO #: | | | |
| Email | WO #: | | | |
| Project Name: Baldwin Park | Project #: 44025119 | | | |
| Site | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes.**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | TO15_PF/Air_Summa_Can Routine Volatiles in Air (full spike) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| IAS-1 (440-281107-1) | 3/24/21 | 16.25 Pacific | | Air | | | X | 1 | |
| IAS-2 (440-281107-2) | 3/24/21 | 16.27 Pacific | | Air | | | X | 1 | |
| IAS-3 (440-281107-3) | 3/24/21 | 16.28 Pacific | | Air | | | X | 1 | |
| IAS-4 (440-281107-4) | 3/24/21 | 16 29 Pacific | | Air | | | X | 1 | |
| OAS-1 (440-281107-5) | 3/24/21 | 16 37 Pacific | | Air | | | X | 1 | |
| OAS-2 (440-281107-6) | 3/24/21 | 16.39 Pacific | | Air | | | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Relinquished by: | 3-27-21 8:45 | GCFW | | | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No: | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281106-1

**Login Number: 281107**
**List Number: 1**
**Creator: Skinner, Alma D**

**List Source: Eurofins Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | N/A | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <" mm (1/47). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consultants Inc

Job Number: 440-281106-1

**Login Number: 281107**
**List Number: 2**
**Creator: Liao, Gineyau**

**List Source: Eurofins Calscience**
**List Creation: 03/27/21 02:57 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | Not present |
| Sample custody seals, if present, are intact. | N/A | Not Present |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | False | Thermal preservation not required. |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <" mm (1/47). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | False | |

# INDIVIDUAL CANISTER QC CERTIFICATION

Canister Size: ☑ 6L ☐ 1L

Certified Canister IDs:

| | |
|---|---|
| D640 | D654 |
| D530 | D863 |
| D690 | D388 |
| D762 | SIM079 |
| D477 | D339 |
| D185 | D606 |

Certification Method: ☐ TO-14 ☐ TO-15 ☑ TO-15 SIM

Date Cleaned: 3/9/2021

Date Certified: 3/15/2021

TALS Job #: C570-53377

Gauge ID: AIR MG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☐ Oven 1 | ☐ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☑ Oven 7 |
| ☐ Rack 3 | | ☐ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes

Employee ID: I2GR Date: 3/17/2021

eurofins | Calscience

570-53692 Chain of Custody

570-53692 COC

# INDIVIDUAL CANISTER QC CERTIFICATION

Canister Size: ☑ 6L ☐ 1L

Certified Canister IDs:

| | |
|---|---|
| D586 | D835 |
| D464 | D220 |
| D593 | D572 |
| D714 | SIM093 |
| D489 | D555 |
| D705 | D789 |

Certification Method: ☐ TO-14 ☐ TO-15 ☑ TO-15 SIM

Date Cleaned: 3/12/2021

Date Certified: 3/16/2021

TALS Job #: C570-53692

Gauge ID: AIR MG7

Cleaning Equipment ID:

| | | | |
|---|---|---|---|
| ☐ Rack 1 | ☐ Rack 4a | ☐ Oven 1 | ☐ Oven 4 |
| ☐ Rack 2 | ☐ Rack 4b | ☐ Oven 2 | ☑ Oven 7 |
| ☐ Rack 3 | | ☐ Oven 3 | ☐ Oven 8 |

Canisters were cleaned as a batch per Eurofins-Calscience SOP T-016. This certifies that the canisters referenced herein contain no target analytes above the reporting limits stated in the applicable SOP and/or any client specified target list of analytes

Employee ID: I2GR Date: 3/17/2021

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D640 | Lab Sample ID: 570-53377-1

Matrix: Air | Lab File ID: MMM15MAR13.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/15/2021 20:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.025 | 0.010 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 0.025 | 0.016 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.025 | 0.0091 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.025 | 0.015 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.025 | 0.012 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.025 | 0.013 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 0.25 | 0.11 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 0.050 | 0.042 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 0.050 | 0.0073 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 0.050 | 0.033 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 0.050 | 0.018 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.025 | 0.022 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.025 | 0.016 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.025 | 0.017 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.025 | 0.015 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.025 | 0.012 |
| 106-99-0 | 1,3-Butadiene | ND | | 0.025 | 0.013 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.025 | 0.014 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.025 | 0.013 |
| 123-91-1 | 1,4-Dioxane | ND | | 0.25 | 0.17 |
| 78-93-3 | 2-Butanone | ND | | 0.25 | 0.027 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.050 | 0.013 |
| 67-64-1 | Acetone | ND | | 0.50 | 0.41 |
| 71-43-2 | Benzene | ND | | 0.025 | 0.013 |
| 75-27-4 | Bromodichloromethane | ND | | 0.025 | 0.0098 |
| 74-83-9 | Bromomethane | ND | | 0.050 | 0.036 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.025 | 0.014 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.025 | 0.011 |
| 75-15-0 | Carbon disulfide | ND | | 0.25 | 0.16 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.050 | 0.040 |
| 108-90-7 | Chlorobenzene | ND | | 0.050 | 0.017 |
| 75-00-3 | Chloroethane | ND | | 0.025 | 0.020 |
| 67-66-3 | Chloroform | ND | | 0.025 | 0.012 |
| 74-87-3 | Chloromethane | ND | | 0.025 | 0.013 |
| 124-48-1 | Dibromochloromethane | ND | | 0.025 | 0.010 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D640 | Lab Sample ID: 570-53377-1

Matrix: Air | Lab File ID: MMM15MAR13.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/15/2021 20:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.025 | 0.010 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 0.025 | 0.0090 |
| 100-41-4 | Ethylbenzene | ND | | 0.025 | 0.012 |
| 87-68-3 | Hexachloro-1,3-butadiene | ND | | 0.10 | 0.050 |
| 110-54-3 | Hexane | ND | | 0.10 | 0.011 |
| 67-63-0 | Isopropanol | 0.14 | J | 0.25 | 0.13 |
| 75-09-2 | Methylene Chloride | ND | | 0.050 | 0.026 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 0.025 | 0.011 |
| 91-20-3 | Naphthalene | ND | | 0.050 | 0.033 |
| 95-47-6 | o-Xylene | ND | | 0.025 | 0.013 |
| 179601-23-1 | m,p-Xylene | ND | | 0.050 | 0.026 |
| 100-42-5 | Styrene | ND | | 0.025 | 0.0099 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.025 | 0.011 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 0.025 | 0.010 |
| 127-18-4 | Tetrachloroethene | ND | | 0.025 | 0.014 |
| 108-88-3 | Toluene | ND | | 0.050 | 0.015 |
| 1330-20-7 | Xylenes, Total | ND | | 0.075 | 0.039 |
| 79-01-6 | Trichloroethene | ND | | 0.025 | 0.018 |
| 75-69-4 | Trichlorofluoromethane | ND | | 0.025 | 0.0082 |
| 75-01-4 | Vinyl chloride | ND | | 0.050 | 0.023 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 95 | | 61-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 80 | | 59-130 |
| 2037-26-5 | Toluene-d8 (Surr) | 102 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D
Lims ID: 570-53377-A-1
Client ID: D640
Sample Type: Client
Inject. Date: 15-Mar-2021 20:10:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53377-a-1
Misc. Info.: A_SIMIS/SS_00005
Operator ID: 12GR Instrument ID: GCMSMMM

Method: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\AIRMS_GCMSMMM.m
Limit Group: MSV - TO15 SIM TO15 SIMLL
Last Update: 16-Mar-2021 13:38:16 Calib Date: 09-Feb-2021 18:41:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSMMM\20210210-38552.b\MMM09FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: rhoadesw Date: 16-Mar-2021 13:27:08

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 11 1,1-Difluoroethane | 51 | | 2.755 | | | | ND | U |
| 13 Chloromethane | 50 | | 2.966 | | | | ND | U |
| 8 Dichlorodifluoromethane | 85 | | 3.033 | | | | ND | U |
| 15 Vinyl chloride | 62 | | 3.111 | | | | ND | |
| 6 Butadiene | 54 | | 3.200 | | | | ND | |
| 14 Bromomethane | 94 | | 3.378 | | | | ND | |
| 18 Chloroethane | 64 | | 3.493 | | | | ND | |
| 23 Trichlorofluoromethane | 101 | | 4.033 | | | | ND | U |
| 20 Acetone | 43 | 4.052 | 4.052 | 0.000 | 27 | 22034 | 0.0560 | |
| 21 Isopropyl alcohol | 45 | 4.228 | 4.259 | -0.031 | 9 | 45528 | 0.1396 | M |
| 24 1,1-Dichloroethene | 61 | | 4.522 | | | | ND | |
| 25 Methylene Chloride | 84 | 4.612 | 4.612 | 0.000 | 35 | 4790 | 0.0216 | |
| 31 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 4.867 | | | | ND | U |
| 29 1,2-Dichloro-1,1,2,2-tetrafluoro | 151 | | 4.867 | | | | ND | |
| 30 Carbon disulfide | 76 | | 4.872 | | | | ND | |
| 26 trans-1,2-Dichloroethene | 96 | | 5.483 | | | | ND | |
| 32 1,1-Dichloroethane | 63 | | 5.684 | | | | ND | U |
| 33 Methyl tert-butyl ether | 73 | | 5.900 | | | | ND | |
| 34 2-Butanone (MEK) | 43 | | 6.484 | | | | ND | U |
| 35 cis-1,2-Dichloroethene | 96 | | 6.587 | | | | ND | |
| * 36 Chlorobromomethane (IS) | 130 | 6.758 | 6.758 | 0.000 | 78 | 37816 | 0.5000 | |
| 40 Hexane | 57 | | 6.869 | | | | ND | U |
| 39 Chloroform | 83 | | 6.920 | | | | ND | |
| $ 42 1,2-Dichloroethane-d4 (Surr) | 65 | 7.670 | 7.670 | 0.000 | 95 | 80751 | 0.4772 | |
| 38 1,2-Dichloroethane | 62 | | 7.806 | | | | ND | |
| 45 1,1,1-Trichloroethane | 97 | | 8.132 | | | | ND | |
| 48 Benzene | 78 | | 8.721 | | | | ND | U |
| 49 Carbon tetrachloride | 117 | | 8.927 | | | | ND | |
| * 50 1,4-Difluorobenzene | 114 | 9.267 | 9.267 | 0.000 | 63 | 114412 | 0.5000 | |
| 41 1,2-Dichloropropane | 63 | | 9.860 | | | | ND | |
| 52 Dichlorobromomethane | 83 | | 10.127 | | | | ND | U |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 53 Trichloroethene | 95 | | 10.213 | | | | ND | |
| 54 1,4-Dioxane | 57 | | 10.761 | | | | ND | |
| 57 cis-1,3-Dichloropropene | 75 | | 11.547 | | | | ND | U |
| 60 trans-1,3-Dichloropropene | 75 | | 12.399 | | | | ND | U |
| 61 1,1,2-Trichloroethane | 83 | | 12.623 | | | | ND | |
| $ 63 Toluene-d8 (Surr) | 98 | 12.933 | 12.932 | 0.001 | 98 | 109278 | 0.5092 | |
| 64 Toluene | 91 | | 13.092 | | | | ND | U |
| 66 Chlorodibromomethane | 129 | | 13.731 | | | | ND | U |
| 59 Ethylene Dibromide | 107 | | 14.136 | | | | ND | U |
| 67 Tetrachloroethene | 166 | | 15.012 | | | | ND | U |
| * 68 Chlorobenzene-d5 | 117 | 16.143 | 16.143 | 0.000 | 95 | 103922 | 0.5000 | |
| 69 Chlorobenzene | 112 | | 16.219 | | | | ND | |
| 71 Ethylbenzene | 91 | | 16.995 | | | | ND | U |
| 72 m-Xylene & p-Xylene | 91 | | 17.330 | | | | ND | |
| 74 Styrene | 104 | | 18.037 | | | | ND | U |
| 75 1,1,2,2-Tetrachloroethane | 83 | | 18.209 | | | | ND | |
| 76 o-Xylene | 91 | | 18.245 | | | | ND | U |
| 77 1,2,3-Trichloropropane | 75 | | 18.472 | | | | ND | |
| $ 79 4-Bromofluorobenzene (Surr) | 95 | 19.144 | 19.143 | 0.001 | 99 | 61334 | 0.4015 | |
| 86 4-Ethyltoluene | 105 | | 20.959 | | | | ND | U |
| 81 1,3,5-Trimethylbenzene | 105 | | 21.154 | | | | ND | U |
| 85 1,2,4-Trimethylbenzene | 105 | | 22.073 | | | | ND | |
| 92 1,3-Dichlorobenzene | 146 | | 22.305 | | | | ND | |
| 93 1,4-Dichlorobenzene | 146 | | 22.487 | | | | ND | |
| 89 1,2-Dichlorobenzene | 146 | | 23.286 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 28.061 | | | | ND | |
| 98 Naphthalene | 128 | | 28.303 | | | | ND | U |
| 97 1,2,3-Trichlorobenzene | 180 | | 29.029 | | | | ND | U |
| 99 Hexachlorobutadiene | 225 | | 29.416 | | | | ND | U |
| 102 Xylenes, Total | 1 | | 0.000 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_Sim IS/SS_00005 Amount Added: 100.00 Units: mL Run Reagent

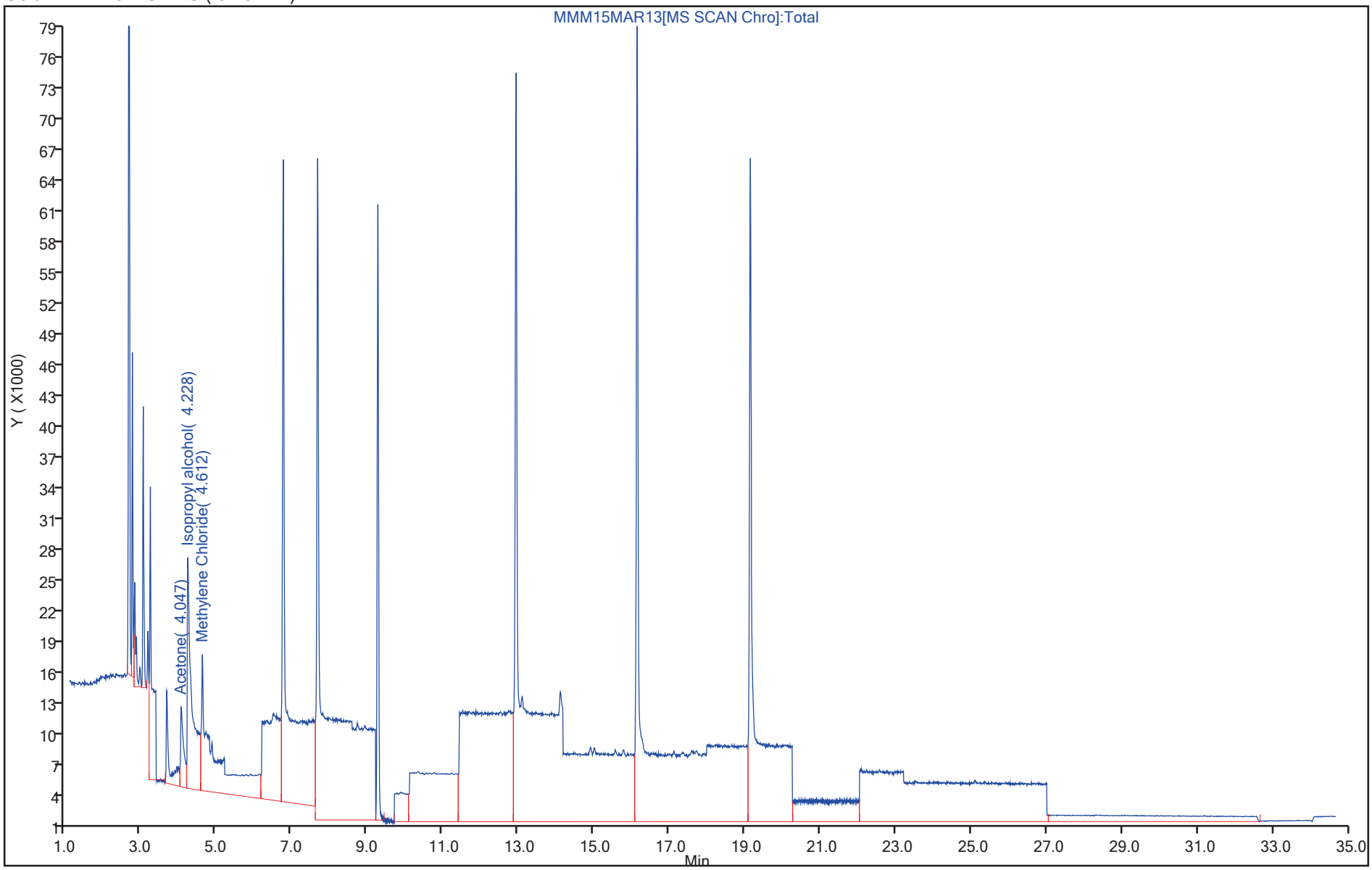
Report Date: 16-Mar-2021 13:38:39 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | Operator ID: | 12GR |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | Worklist Smp#: | 13 |
| Client ID: | D640 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 13 |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |

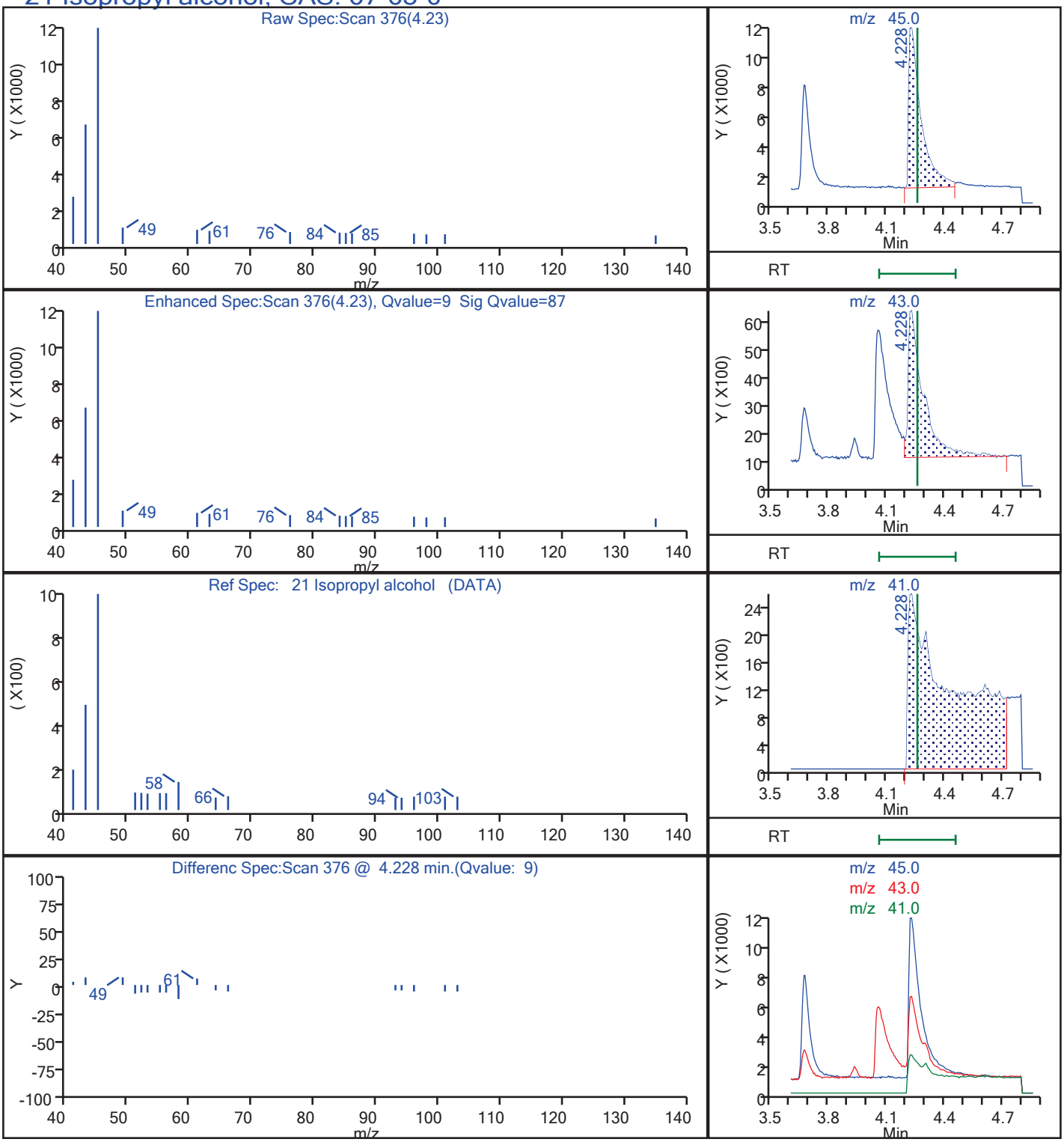
Column: Rxi-624Sil MS ( 0.18 mm)



Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 21 Isopropyl alcohol, CAS: 67-63-0



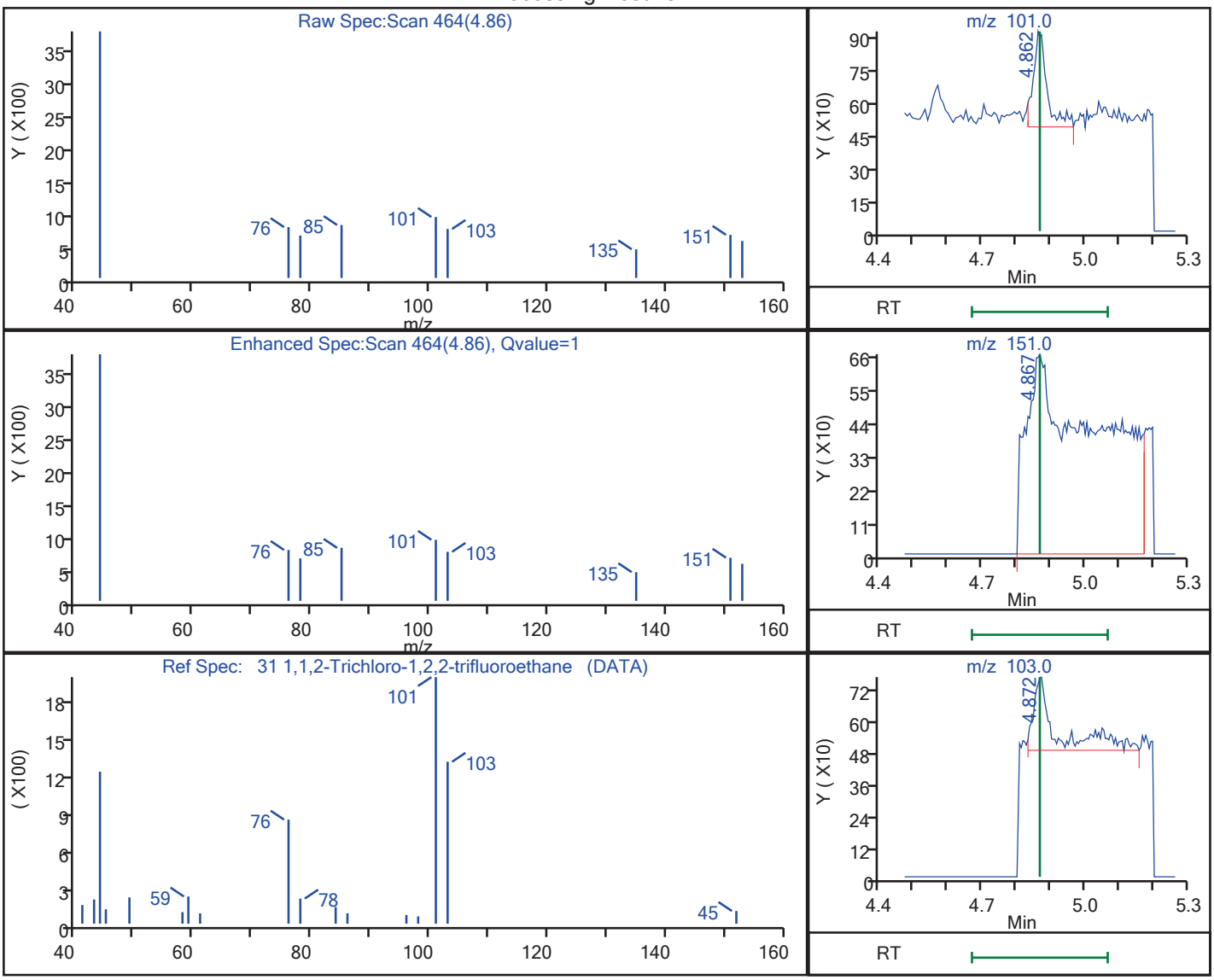
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 31 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.86 | 101.00 | 1233 | 0.002786 |
| 4.87 | 151.00 | 9873 | |
| 4.87 | 103.00 | 1325 | |
| 4.87 | 153.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

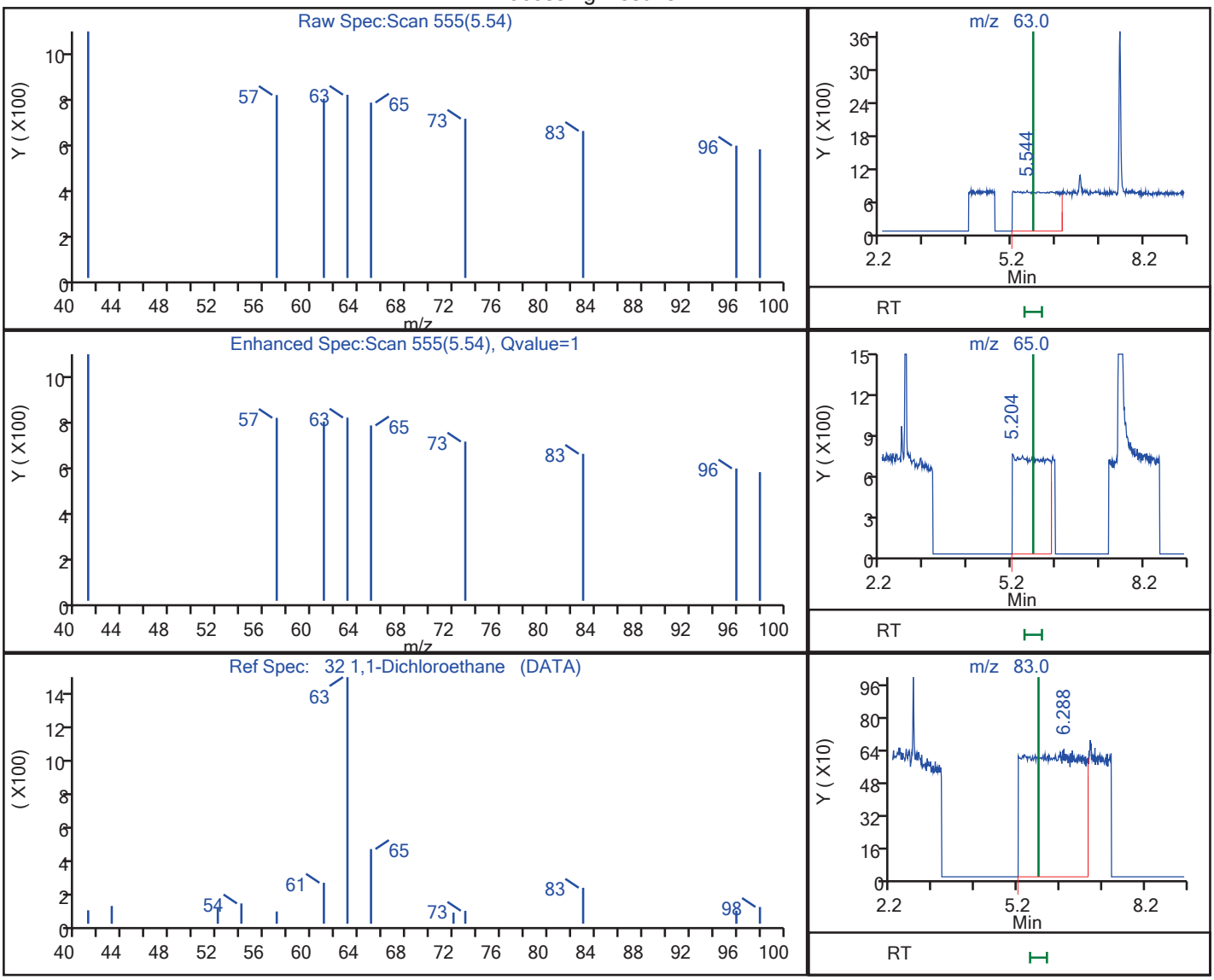
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 32 1,1-Dichloroethane, CAS: 75-34-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.54 | 63.00 | 49136 | 0.130400 |
| 5.20 | 65.00 | 37932 | |
| 6.29 | 83.00 | 58831 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

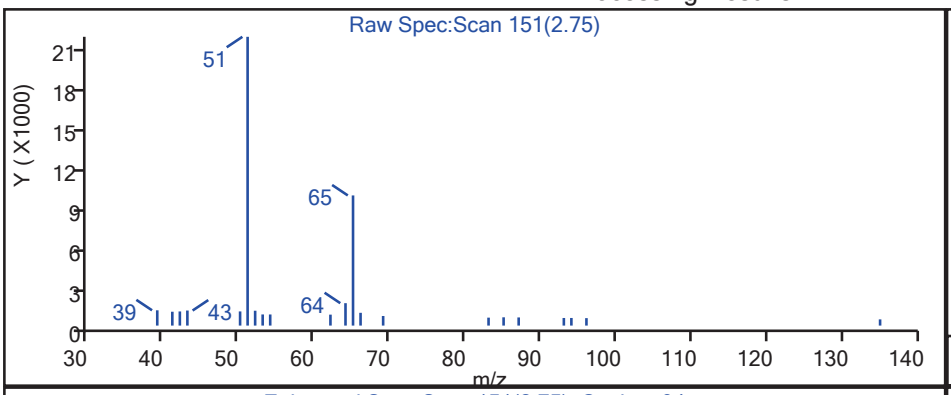
User Disabled Compound Report

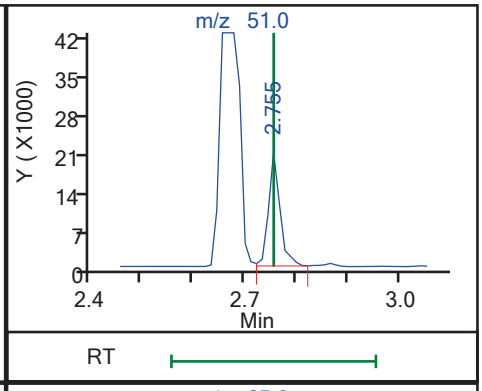
Eurofins Calscience LLC

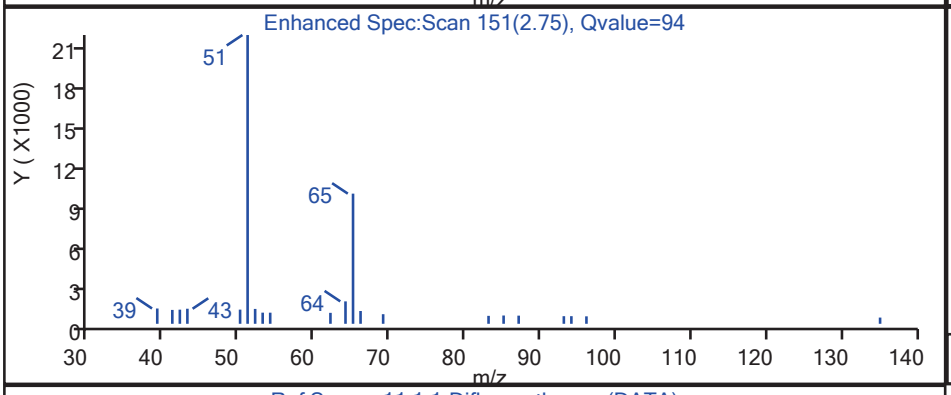
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

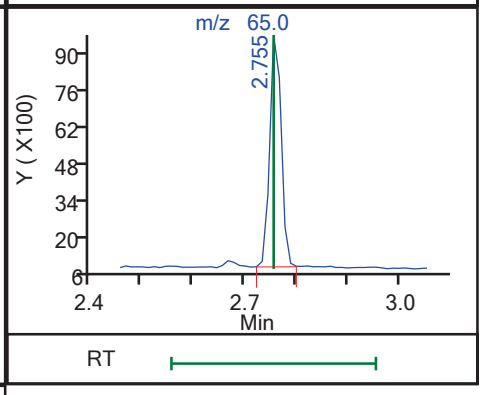
## 11 1,1-Difluoroethane, CAS: 75-37-6

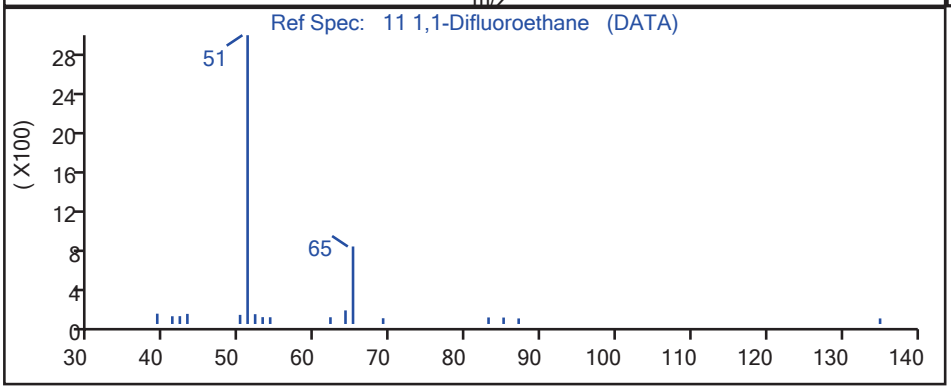
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.75 | 51.00 | 31804 | 0.121716 |
| 2.75 | 65.00 | 13904 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

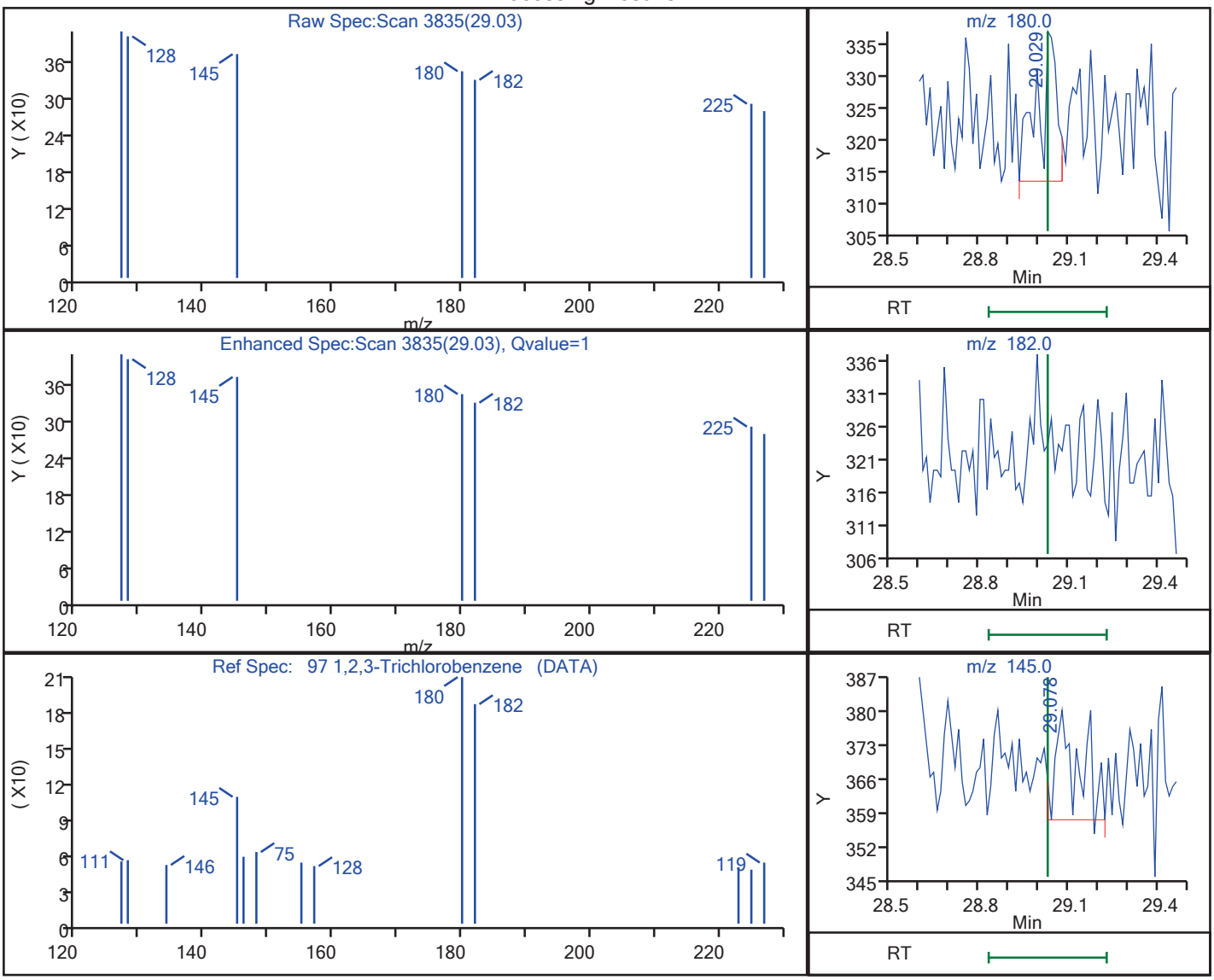
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 97 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.03 | 180.00 | 108 | 0.000471 |
| 29.03 | 182.00 | 0 | |
| 29.08 | 145.00 | 128 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

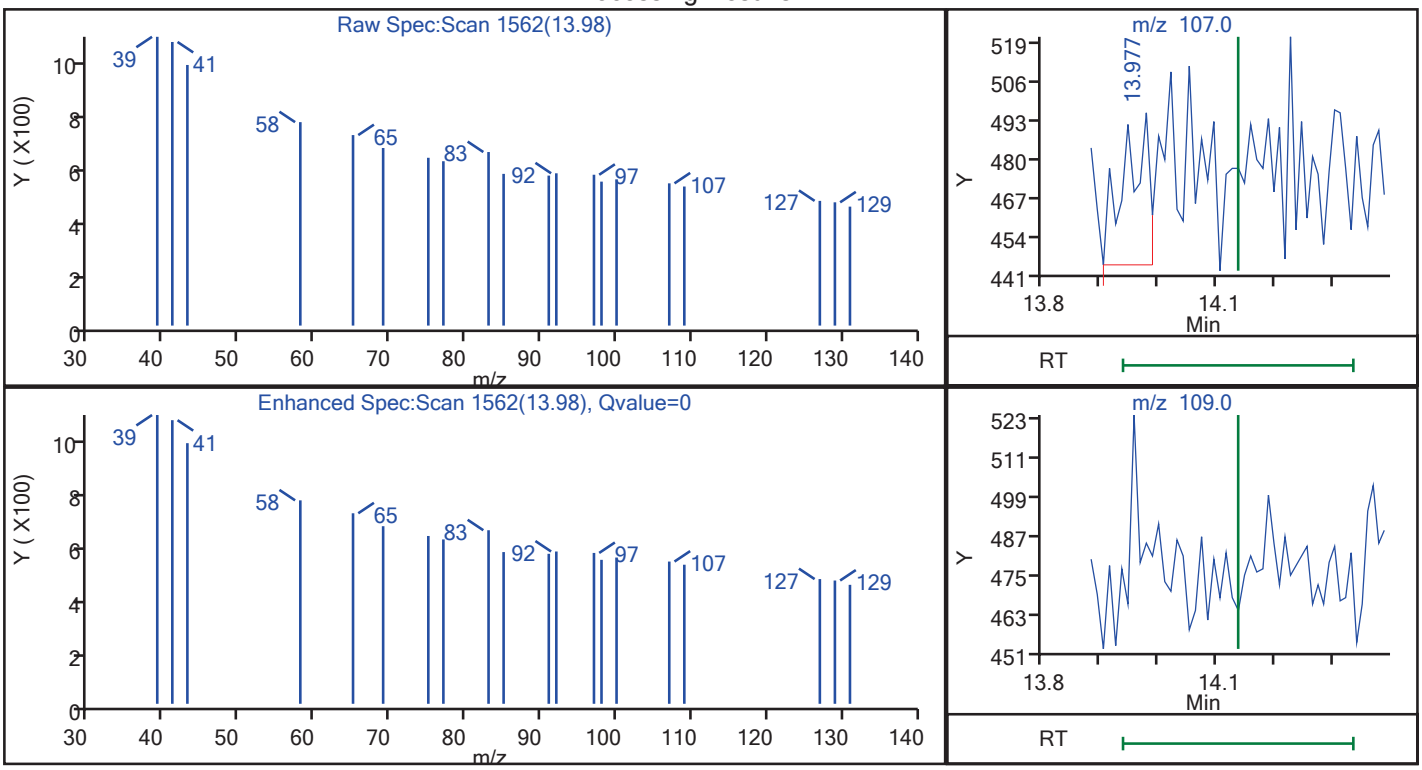
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 59 Ethylene Dibromide, CAS: 106-93-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.98 | 107.00 | 153 | 0.000657 |
| 14.14 | 109.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

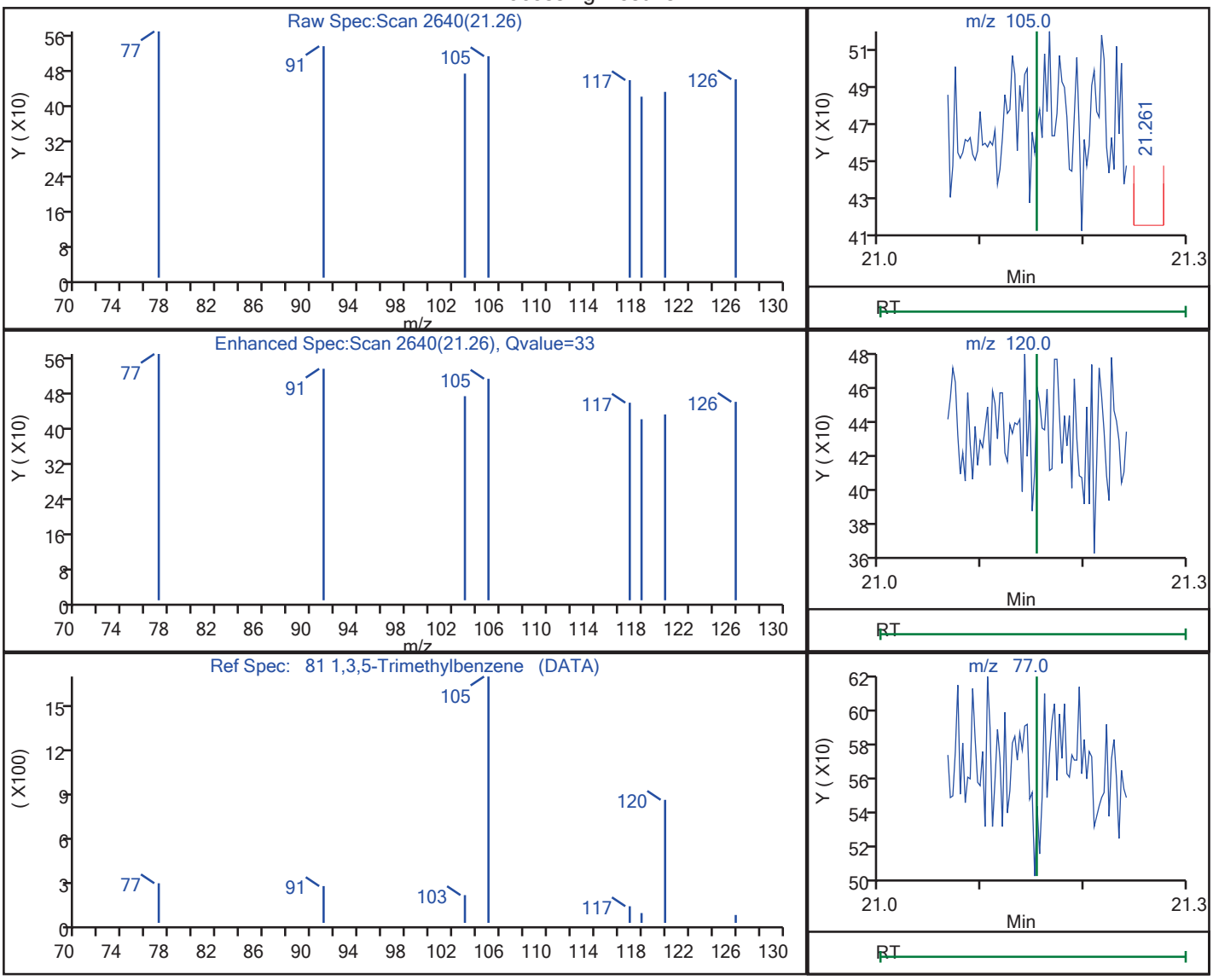
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 81 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 21.26 | 105.00 | 90 | 0.000375 |
| 21.15 | 120.00 | 0 | |
| 21.15 | 77.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

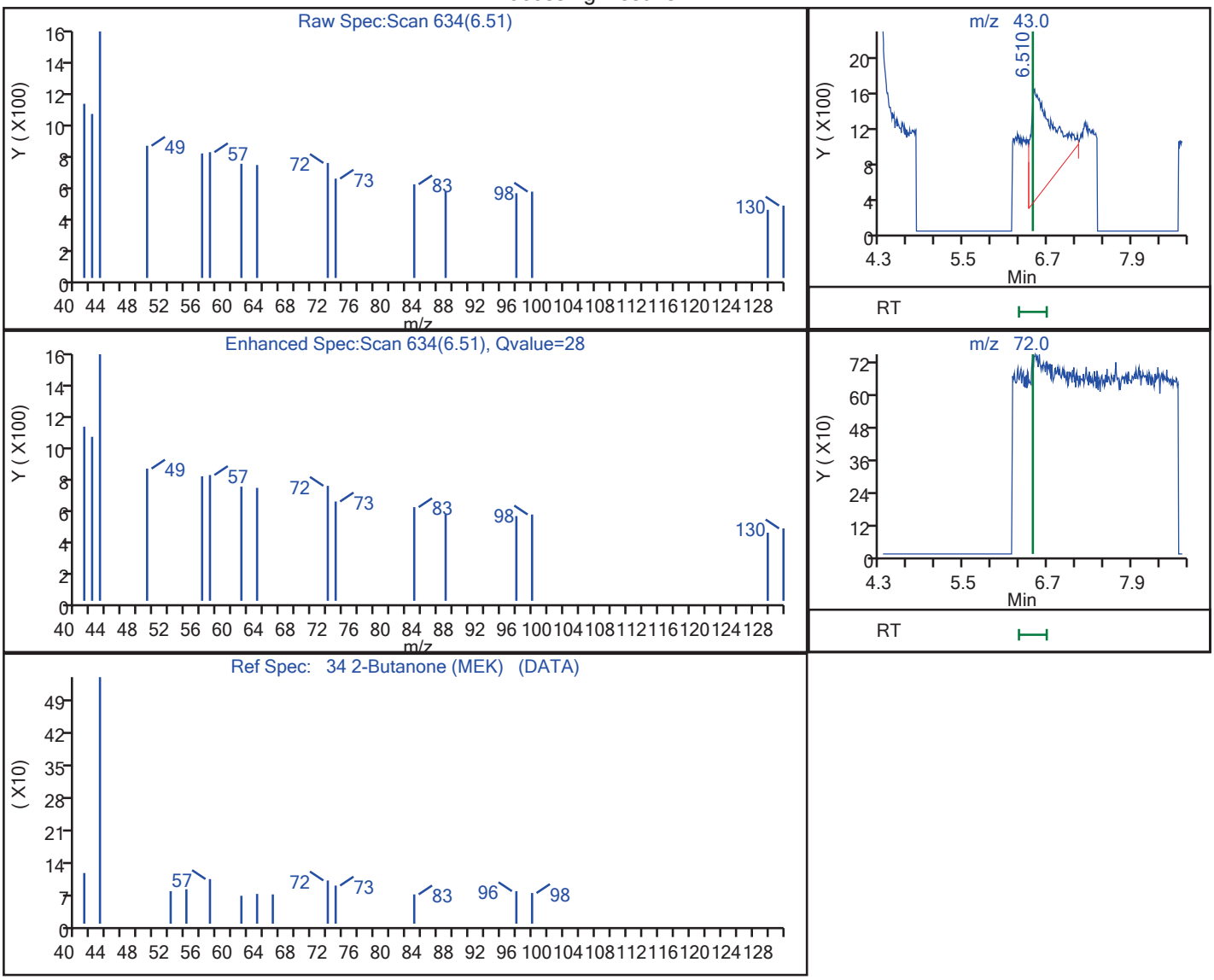
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 34 2-Butanone (MEK), CAS: 78-93-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.51 | 43.00 | 25404 | 0.094243 |
| 6.48 | 72.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

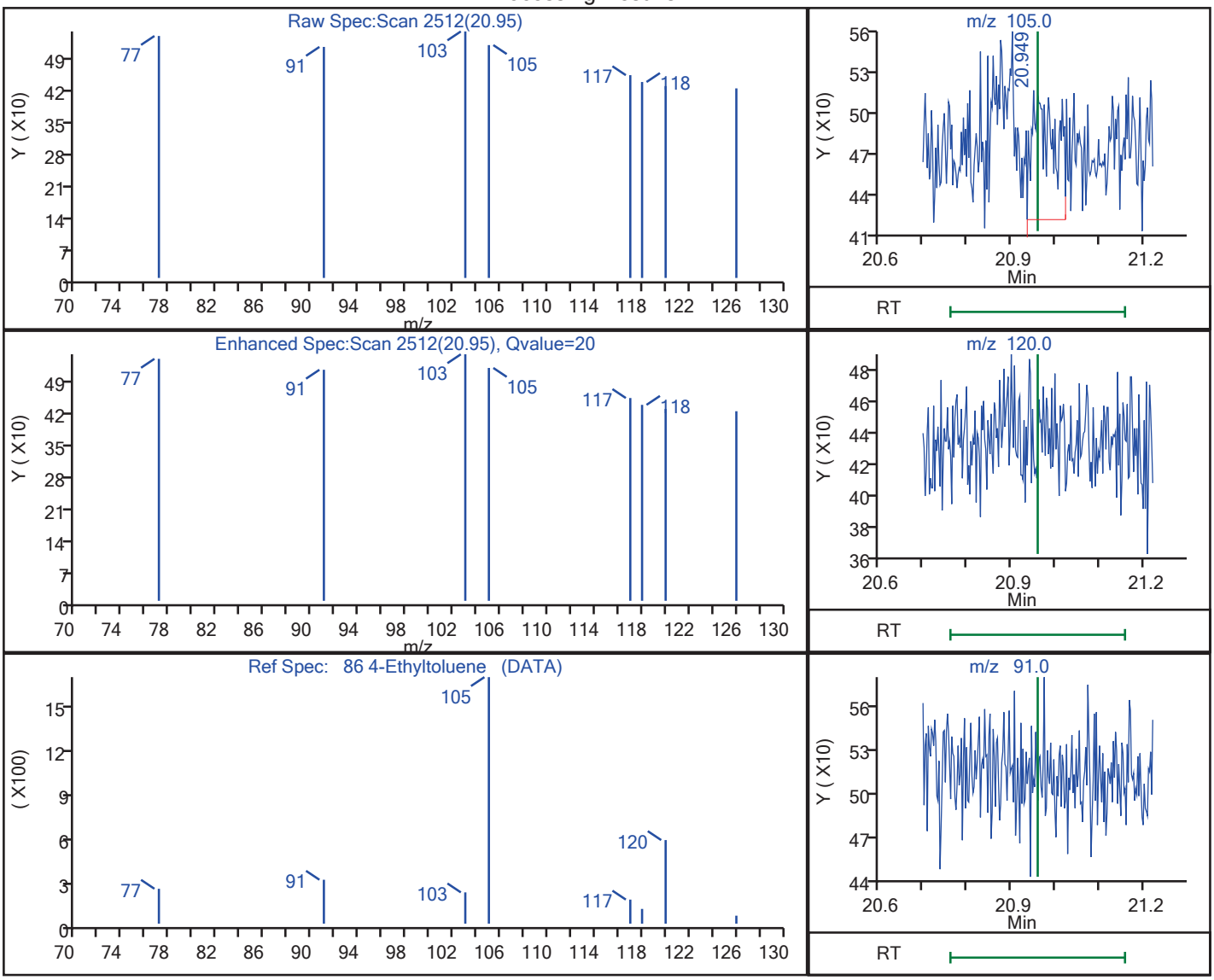
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 86 4-Ethyltoluene, CAS: 622-96-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 20.95 | 105.00 | 313 | 0.001177 |
| 20.96 | 120.00 | 0 | |
| 20.96 | 91.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

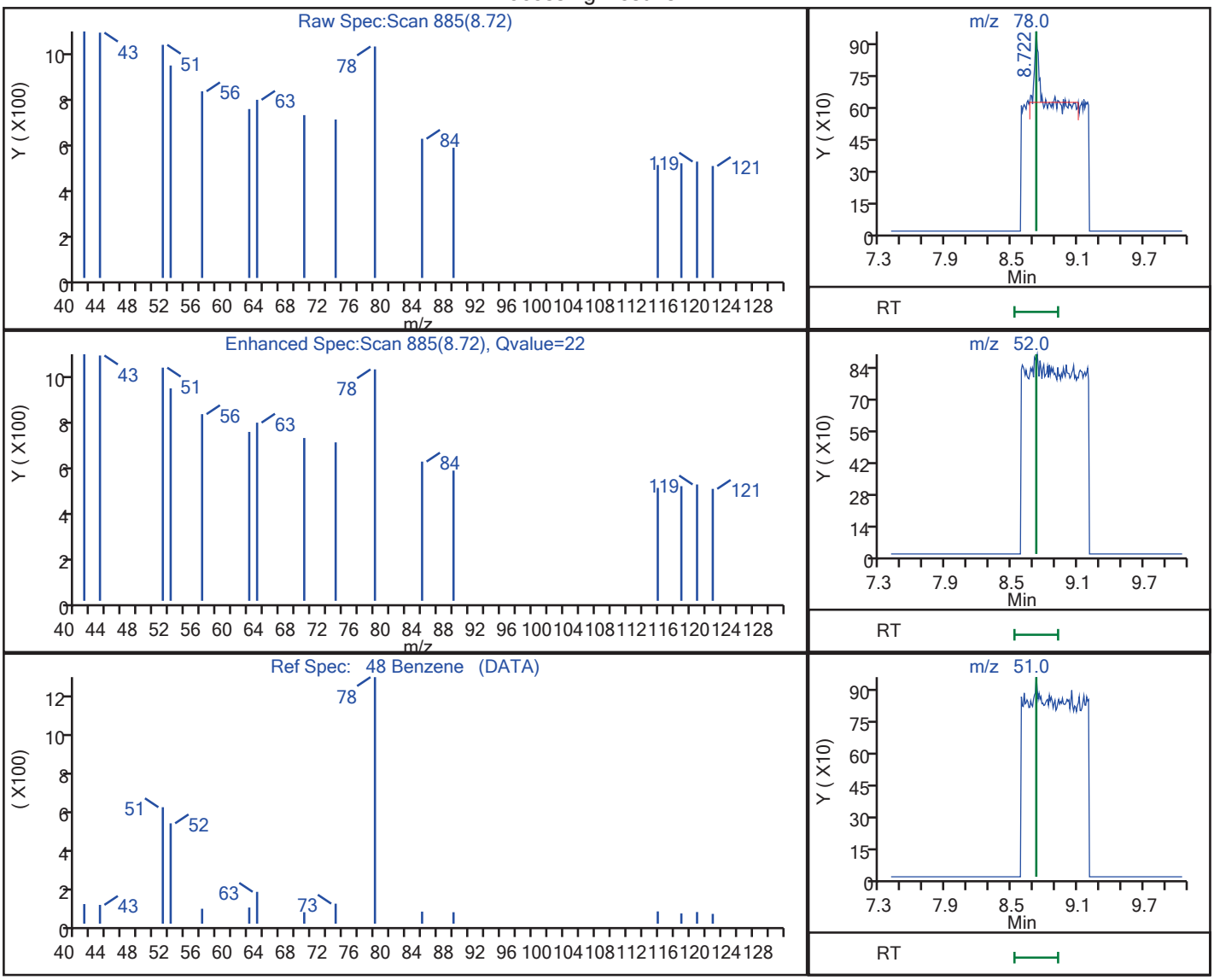
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 48 Benzene, CAS: 71-43-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.72 | 78.00 | 648 | 0.002030 |
| 8.72 | 52.00 | 0 | |
| 8.72 | 51.00 | 0 | |
| 8.72 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

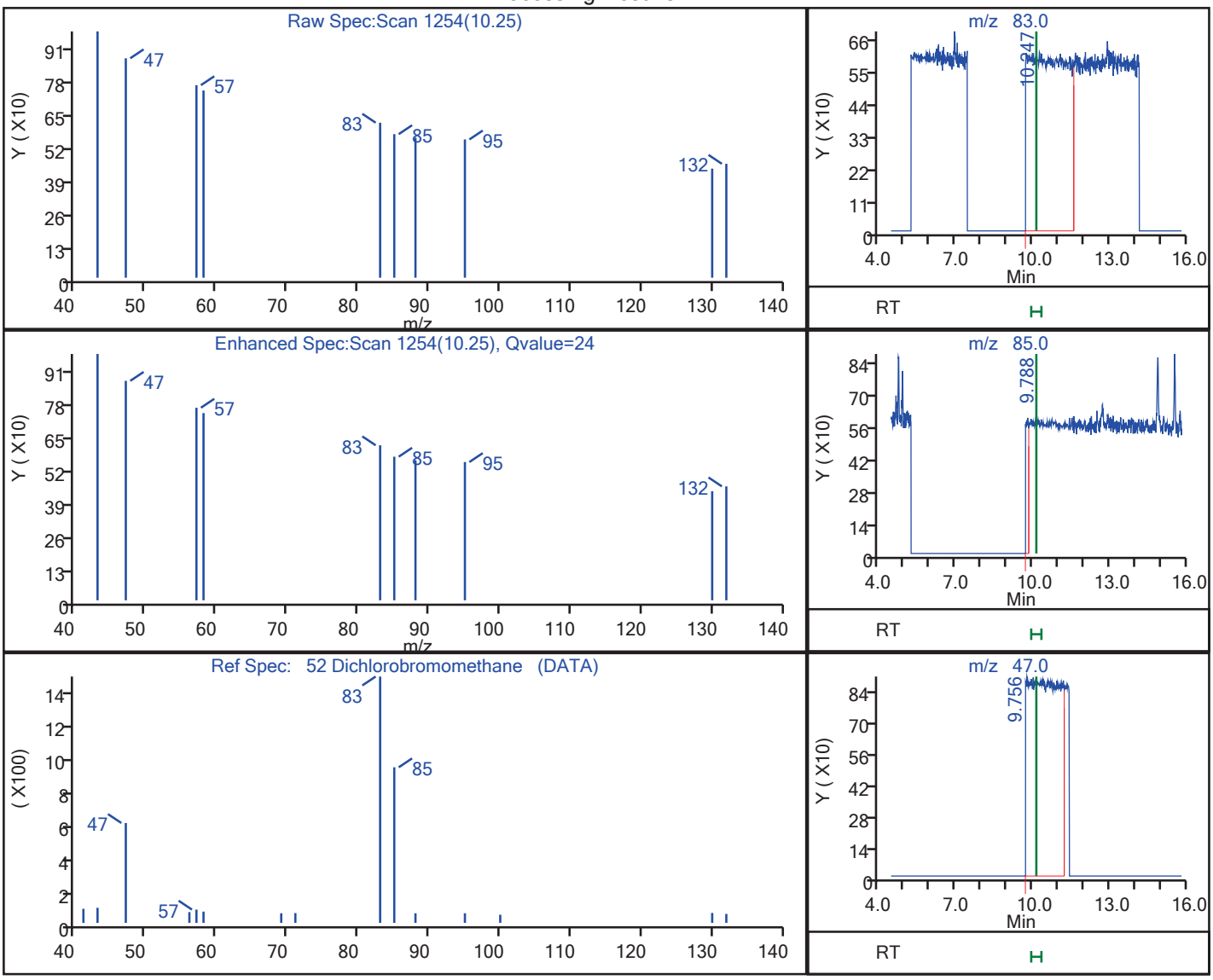
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 52 Dichlorobromomethane, CAS: 75-27-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 10.25 | 83.00 | 65941 | 0.196477 |
| 9.79 | 85.00 | 4320 | |
| 9.76 | 47.00 | 79252 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

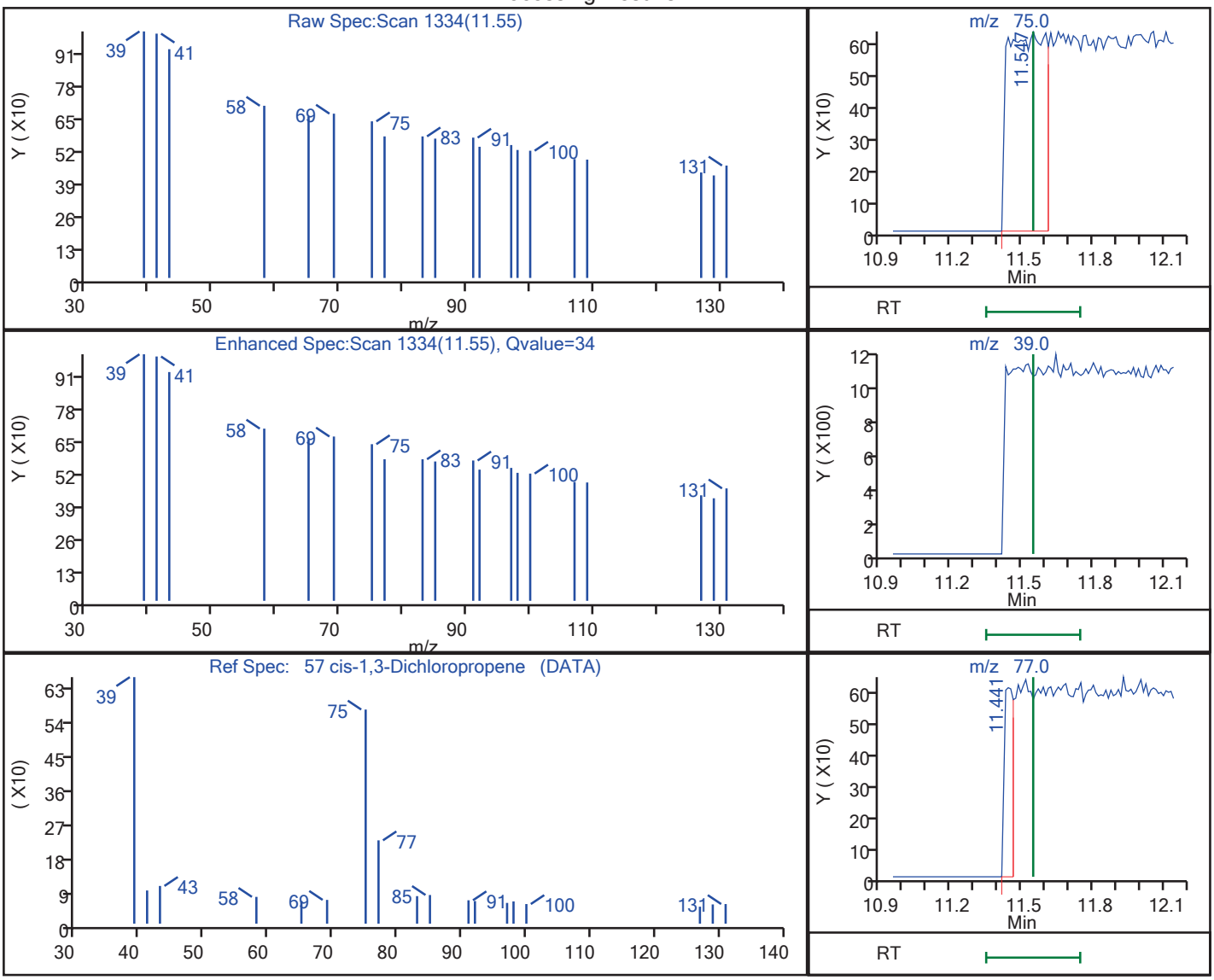
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 57 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 11.55 | 75.00 | 7196 | 0.045428 |
| 11.55 | 39.00 | 0 | |
| 11.44 | 77.00 | 1762 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

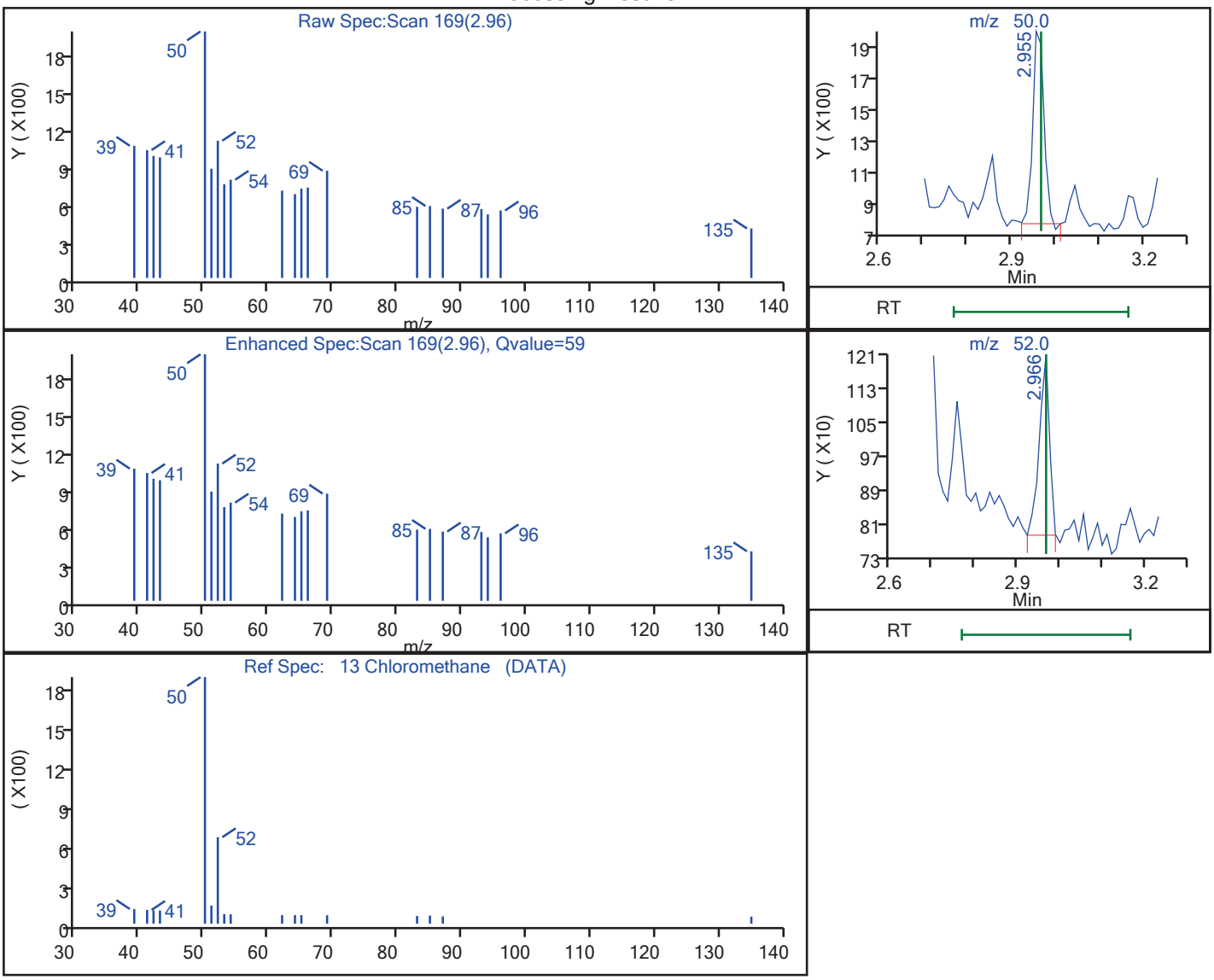
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 13 Chloromethane, CAS: 74-87-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.96 | 50.00 | 1986 | 0.009790 |
| 2.97 | 52.00 | 725 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

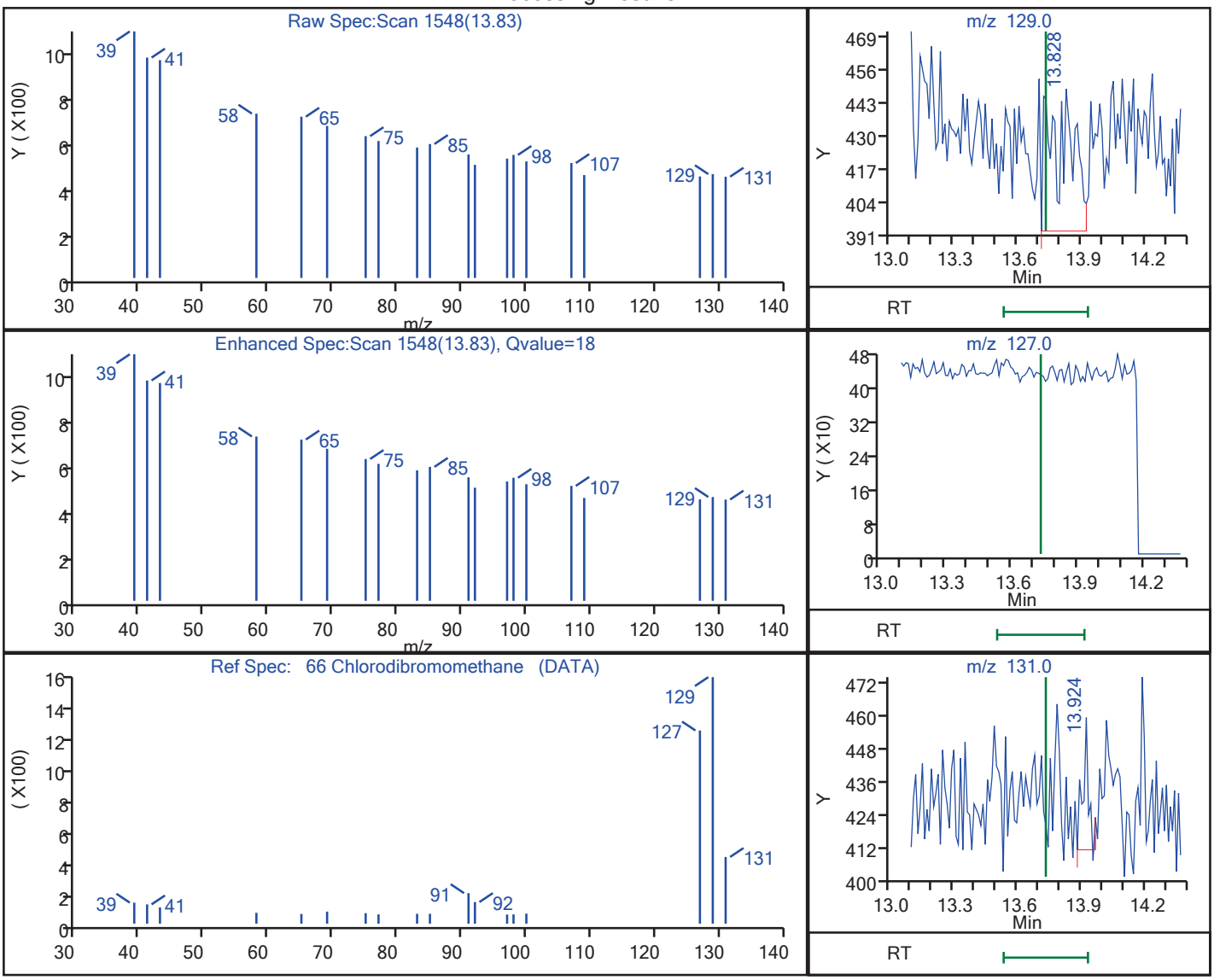
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 66 Chlorodibromomethane, CAS: 124-48-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.83 | 129.00 | 433 | 0.001358 |
| 13.73 | 127.00 | 0 | |
| 13.92 | 131.00 | 95 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

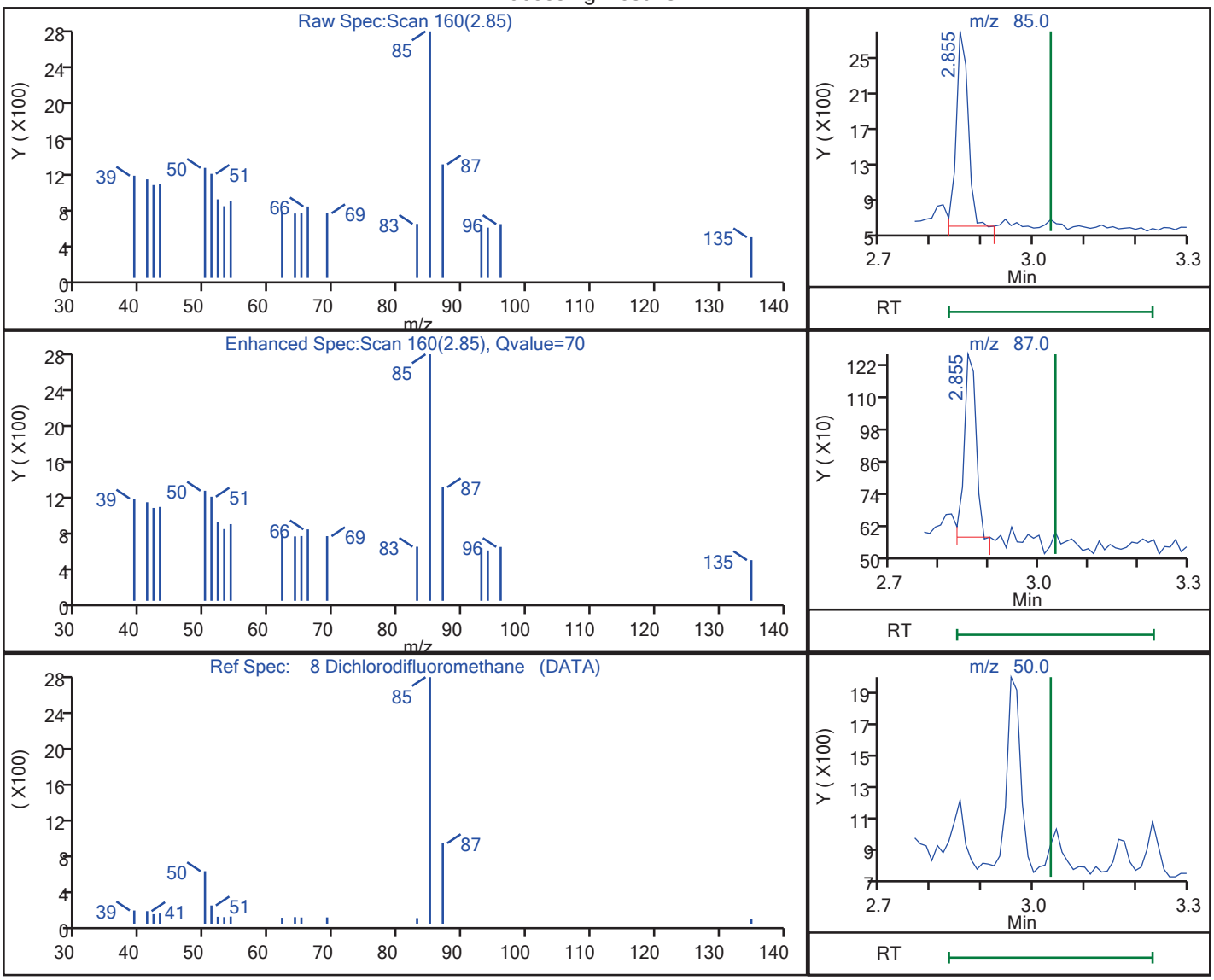
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 8 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.85 | 85.00 | 3468 | 0.006077 |
| 2.85 | 87.00 | 1142 | |
| 3.03 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

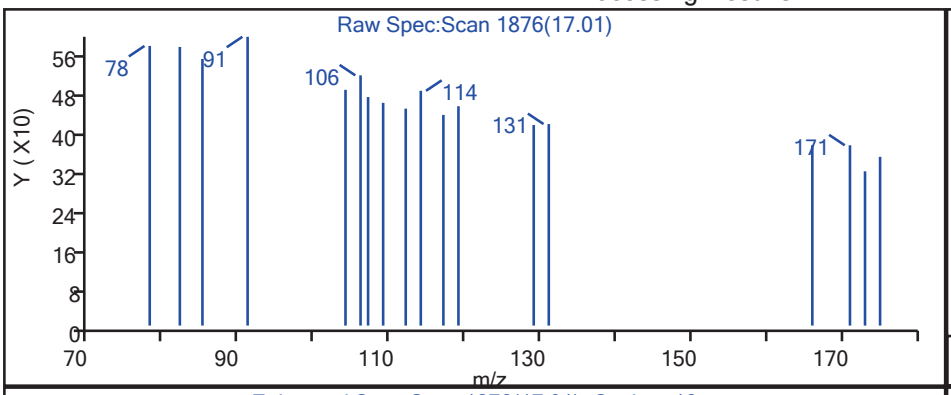
User Disabled Compound Report

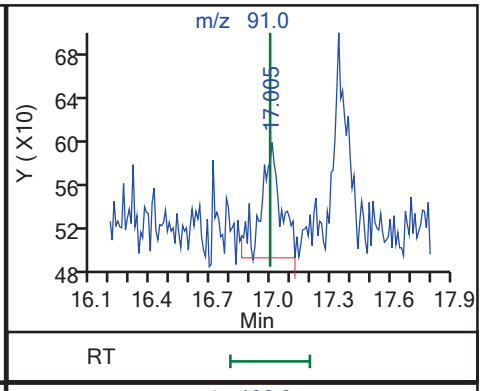
Eurofins Calscience LLC

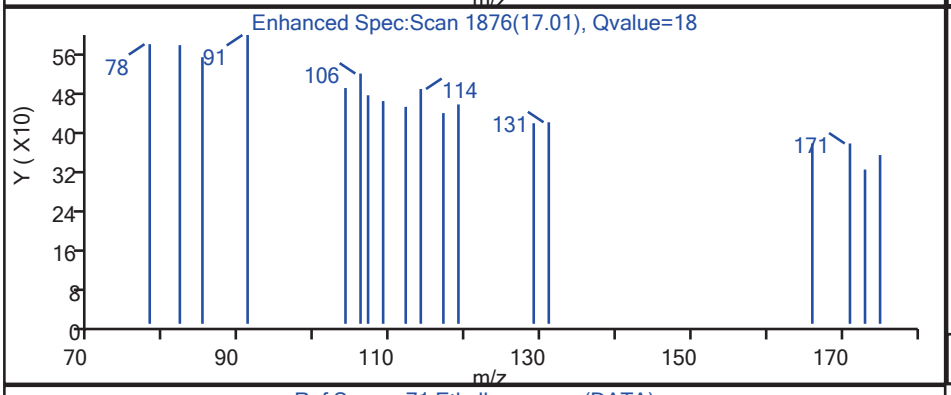
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

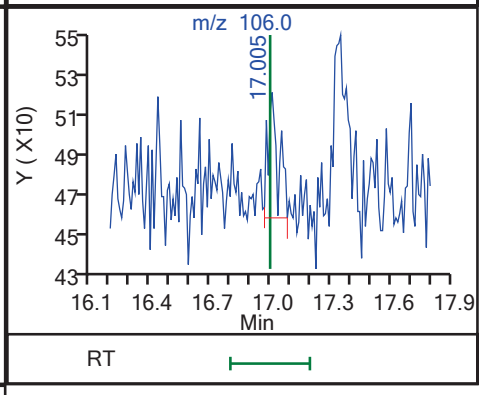
## 71 Ethylbenzene, CAS: 100-41-4

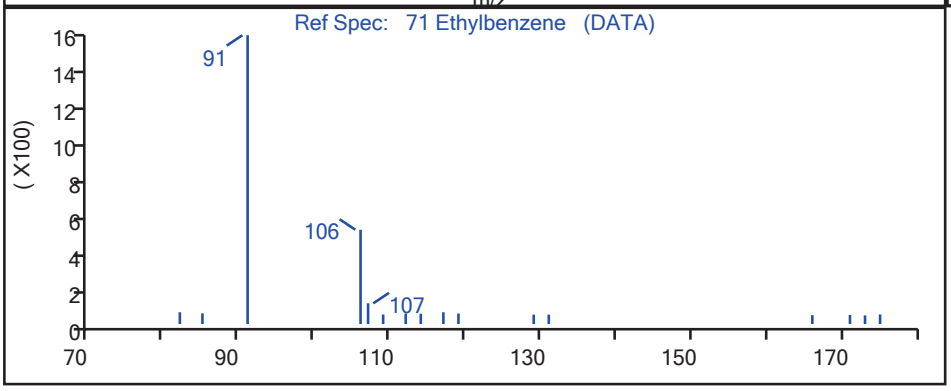
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 17.01 | 91.00 | 710 | 0.002542 |
| 17.01 | 106.00 | 216 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

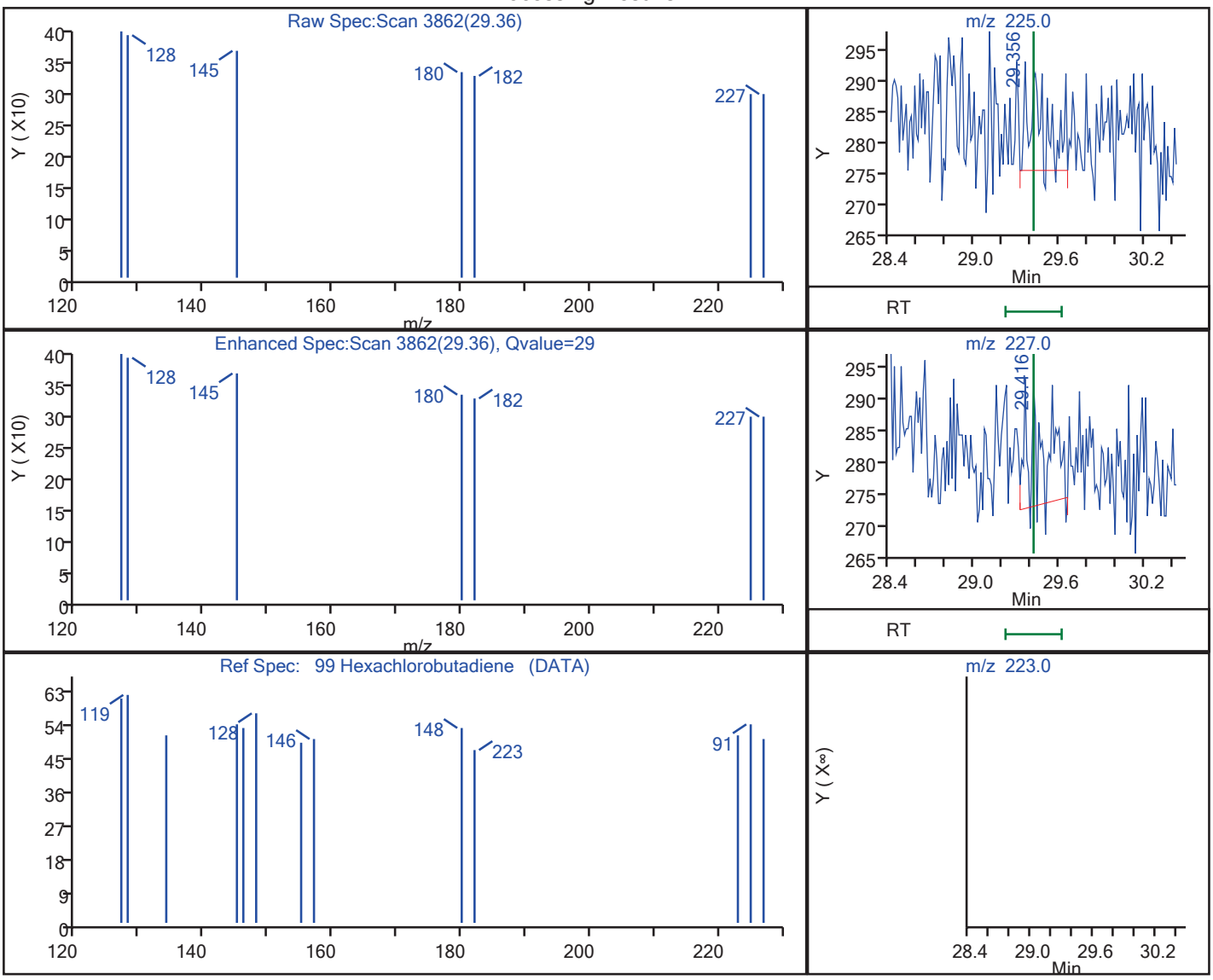
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 99 Hexachlorobutadiene, CAS: 87-68-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.36 | 225.00 | 139 | 0.000290 |
| 29.42 | 227.00 | 160 | |
| 29.42 | 223.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

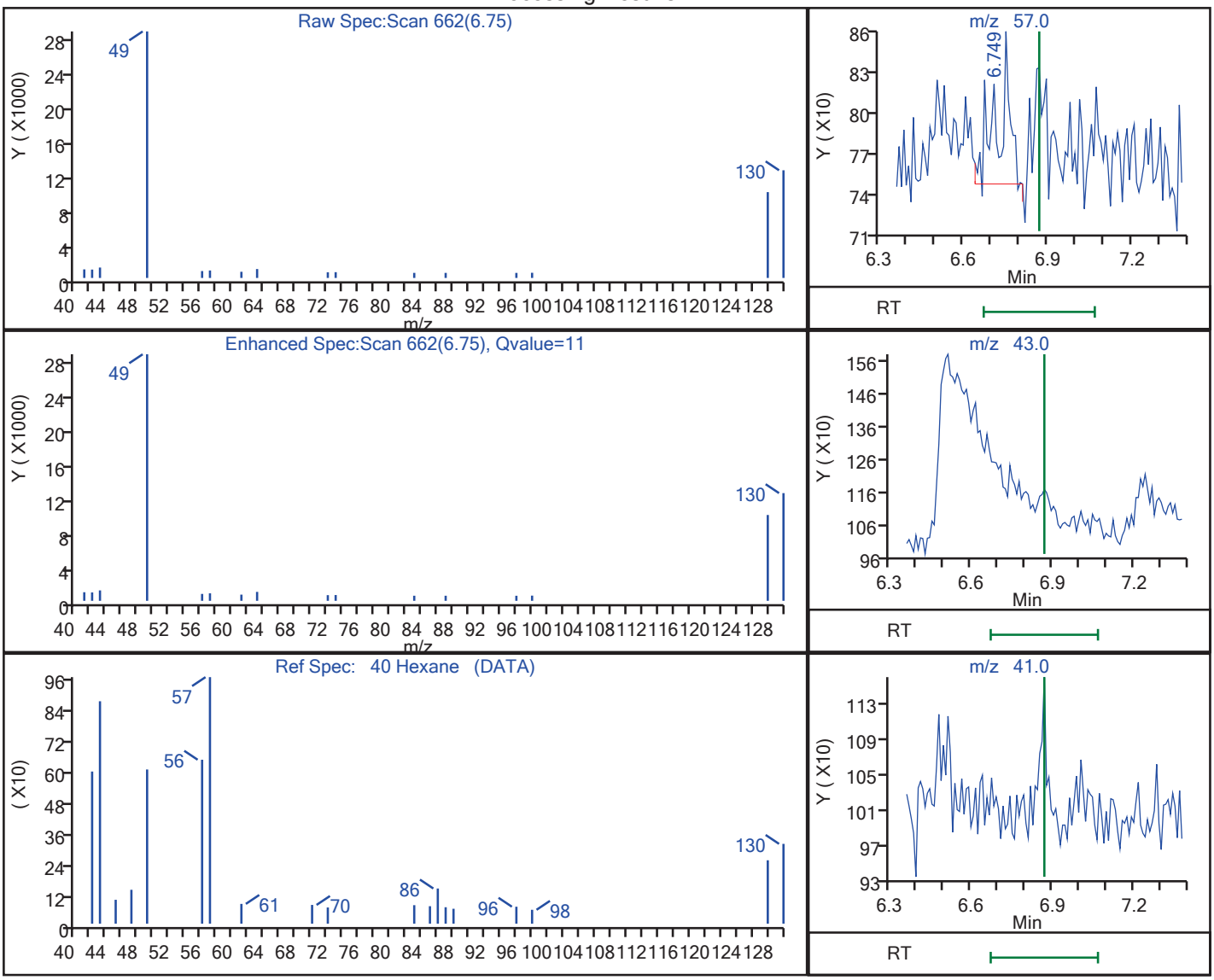
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 40 Hexane, CAS: 110-54-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.75 | 57.00 | 338 | 0.002735 |
| 6.87 | 43.00 | 0 | |
| 6.87 | 41.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

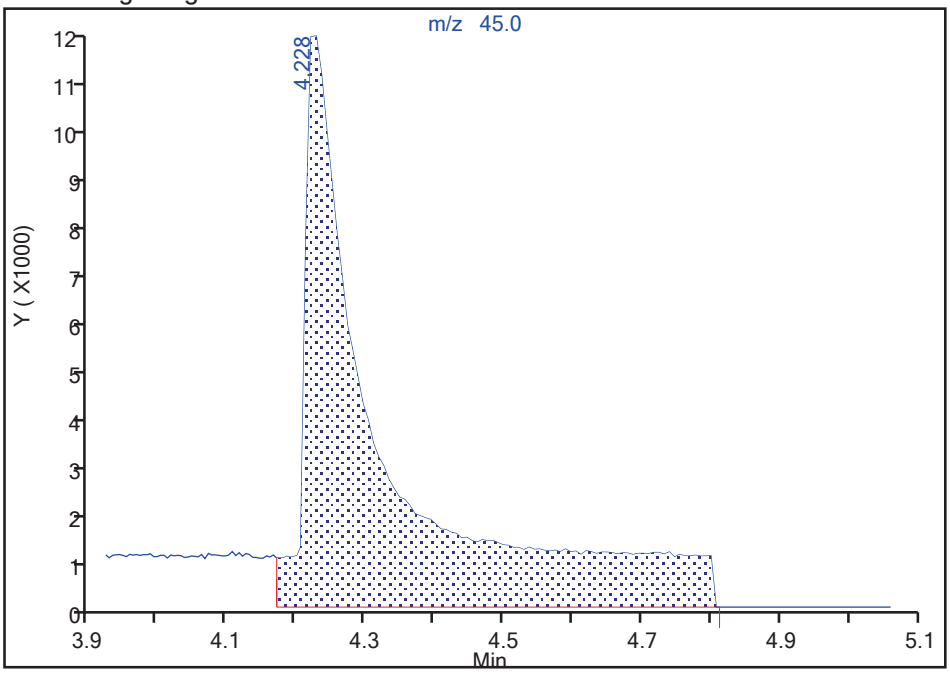
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 21 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

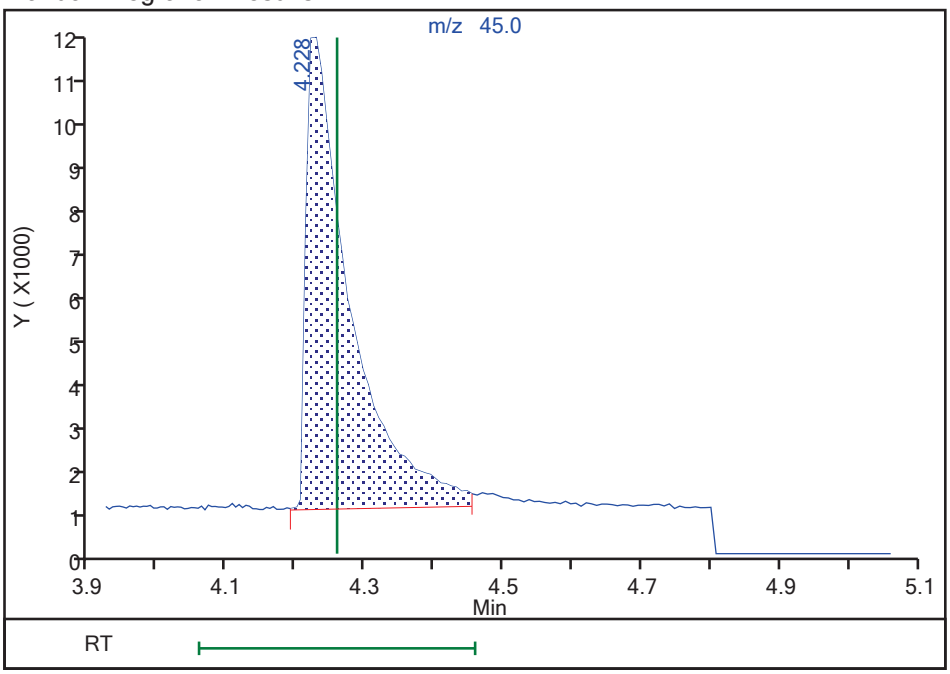
Processing Integration Results

RT: 4.23
Area: 86473
Amount: 0.265089
Amount Units: ppb v/v




Manual Integration Results

RT: 4.23
Area: 45528
Amount: 0.139569
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:26:15
Audit Action: Manually Integrated Audit Reason: Baseline

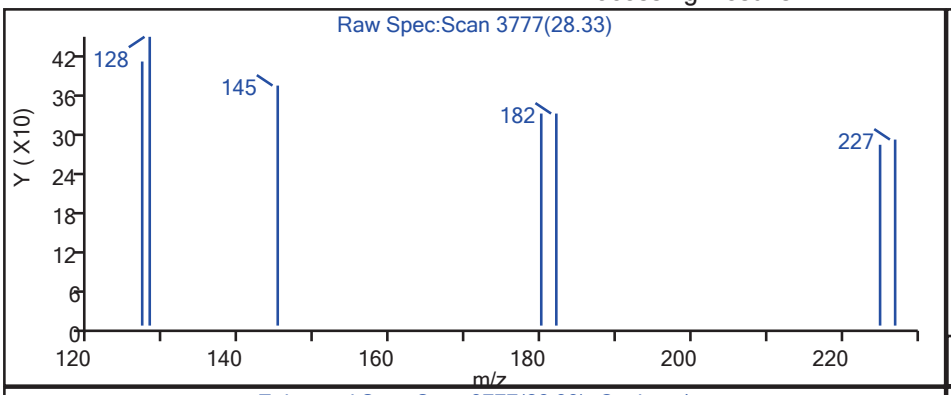
User Disabled Compound Report

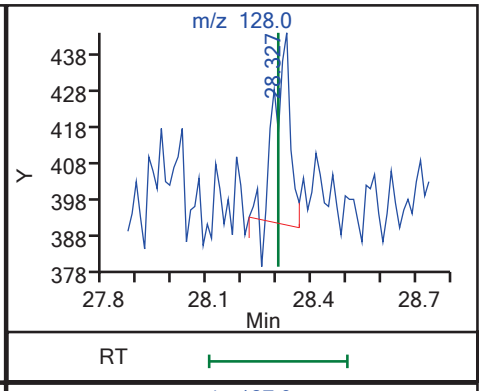
Eurofins Calscience LLC

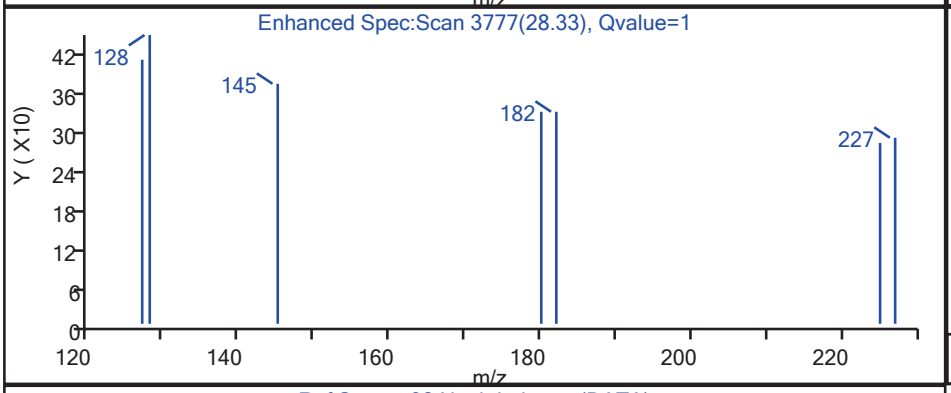
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

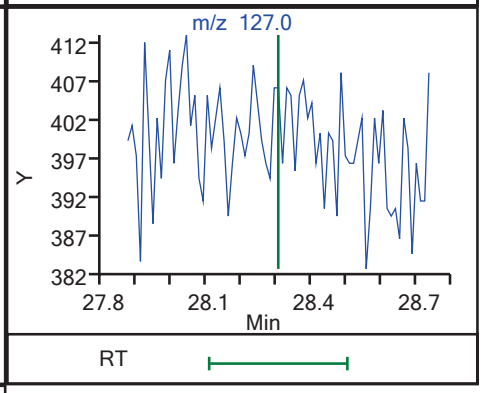
## 98 Naphthalene, CAS: 91-20-3

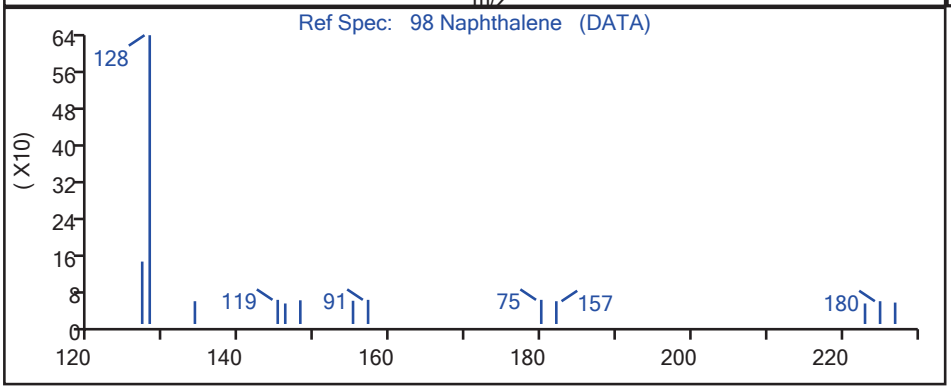
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 28.33 | 128.00 | 167 | 0.000446 |
| 28.30 | 127.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

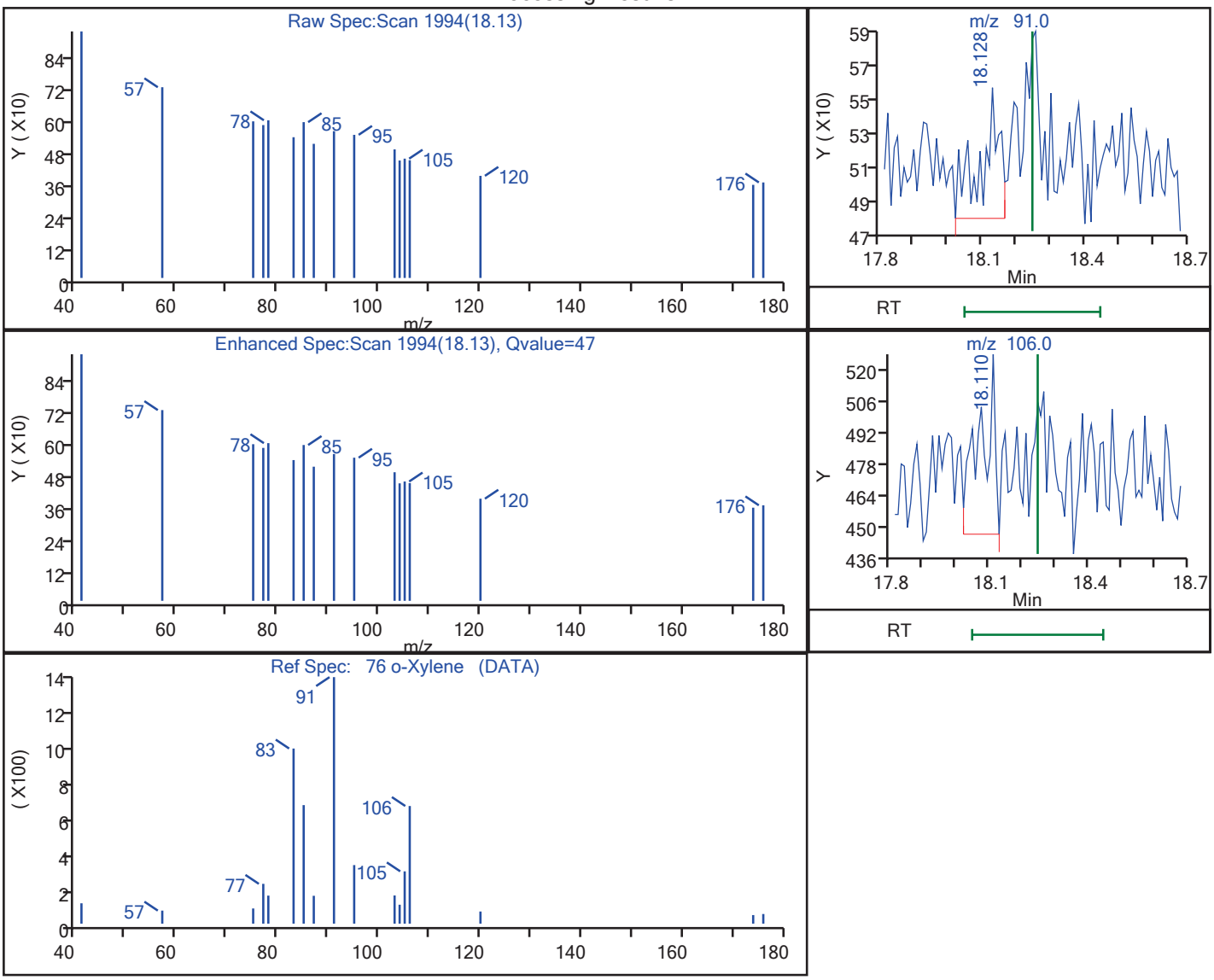
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 76 o-Xylene, CAS: 95-47-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.13 | 91.00 | 270 | 0.001180 |
| 18.11 | 106.00 | 256 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

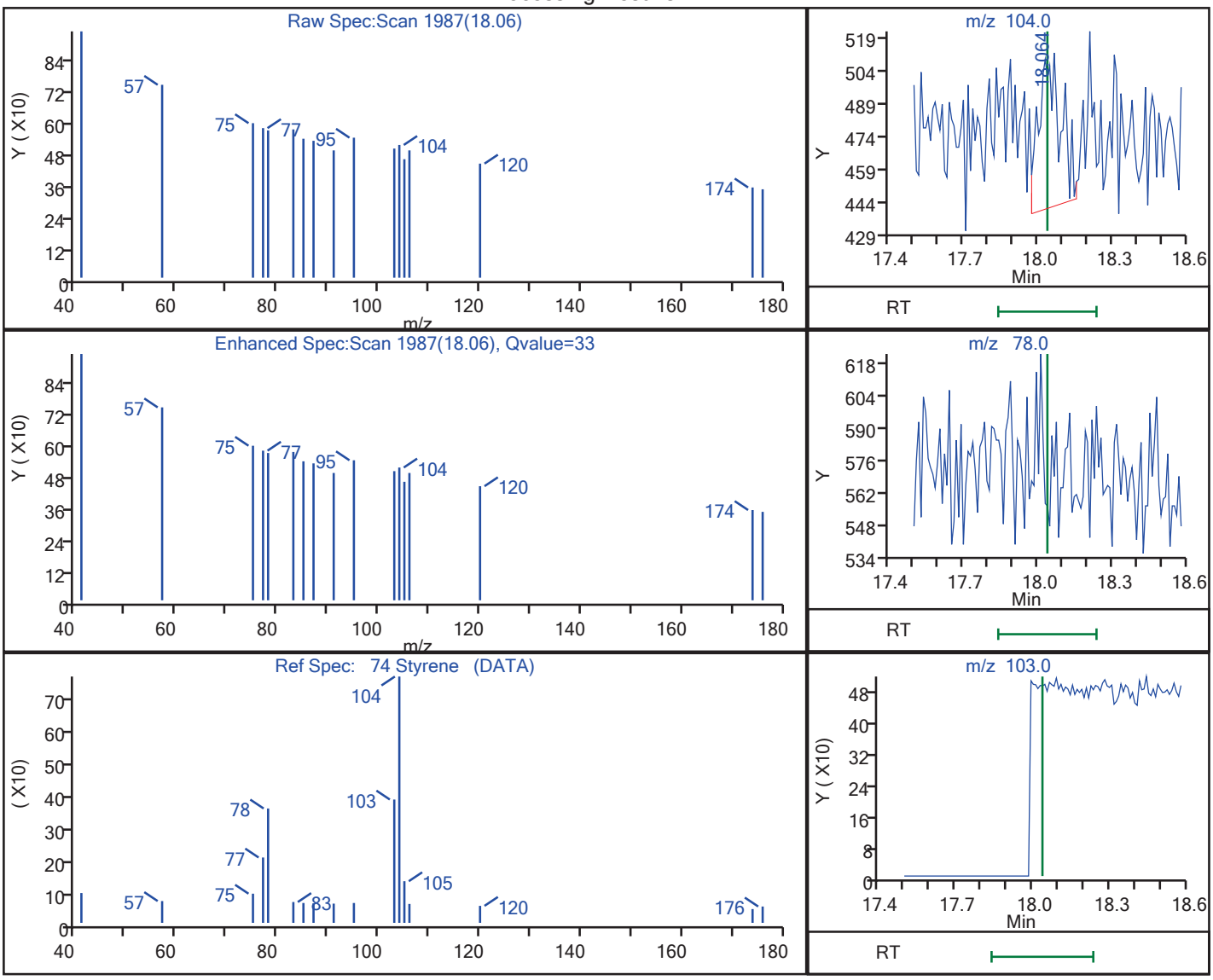
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 74 Styrene, CAS: 100-42-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.06 | 104.00 | 447 | 0.003547 |
| 18.04 | 78.00 | 0 | |
| 18.04 | 103.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

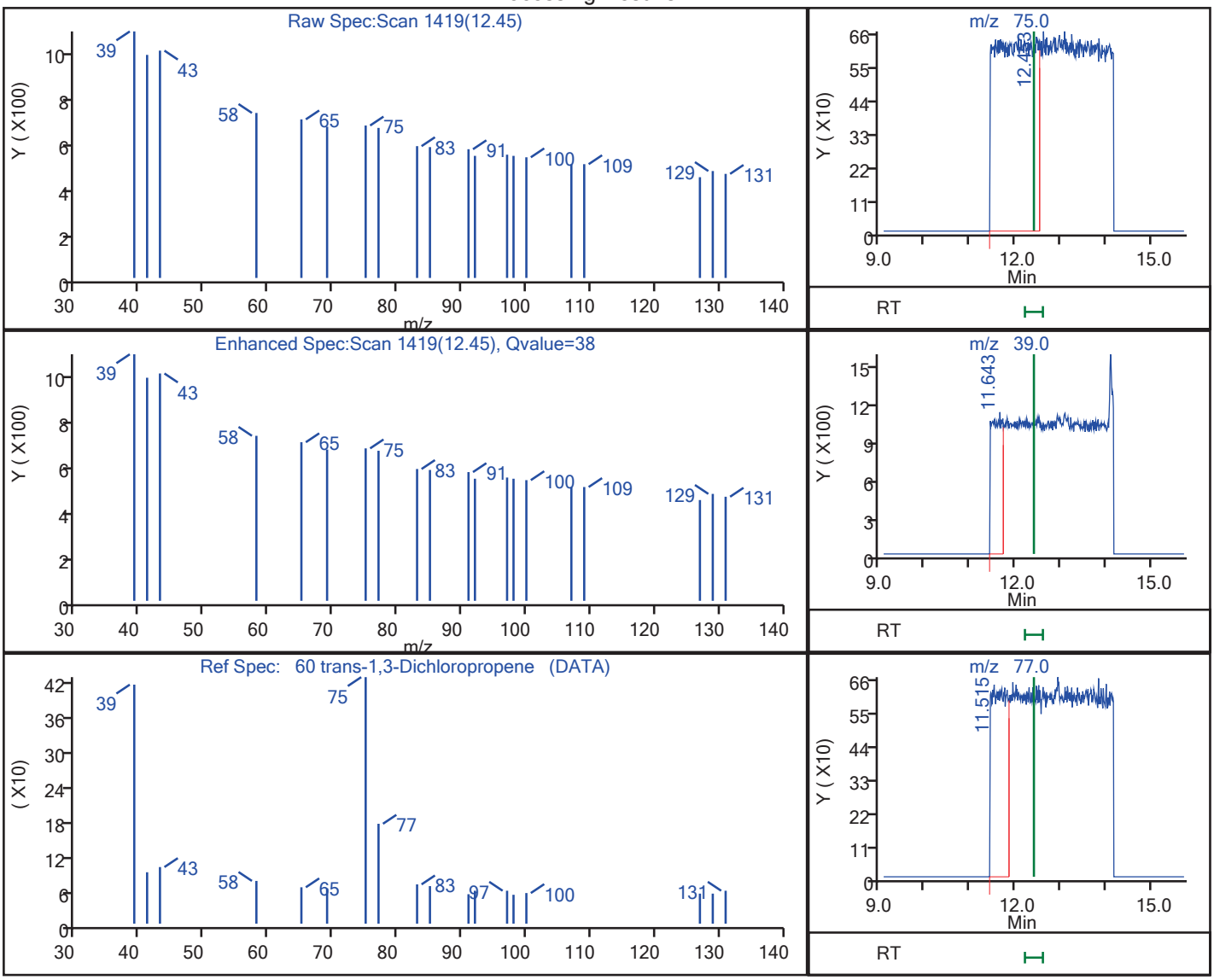
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 60 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 12.45 | 75.00 | 40664 | 0.303556 |
| 11.64 | 39.00 | 18944 | |
| 11.52 | 77.00 | 15574 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

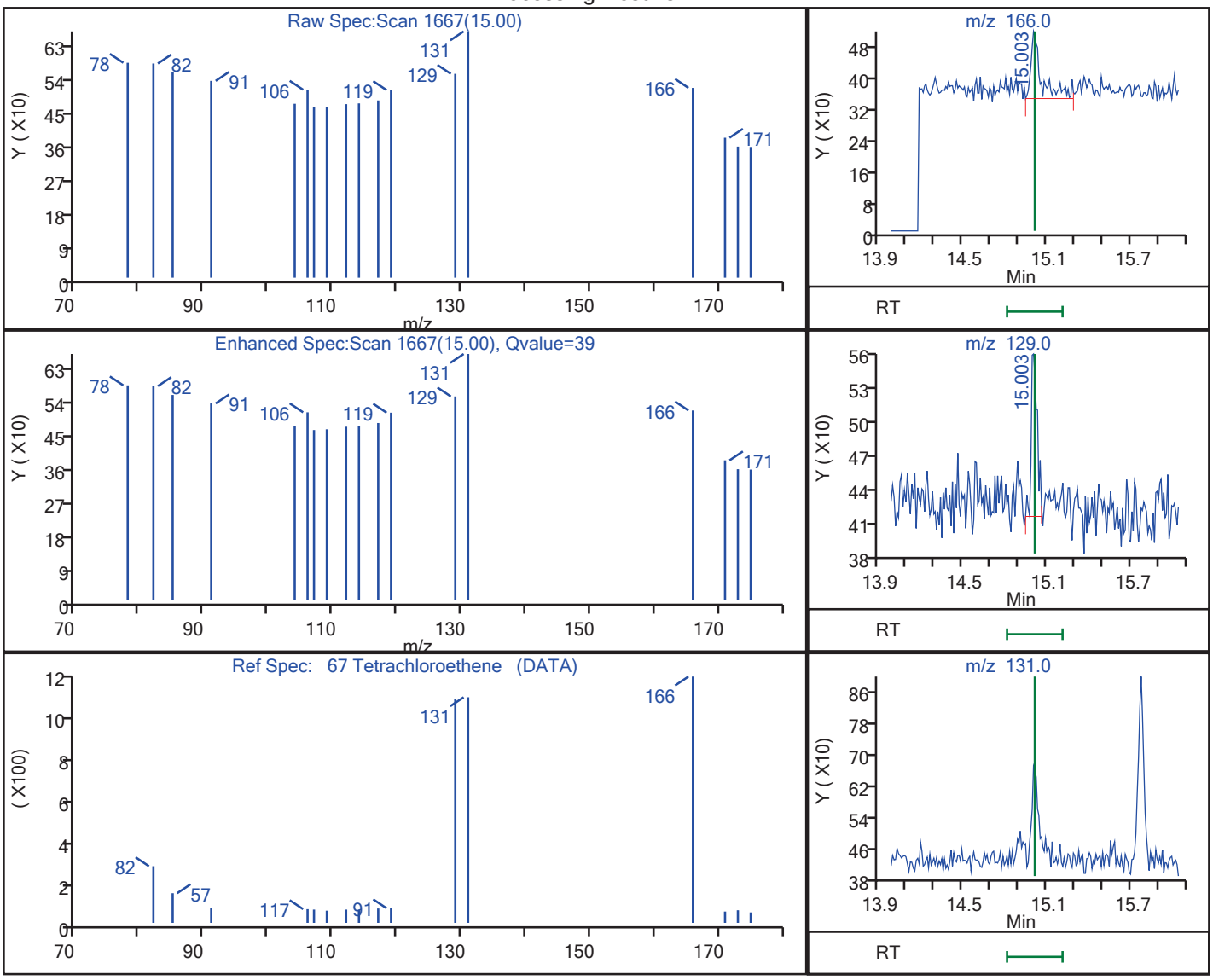
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 67 Tetrachloroethene, CAS: 127-18-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 15.00 | 166.00 | 917 | 0.004532 |
| 15.00 | 129.00 | 411 | |
| 15.01 | 131.00 | 0 | |
| 15.01 | 164.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

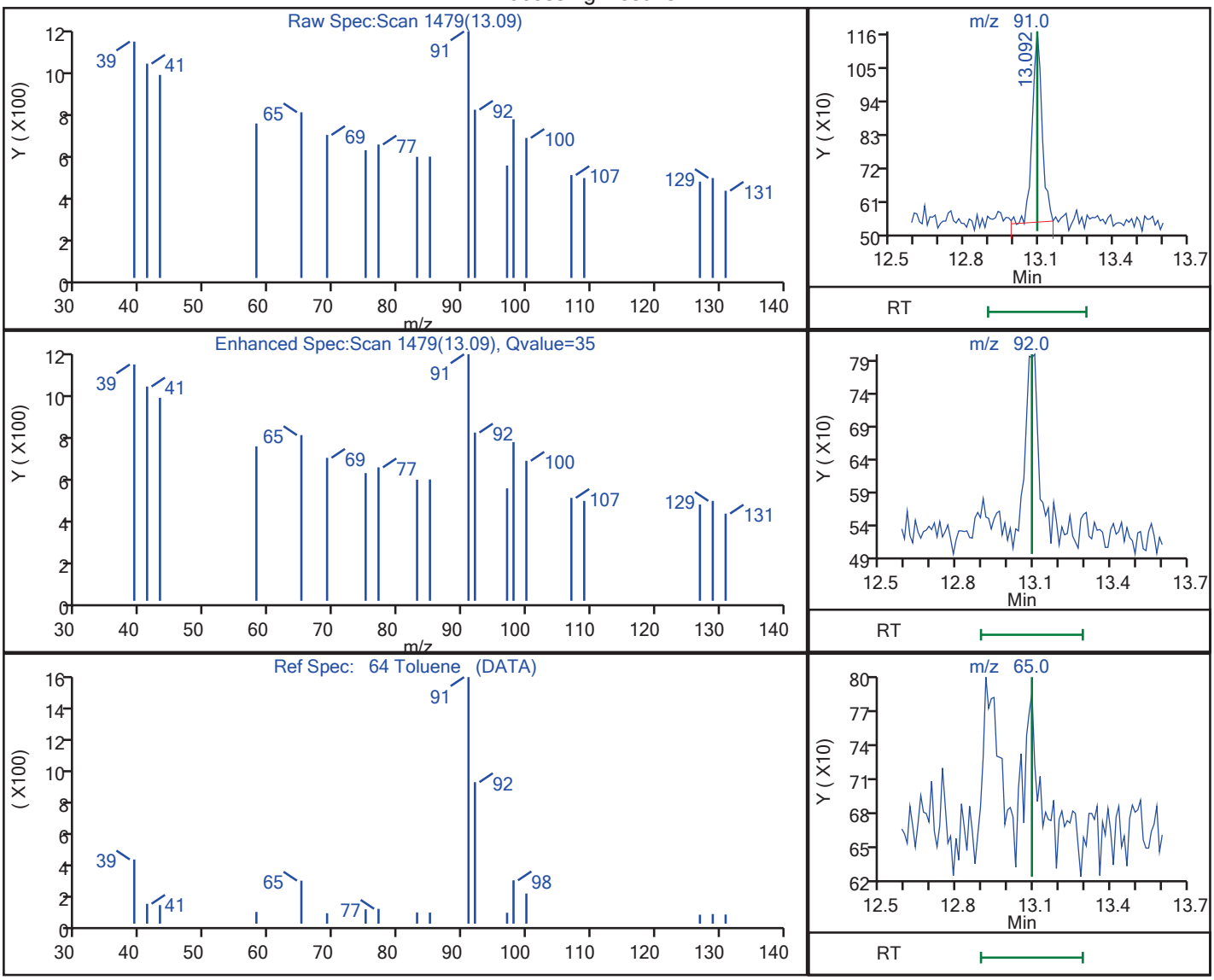
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 64 Toluene, CAS: 108-88-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.09 | 91.00 | 1746 | 0.005686 |
| 13.09 | 92.00 | 0 | |
| 13.09 | 65.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

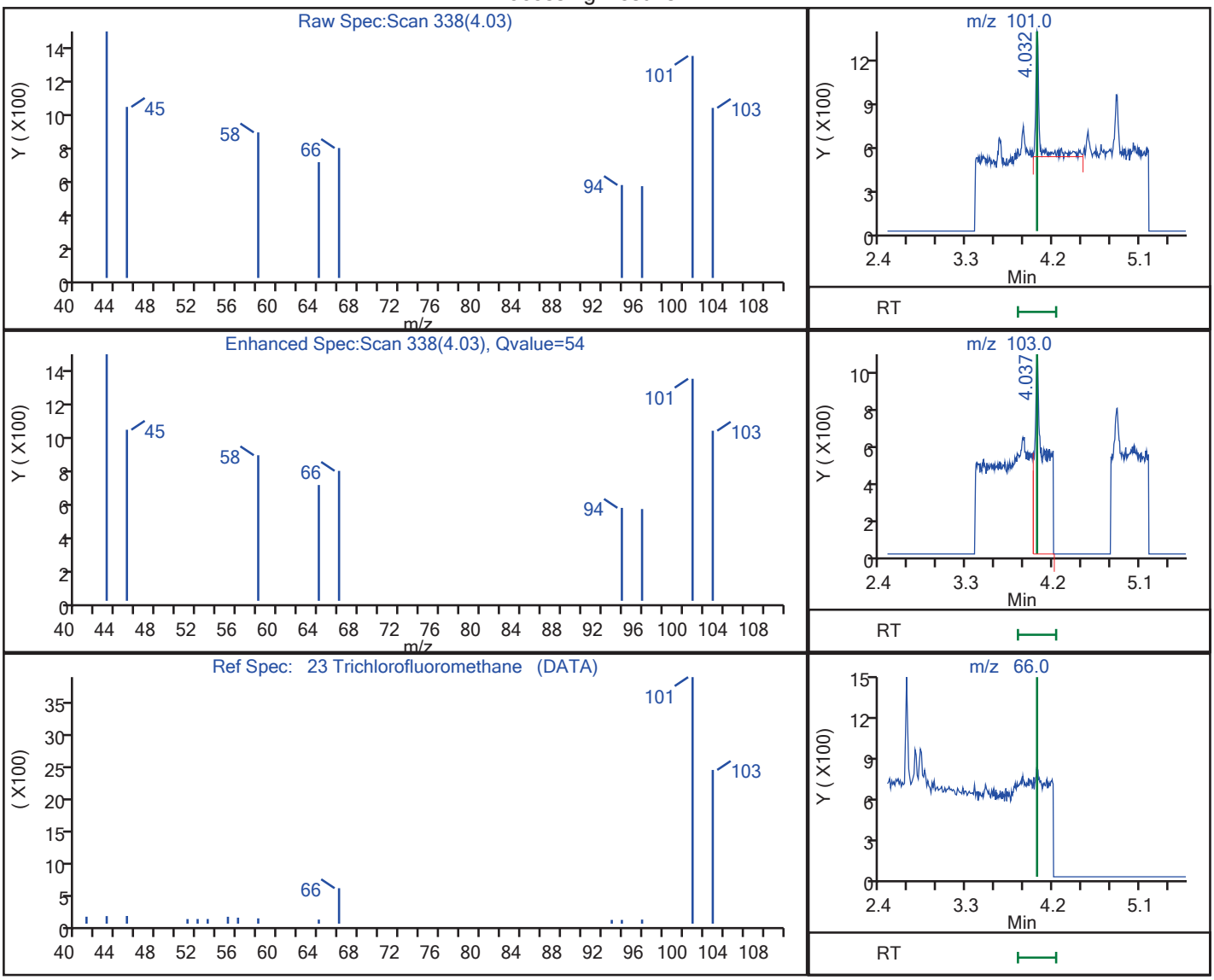
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR13.D | | | | |
| Injection Date: | 15-Mar-2021 20:10:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-1 | Lab Sample ID: | 570-53377-1 | | |
| Client ID: | D640 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 13 | Worklist Smp#: | 13 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 23 Trichlorofluoromethane, CAS: 75-69-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.03 | 101.00 | 2693 | 0.005087 |
| 4.04 | 103.00 | 7732 | |
| 4.03 | 66.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:26:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D654 | Lab Sample ID: 570-53377-2

Matrix: Air | Lab File ID: MMM15MAR14.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/15/2021 20:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.025 | 0.010 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 0.025 | 0.016 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.025 | 0.0091 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.025 | 0.015 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.025 | 0.012 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.025 | 0.013 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 0.25 | 0.11 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 0.050 | 0.042 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 0.050 | 0.0073 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 0.050 | 0.033 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 0.050 | 0.018 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.025 | 0.022 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.025 | 0.016 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.025 | 0.017 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.025 | 0.015 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.025 | 0.012 |
| 106-99-0 | 1,3-Butadiene | ND | | 0.025 | 0.013 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.025 | 0.014 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.025 | 0.013 |
| 123-91-1 | 1,4-Dioxane | ND | | 0.25 | 0.17 |
| 78-93-3 | 2-Butanone | ND | | 0.25 | 0.027 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.050 | 0.013 |
| 67-64-1 | Acetone | ND | | 0.50 | 0.41 |
| 71-43-2 | Benzene | ND | | 0.025 | 0.013 |
| 75-27-4 | Bromodichloromethane | ND | | 0.025 | 0.0098 |
| 74-83-9 | Bromomethane | ND | | 0.050 | 0.036 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.025 | 0.014 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.025 | 0.011 |
| 75-15-0 | Carbon disulfide | ND | | 0.25 | 0.16 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.050 | 0.040 |
| 108-90-7 | Chlorobenzene | ND | | 0.050 | 0.017 |
| 75-00-3 | Chloroethane | ND | | 0.025 | 0.020 |
| 67-66-3 | Chloroform | ND | | 0.025 | 0.012 |
| 74-87-3 | Chloromethane | ND | | 0.025 | 0.013 |
| 124-48-1 | Dibromochloromethane | ND | | 0.025 | 0.010 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D654 | Lab Sample ID: 570-53377-2

Matrix: Air | Lab File ID: MMM15MAR14.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/15/2021 20:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.025 | 0.010 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 0.025 | 0.0090 |
| 100-41-4 | Ethylbenzene | ND | | 0.025 | 0.012 |
| 87-68-3 | Hexachloro-1,3-butadiene | ND | | 0.10 | 0.050 |
| 110-54-3 | Hexane | ND | | 0.10 | 0.011 |
| 67-63-0 | Isopropanol | ND | | 0.25 | 0.13 |
| 75-09-2 | Methylene Chloride | ND | | 0.050 | 0.026 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 0.025 | 0.011 |
| 91-20-3 | Naphthalene | ND | | 0.050 | 0.033 |
| 95-47-6 | o-Xylene | ND | | 0.025 | 0.013 |
| 179601-23-1 | m,p-Xylene | ND | | 0.050 | 0.026 |
| 100-42-5 | Styrene | ND | | 0.025 | 0.0099 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.025 | 0.011 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 0.025 | 0.010 |
| 127-18-4 | Tetrachloroethene | ND | | 0.025 | 0.014 |
| 108-88-3 | Toluene | ND | | 0.050 | 0.015 |
| 1330-20-7 | Xylenes, Total | ND | | 0.075 | 0.039 |
| 79-01-6 | Trichloroethene | ND | | 0.025 | 0.018 |
| 75-69-4 | Trichlorofluoromethane | ND | | 0.025 | 0.0082 |
| 75-01-4 | Vinyl chloride | ND | | 0.050 | 0.023 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 95 | | 61-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 76 | | 59-130 |
| 2037-26-5 | Toluene-d8 (Surr) | 99 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D
Lims ID: 570-53377-A-2
Client ID: D654
Sample Type: Client
Inject. Date: 15-Mar-2021 20:59:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53377-a-2
Misc. Info.: A_SIMIS/SS_00005
Operator ID: 12GR Instrument ID: GCMSMMM

Method: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\AIRMS_GCMSMMM.m
Limit Group: MSV - TO15 SIM TO15 SIMLL
Last Update: 16-Mar-2021 13:38:16 Calib Date: 09-Feb-2021 18:41:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSMMM\20210210-38552.b\MMM09FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: rhoadesw Date: 16-Mar-2021 13:28:19

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 11 1,1-Difluoroethane | 51 | | 2.755 | | | | ND | U |
| 13 Chloromethane | 50 | | 2.966 | | | | ND | U |
| 8 Dichlorodifluoromethane | 85 | | 3.033 | | | | ND | U |
| 15 Vinyl chloride | 62 | | 3.111 | | | | ND | |
| 6 Butadiene | 54 | | 3.200 | | | | ND | |
| 14 Bromomethane | 94 | | 3.378 | | | | ND | |
| 18 Chloroethane | 64 | | 3.493 | | | | ND | |
| 23 Trichlorofluoromethane | 101 | 4.033 | 4.033 | 0.000 | 44 | 934 | 0.001771 | |
| 20 Acetone | 43 | 4.067 | 4.052 | 0.015 | 24 | 15240 | 0.0389 | |
| 21 Isopropyl alcohol | 45 | 4.259 | 4.259 | 0.000 | 2 | 15901 | 0.0489 | M |
| 24 1,1-Dichloroethene | 61 | | 4.522 | | | | ND | |
| 25 Methylene Chloride | 84 | 4.612 | 4.612 | 0.000 | 36 | 5349 | 0.0242 | |
| 31 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 4.867 | | | | ND | U |
| 29 1,2-Dichloro-1,1,2,2-tetrafluoro | 151 | | 4.867 | | | | ND | |
| 30 Carbon disulfide | 76 | | 4.872 | | | | ND | |
| 26 trans-1,2-Dichloroethene | 96 | | 5.483 | | | | ND | |
| 32 1,1-Dichloroethane | 63 | | 5.684 | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 5.900 | | | | ND | |
| 34 2-Butanone (MEK) | 43 | | 6.484 | | | | ND | |
| 35 cis-1,2-Dichloroethene | 96 | | 6.587 | | | | ND | |
| * 36 Chlorobromomethane (IS) | 130 | 6.758 | 6.758 | 0.000 | 79 | 37675 | 0.5000 | |
| 40 Hexane | 57 | | 6.869 | | | | ND | |
| 39 Chloroform | 83 | | 6.920 | | | | ND | |
| $ 42 1,2-Dichloroethane-d4 (Surr) | 65 | 7.670 | 7.670 | 0.000 | 95 | 80129 | 0.4753 | |
| 38 1,2-Dichloroethane | 62 | | 7.806 | | | | ND | U |
| 45 1,1,1-Trichloroethane | 97 | | 8.132 | | | | ND | |
| 48 Benzene | 78 | | 8.721 | | | | ND | U |
| 49 Carbon tetrachloride | 117 | | 8.927 | | | | ND | |
| * 50 1,4-Difluorobenzene | 114 | 9.267 | 9.267 | 0.000 | 63 | 111551 | 0.5000 | |
| 41 1,2-Dichloropropane | 63 | | 9.860 | | | | ND | |
| 52 Dichlorobromomethane | 83 | | 10.127 | | | | ND | U |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 53 Trichloroethene | 95 | | 10.213 | | | | ND | |
| 54 1,4-Dioxane | 57 | | 10.761 | | | | ND | |
| 57 cis-1,3-Dichloropropene | 75 | | 11.547 | | | | ND | |
| 60 trans-1,3-Dichloropropene | 75 | | 12.399 | | | | ND | |
| 61 1,1,2-Trichloroethane | 83 | | 12.623 | | | | ND | |
| $ 63 Toluene-d8 (Surr) | 98 | 12.932 | 12.932 | 0.000 | 97 | 103874 | 0.4965 | |
| 64 Toluene | 91 | | 13.092 | | | | ND | U |
| 66 Chlorodibromomethane | 129 | | 13.731 | | | | ND | |
| 59 Ethylene Dibromide | 107 | | 14.136 | | | | ND | U |
| 67 Tetrachloroethene | 166 | | 15.012 | | | | ND | U |
| * 68 Chlorobenzene-d5 | 117 | 16.143 | 16.143 | 0.000 | 95 | 98950 | 0.5000 | |
| 69 Chlorobenzene | 112 | | 16.219 | | | | ND | U |
| 71 Ethylbenzene | 91 | | 16.995 | | | | ND | U |
| 72 m-Xylene & p-Xylene | 91 | | 17.330 | | | | ND | |
| 74 Styrene | 104 | | 18.037 | | | | ND | U |
| 75 1,1,2,2-Tetrachloroethane | 83 | | 18.209 | | | | ND | U |
| 76 o-Xylene | 91 | | 18.245 | | | | ND | U |
| 77 1,2,3-Trichloropropane | 75 | | 18.472 | | | | ND | U |
| $ 79 4-Bromofluorobenzene (Surr) | 95 | 19.143 | 19.143 | 0.000 | 99 | 55525 | 0.3817 | |
| 86 4-Ethyltoluene | 105 | | 20.959 | | | | ND | U |
| 81 1,3,5-Trimethylbenzene | 105 | | 21.154 | | | | ND | U |
| 85 1,2,4-Trimethylbenzene | 105 | | 22.073 | | | | ND | |
| 92 1,3-Dichlorobenzene | 146 | | 22.305 | | | | ND | |
| 93 1,4-Dichlorobenzene | 146 | | 22.487 | | | | ND | |
| 89 1,2-Dichlorobenzene | 146 | | 23.286 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 28.061 | | | | ND | |
| 98 Naphthalene | 128 | | 28.303 | | | | ND | U |
| 97 1,2,3-Trichlorobenzene | 180 | | 29.029 | | | | ND | |
| 99 Hexachlorobutadiene | 225 | | 29.416 | | | | ND | U |
| 102 Xylenes, Total | 1 | | 0.000 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_Sim IS/SS_00005 Amount Added: 100.00 Units: mL Run Reagent

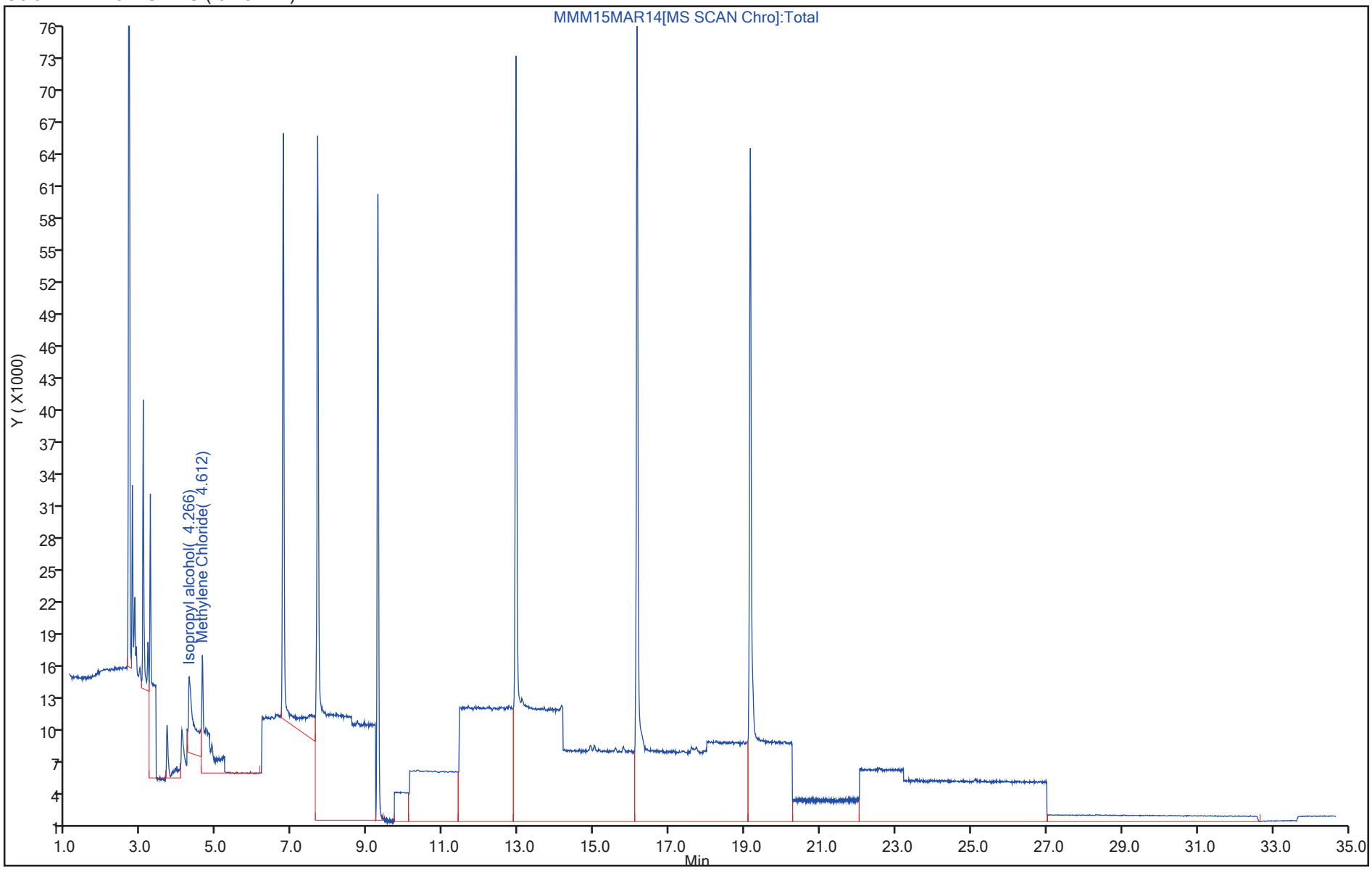
Report Date: 16-Mar-2021 13:38:42 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | Operator ID: | 12GR |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | Worklist Smp#: | 14 |
| Client ID: | D654 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 14 |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |

Column: Rxi-624Sil MS ( 0.18 mm)



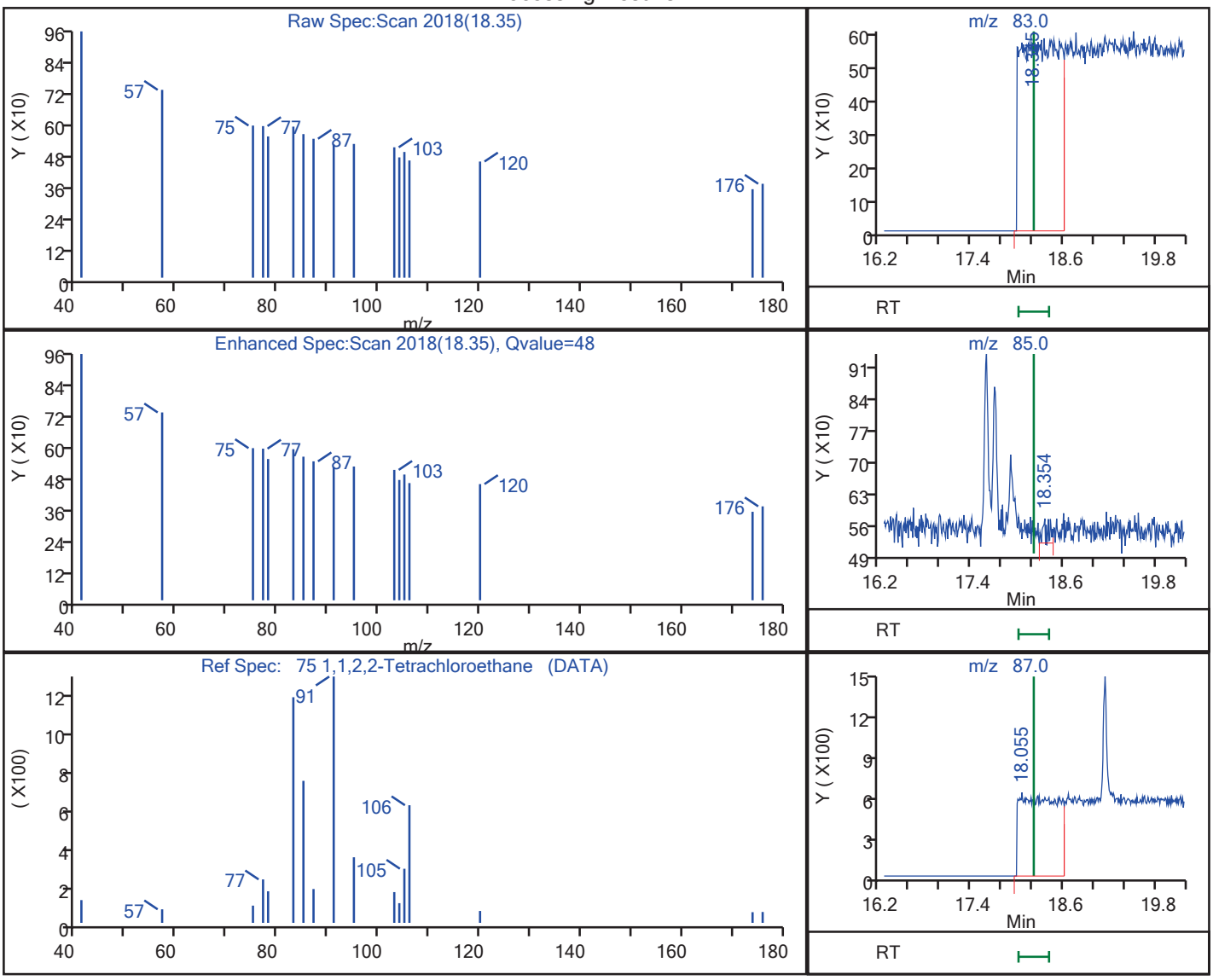
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 75 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.35 | 83.00 | 20760 | 0.044934 |
| 18.35 | 85.00 | 270 | |
| 18.05 | 87.00 | 20070 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

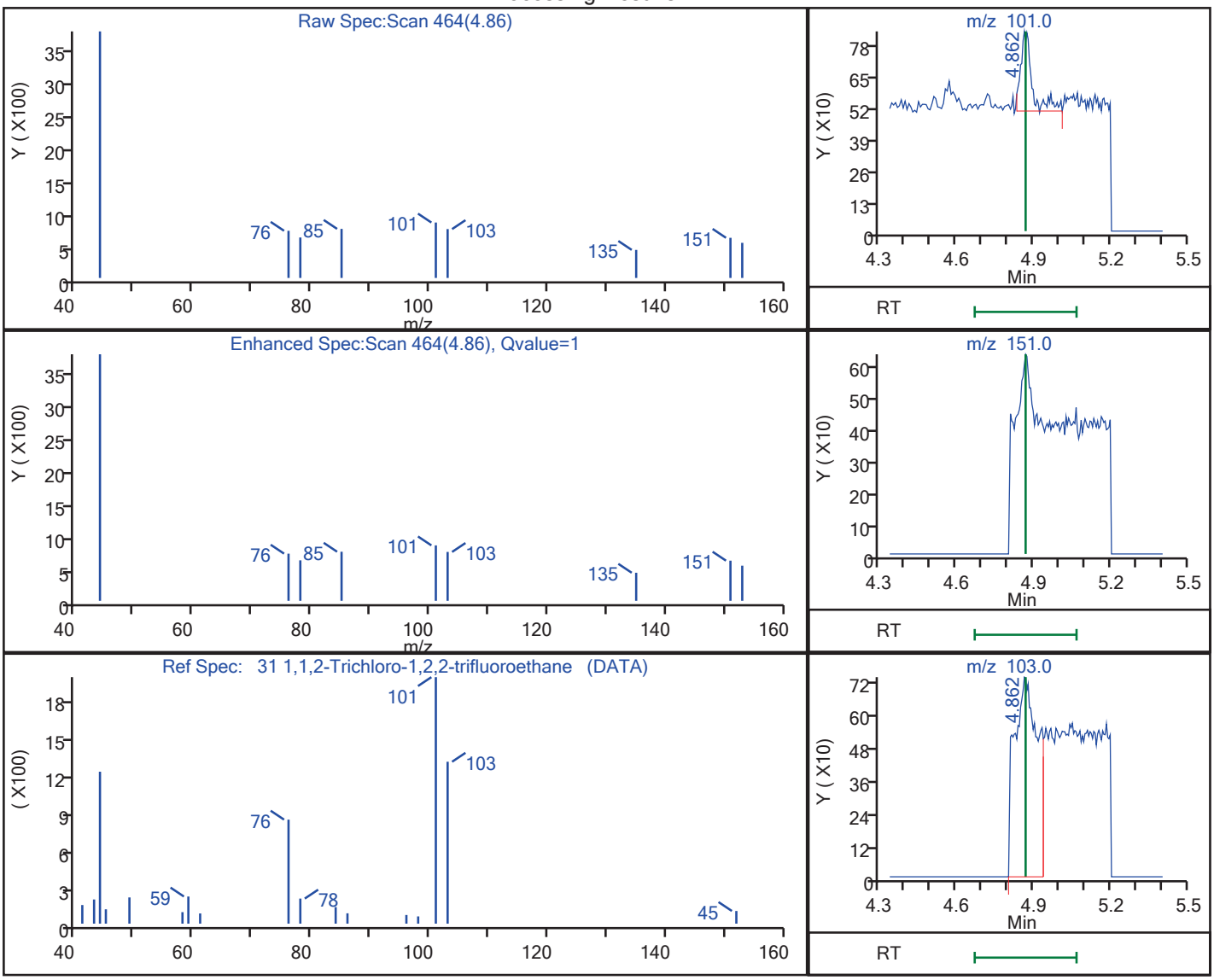
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 31 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.86 | 101.00 | 1037 | 0.002352 |
| 4.87 | 151.00 | 0 | |
| 4.86 | 103.00 | 4762 | |
| 4.87 | 153.00 | 4063 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

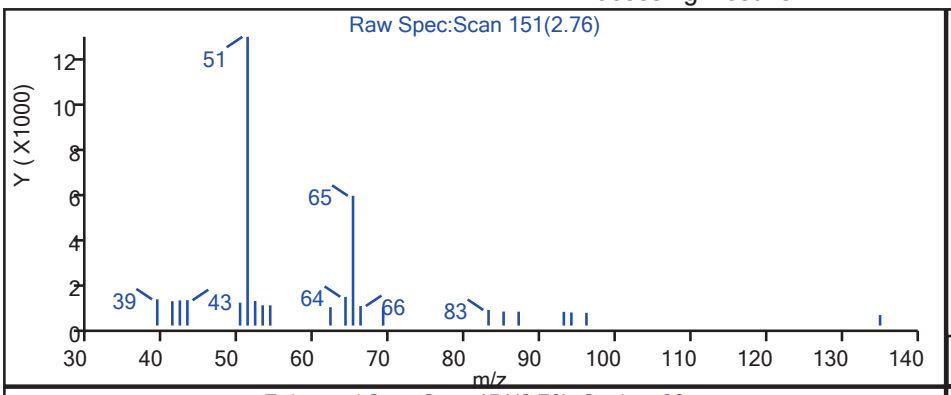
User Disabled Compound Report

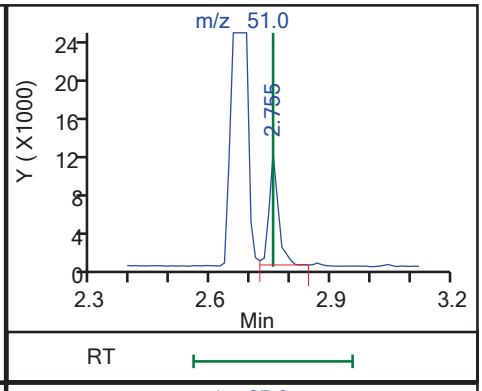
Eurofins Calscience LLC

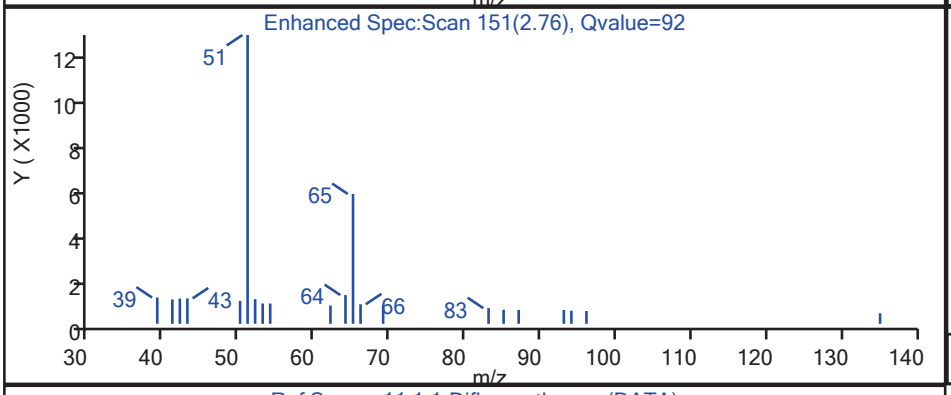
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

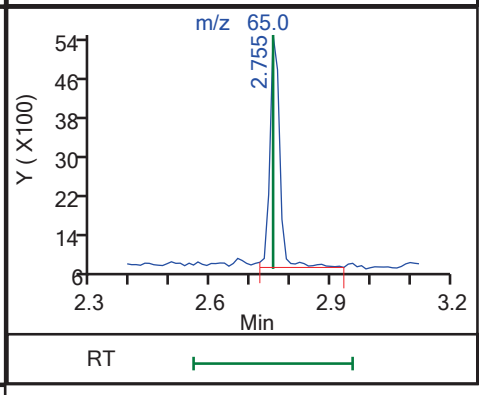
## 11 1,1-Difluoroethane, CAS: 75-37-6

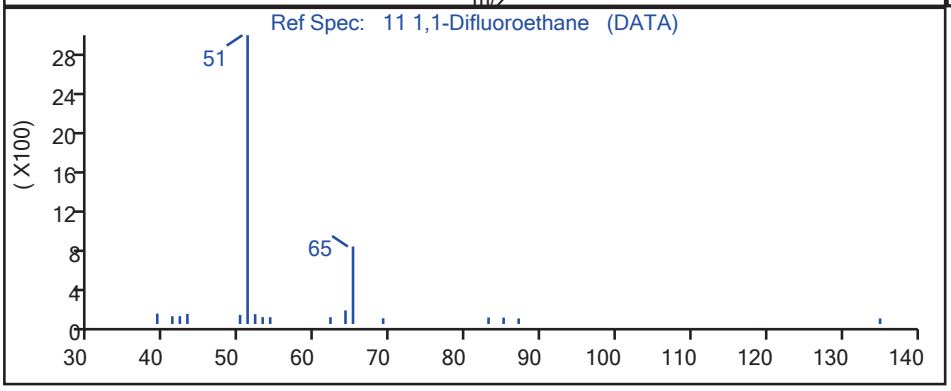
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.76 | 51.00 | 18072 | 0.069422 |
| 2.76 | 65.00 | 8257 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

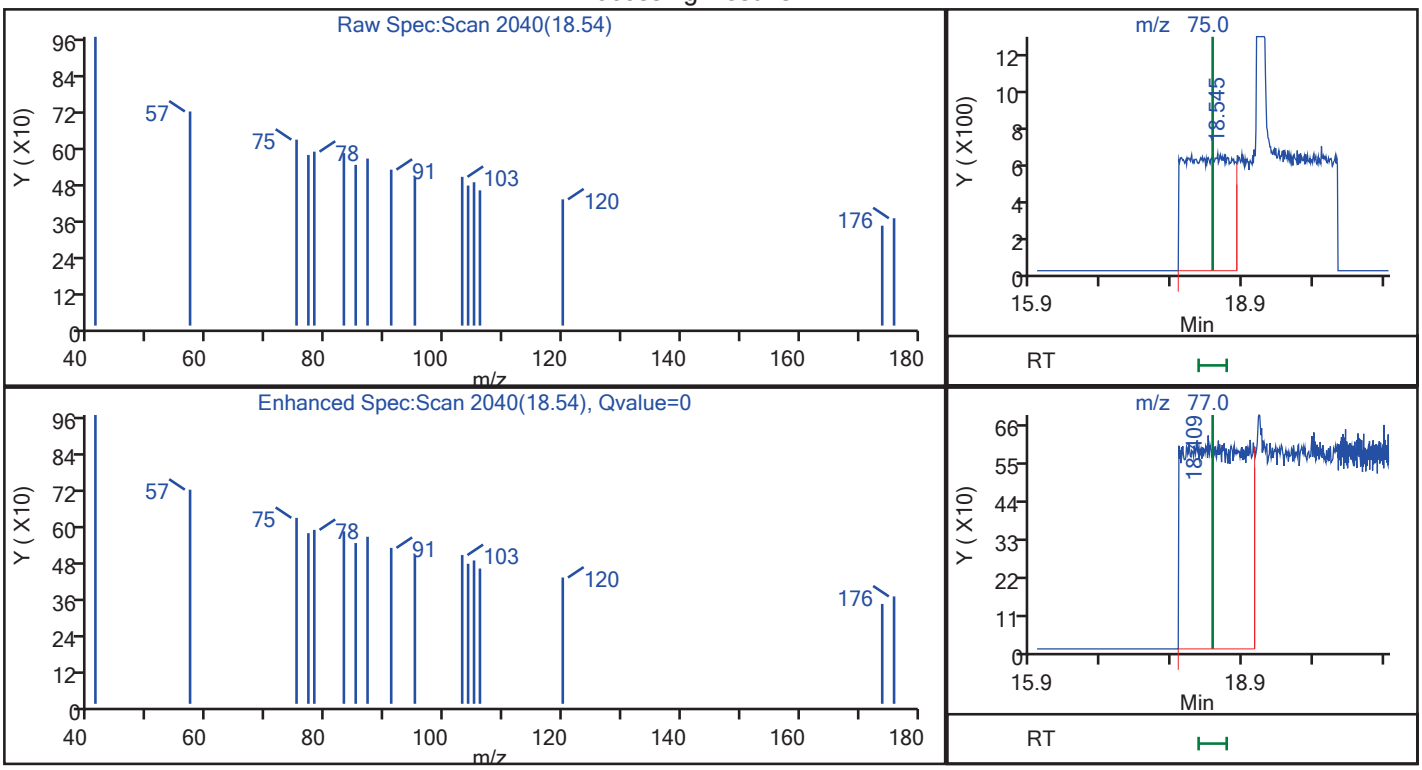
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 77 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.54 | 75.00 | 29414 | 0.094309 |
| 18.41 | 77.00 | 37696 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

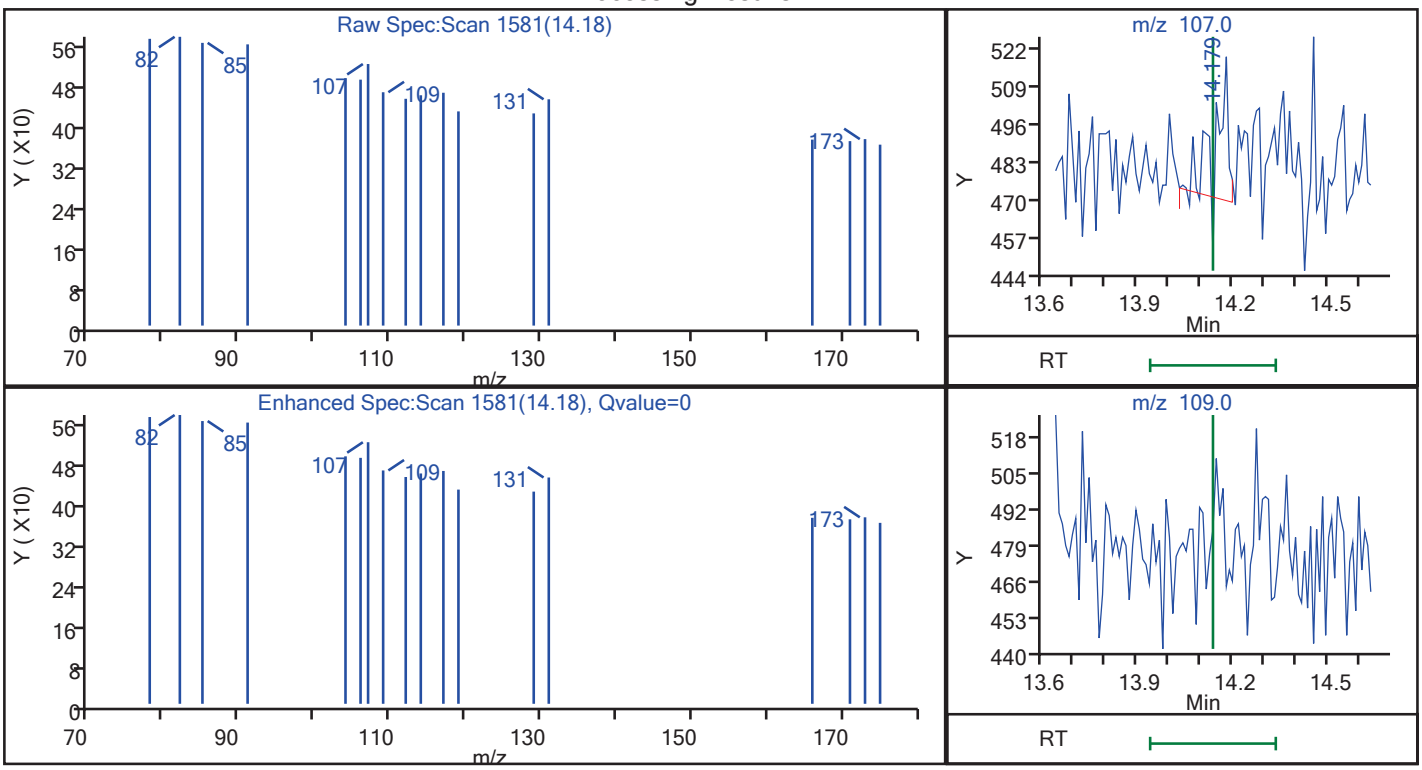
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 59 Ethylene Dibromide, CAS: 106-93-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 14.18 | 107.00 | 134 | 0.000605 |
| 14.14 | 109.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

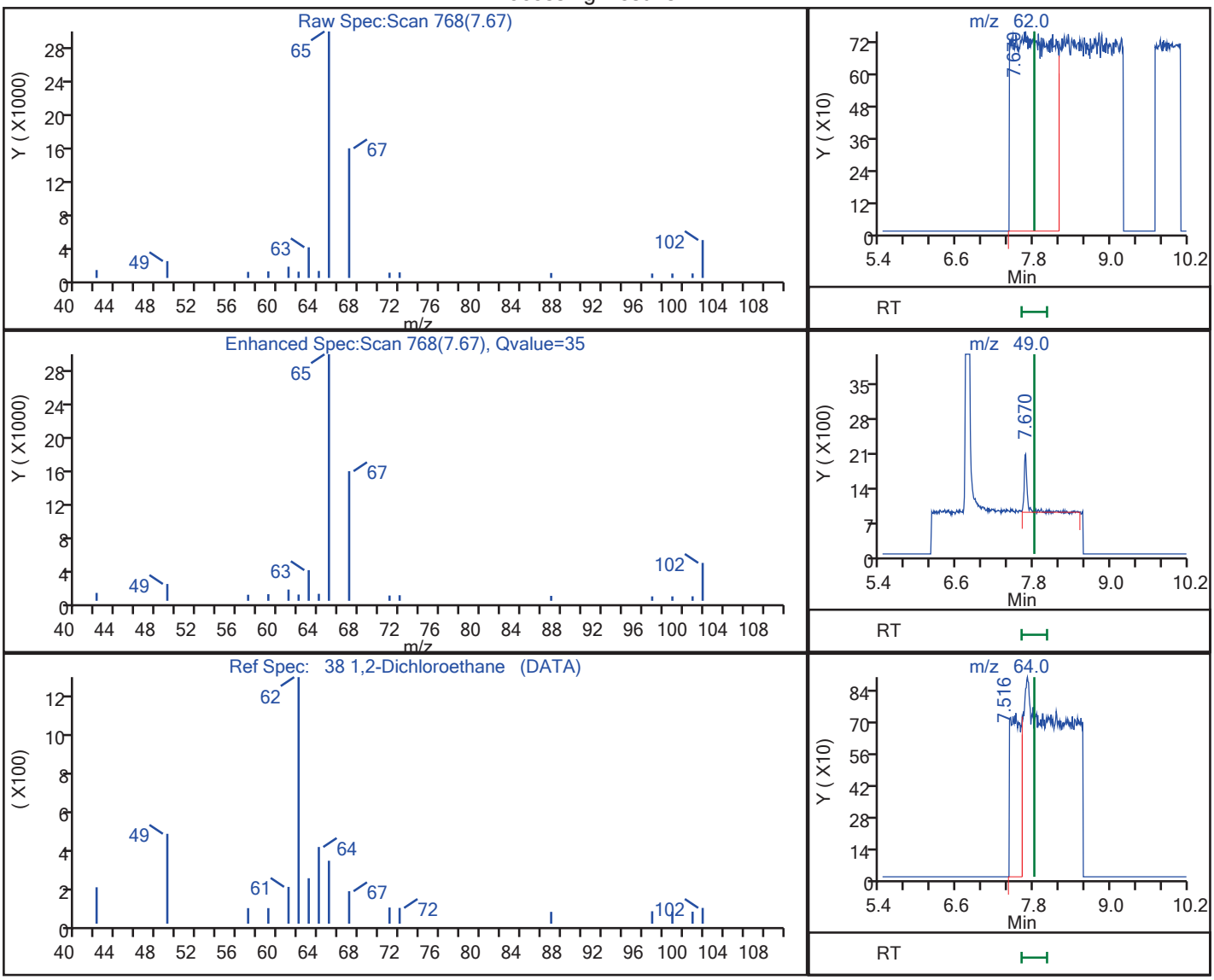
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 38 1,2-Dichloroethane, CAS: 107-06-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.67 | 62.00 | 33659 | 0.122602 |
| 7.67 | 49.00 | 3975 | |
| 7.52 | 64.00 | 8652 | |
| 7.67 | 63.00 | 8328 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

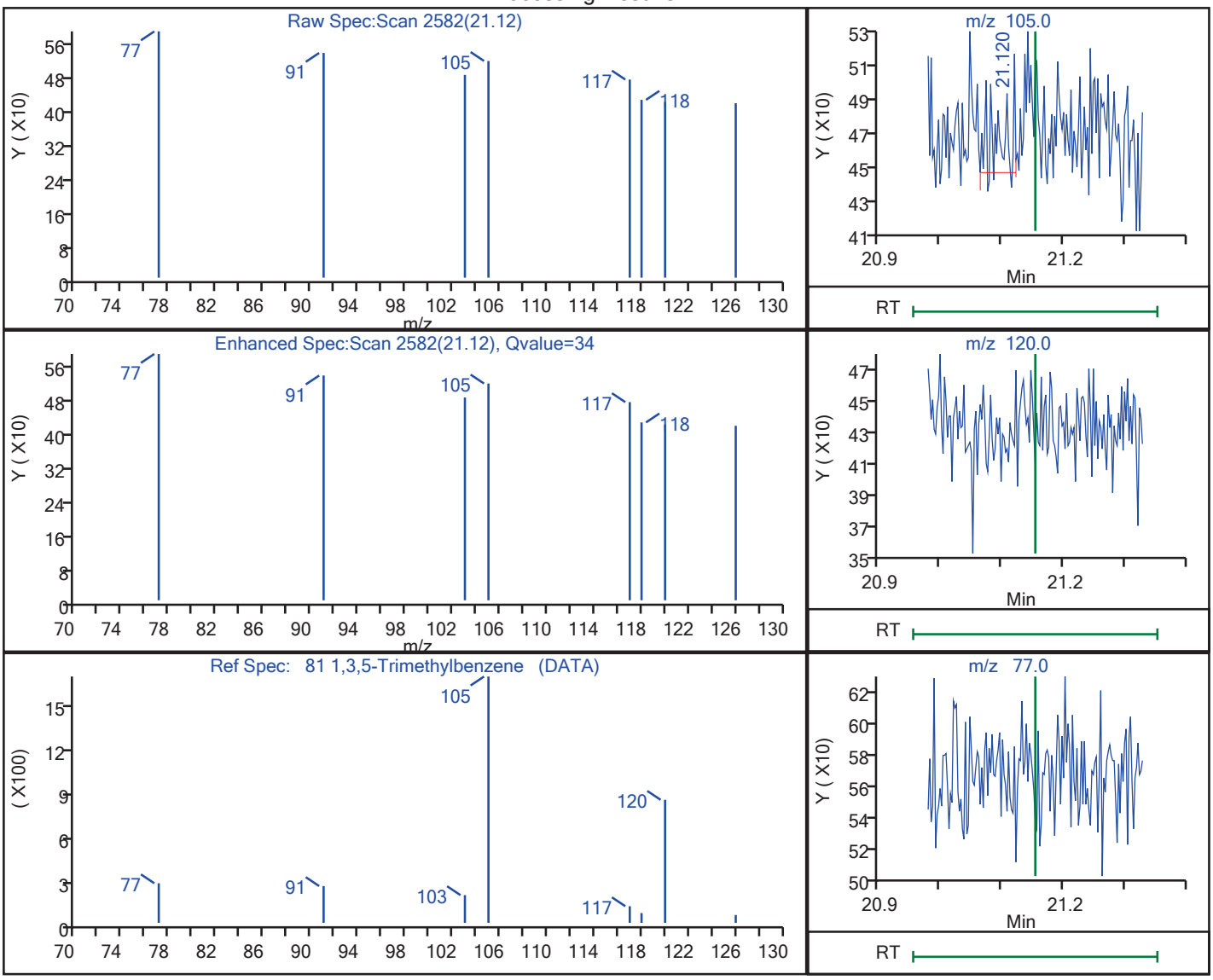
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 81 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 21.12 | 105.00 | 60 | 0.000262 |
| 21.15 | 120.00 | 0 | |
| 21.15 | 77.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

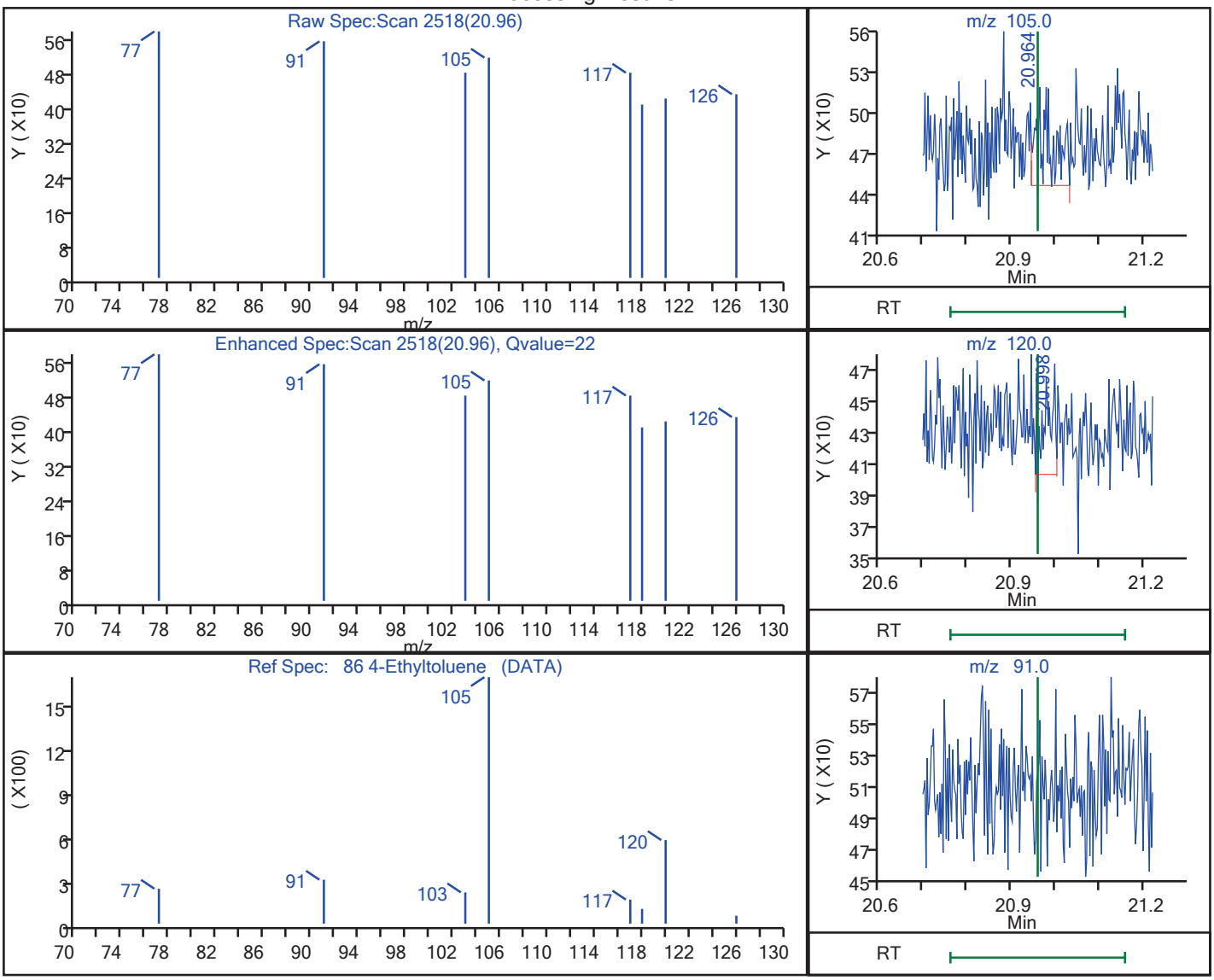
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 86 4-Ethyltoluene, CAS: 622-96-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 20.96 | 105.00 | 151 | 0.000596 |
| 21.00 | 120.00 | 93 | |
| 20.96 | 91.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:07

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

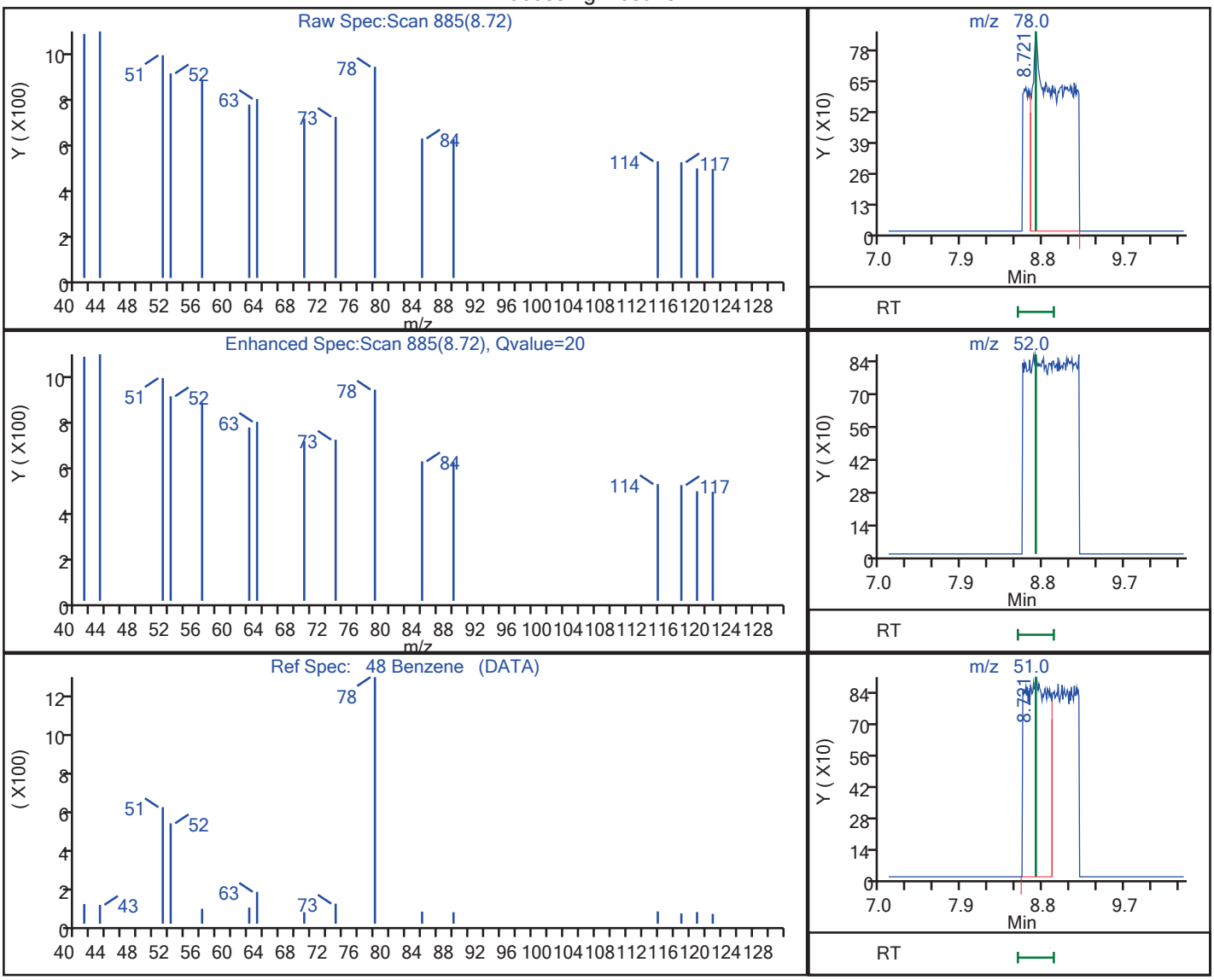
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 48 Benzene, CAS: 71-43-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.72 | 78.00 | 20521 | 0.065925 |
| 8.72 | 52.00 | 0 | |
| 8.72 | 51.00 | 16892 | |
| 8.72 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

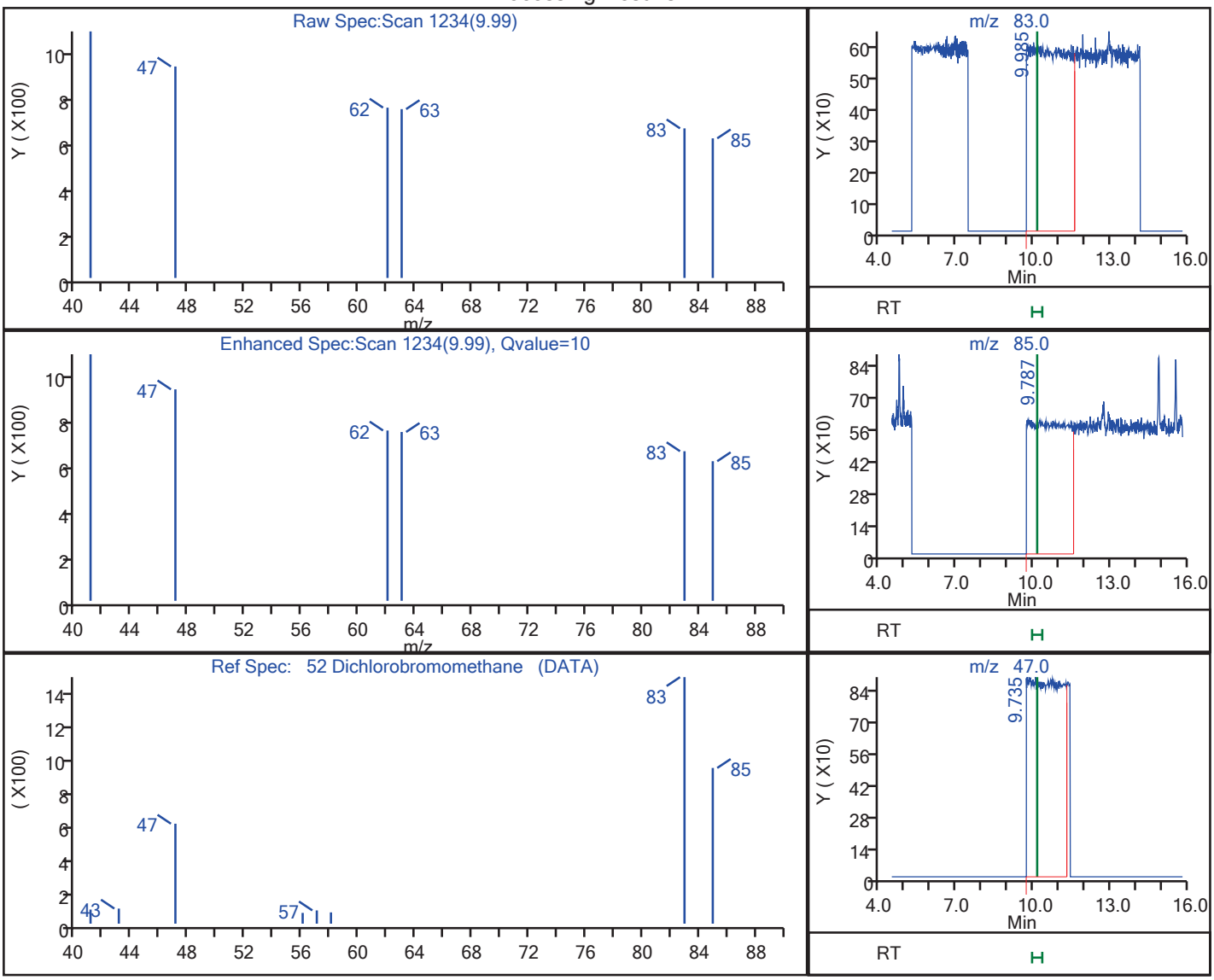
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 52 Dichlorobromomethane, CAS: 75-27-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 9.99 | 83.00 | 66099 | 0.201999 |
| 9.79 | 85.00 | 63275 | |
| 9.74 | 47.00 | 82850 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

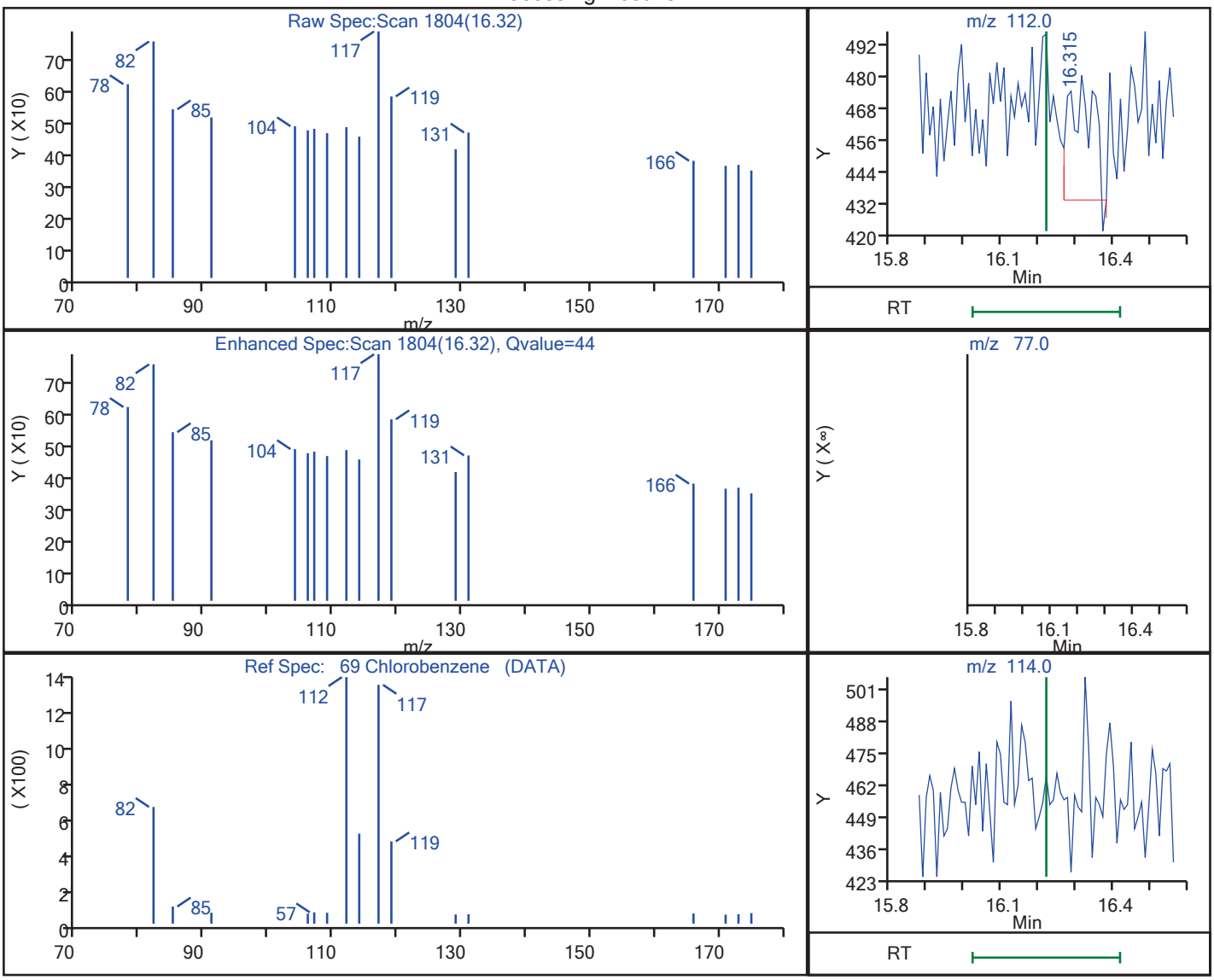
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 69 Chlorobenzene, CAS: 108-90-7

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 16.32 | 112.00 | 206 | 0.000822 |
| 16.22 | 77.00 | 0 | |
| 16.22 | 114.00 | 0 | |
| 16.22 | 51.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

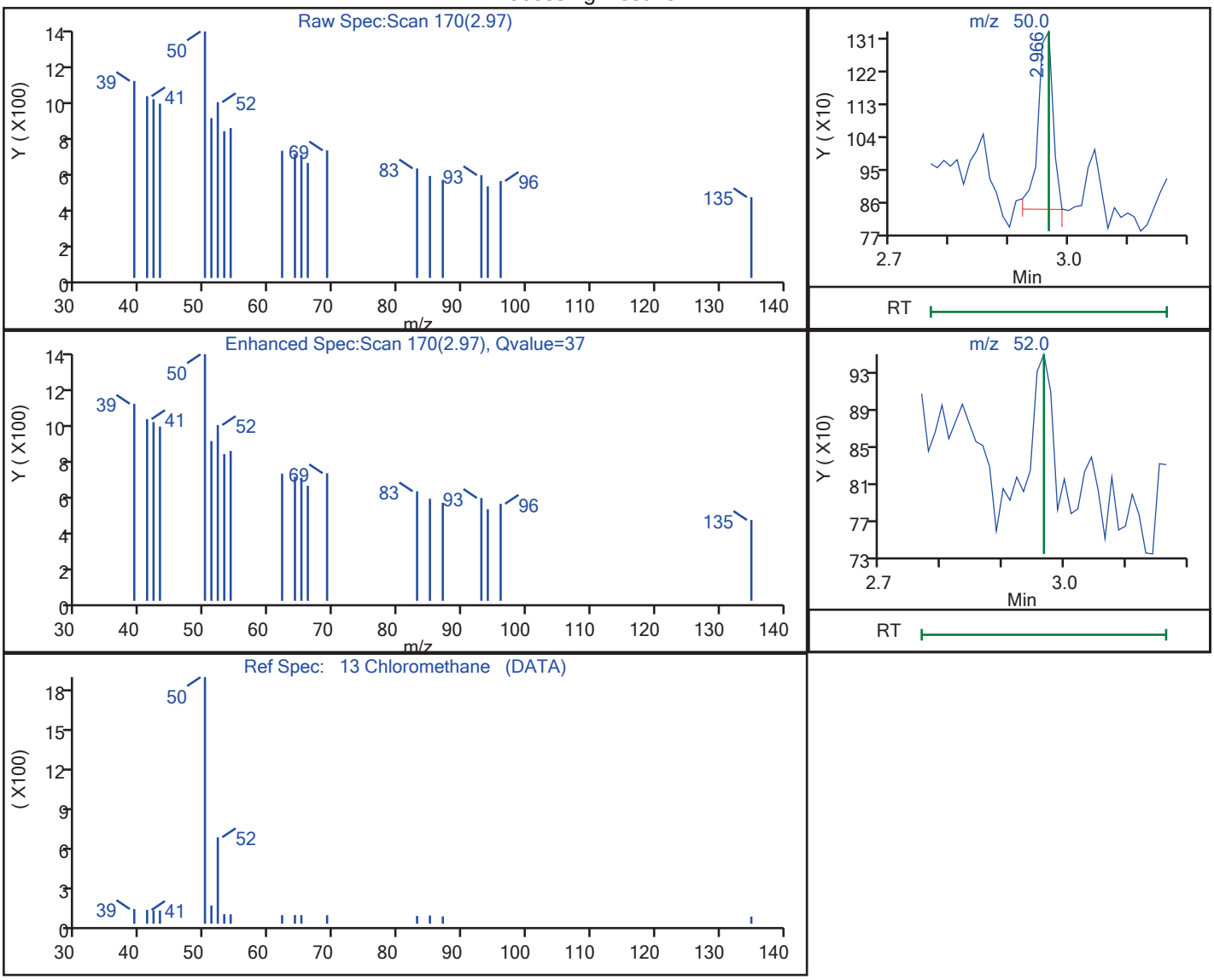
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 13 Chloromethane, CAS: 74-87-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.97 | 50.00 | 866 | 0.004285 |
| 2.97 | 52.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

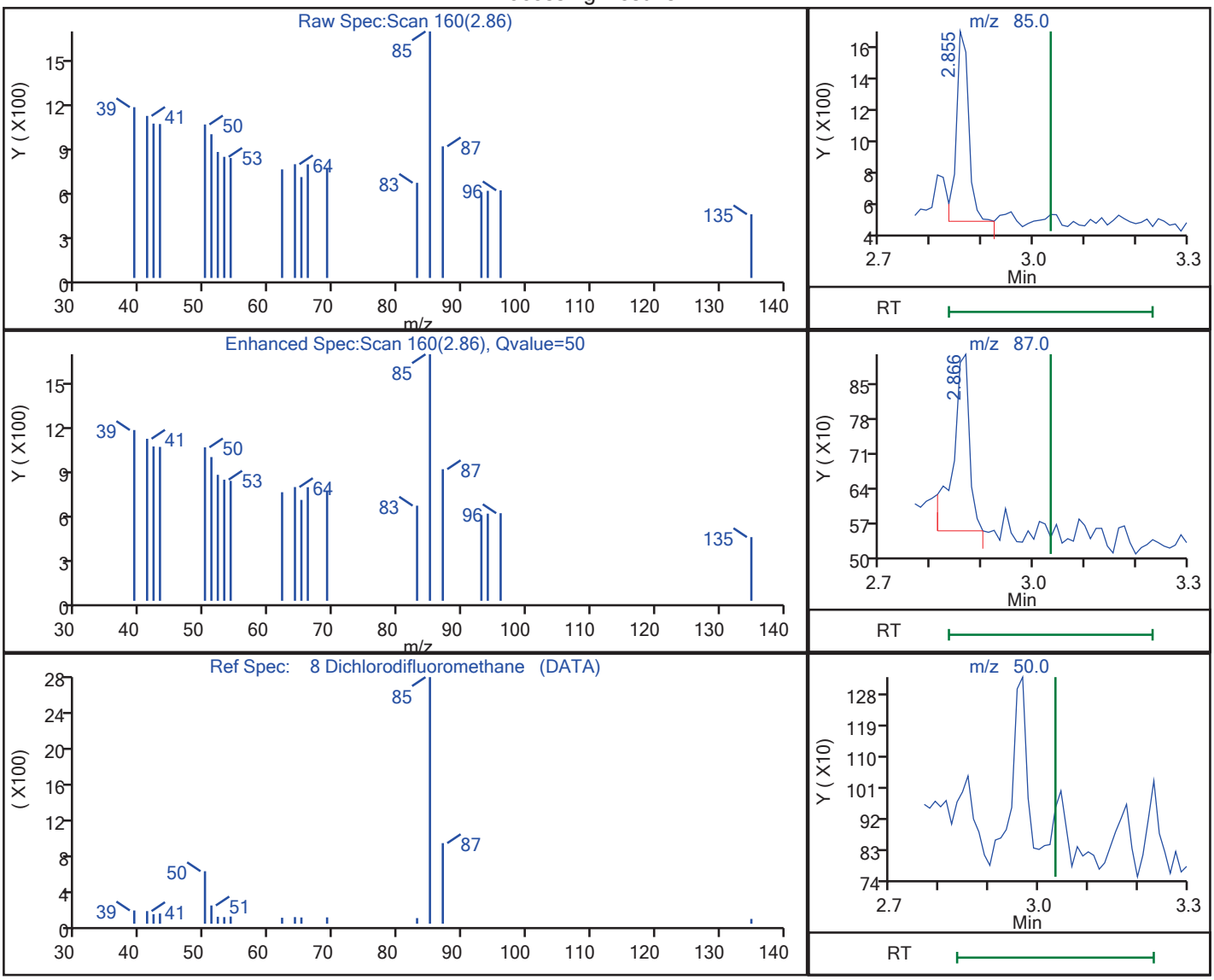
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 8 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.86 | 85.00 | 1886 | 0.003317 |
| 2.87 | 87.00 | 805 | |
| 3.03 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

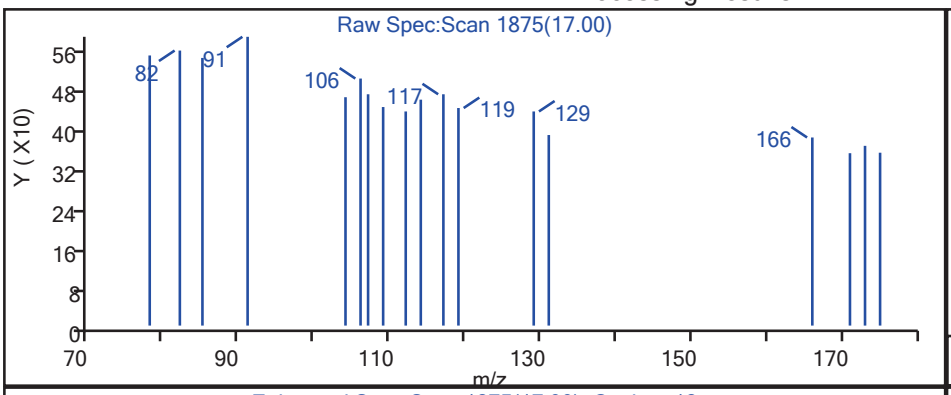
User Disabled Compound Report

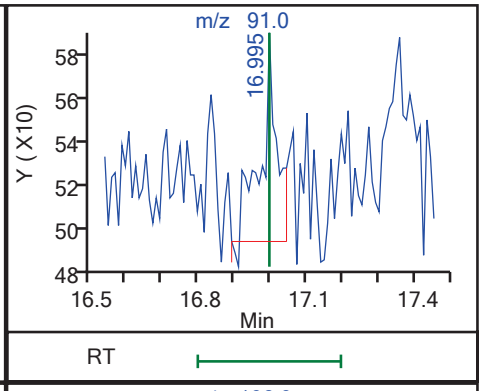
Eurofins Calscience LLC

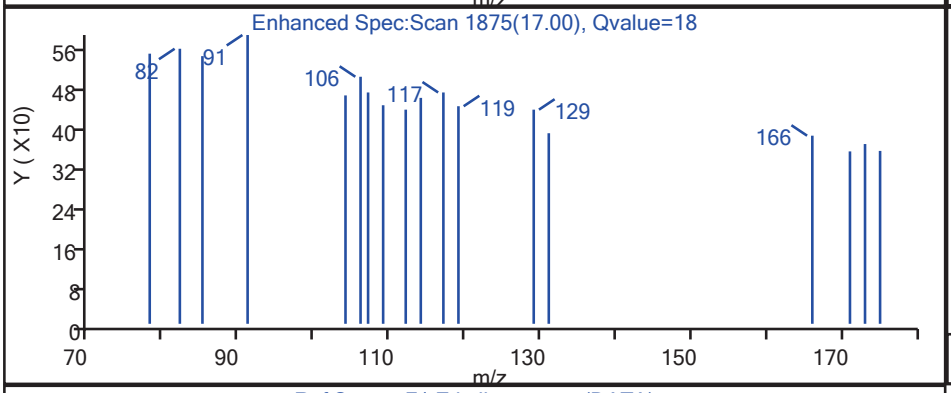
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

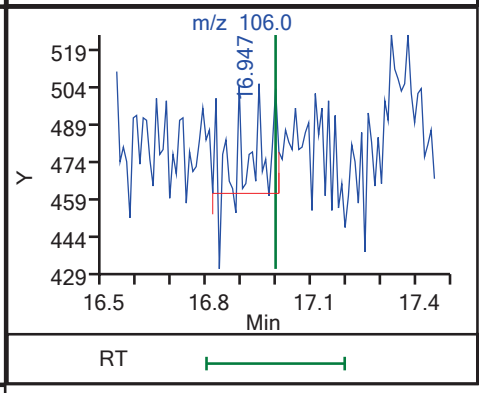
## 71 Ethylbenzene, CAS: 100-41-4

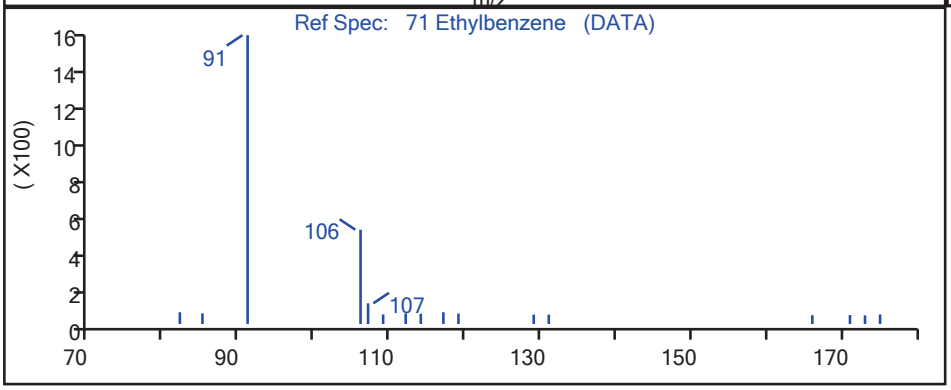
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 17.00 | 91.00 | 283 | 0.001064 |
| 16.95 | 106.00 | 160 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

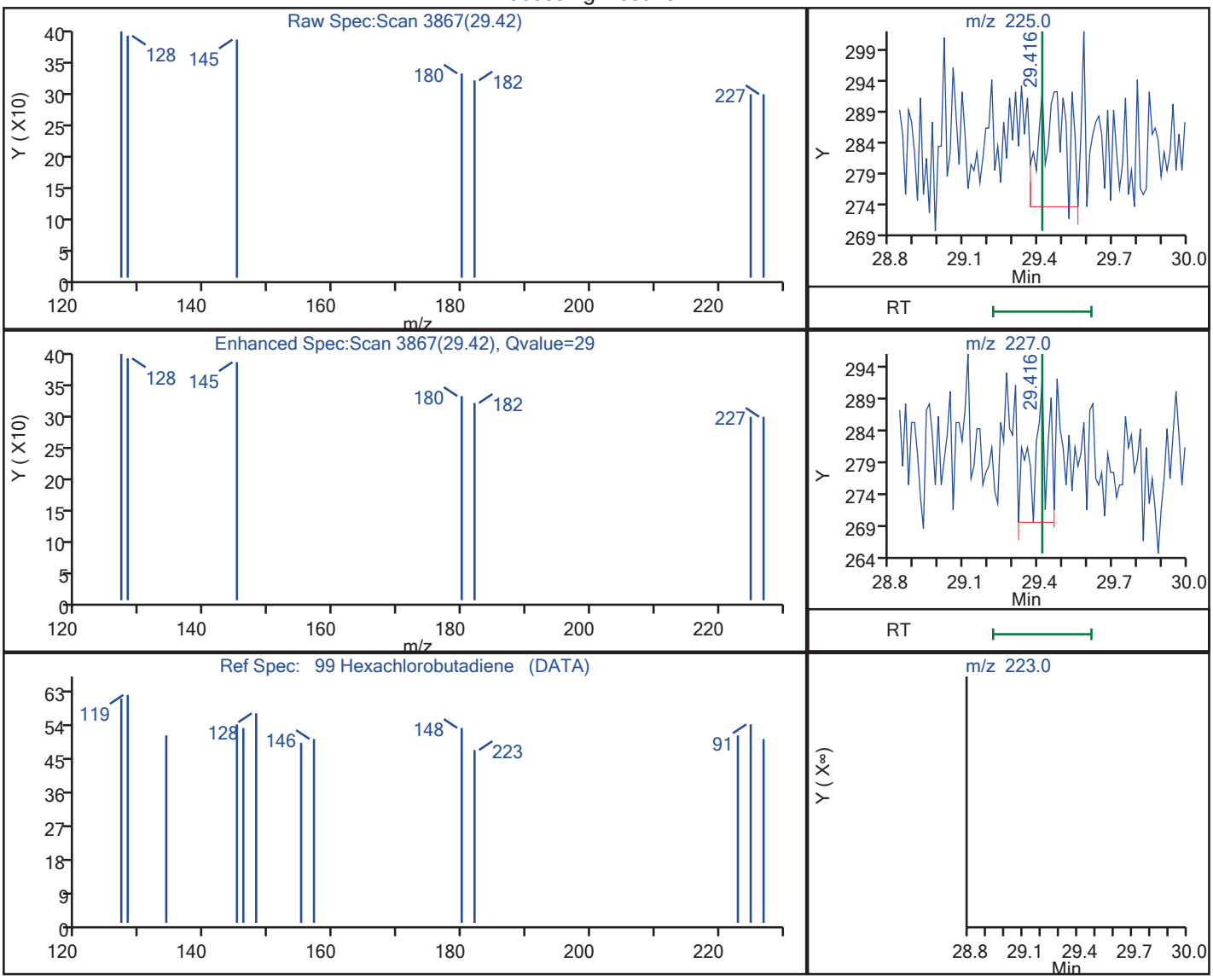
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 99 Hexachlorobutadiene, CAS: 87-68-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.42 | 225.00 | 142 | 0.000312 |
| 29.42 | 227.00 | 96 | |
| 29.42 | 223.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

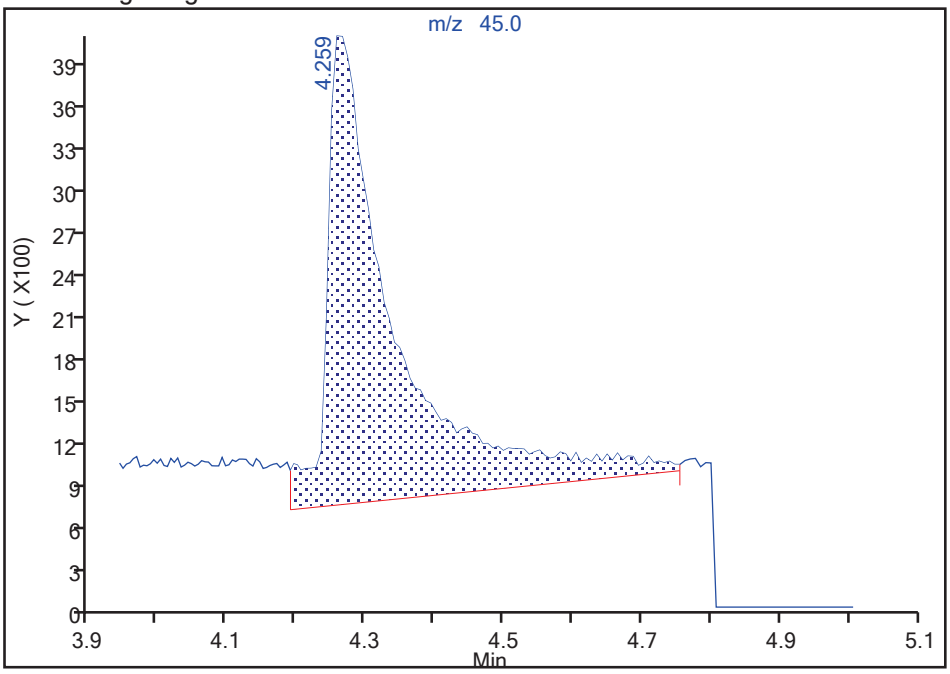
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 21 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

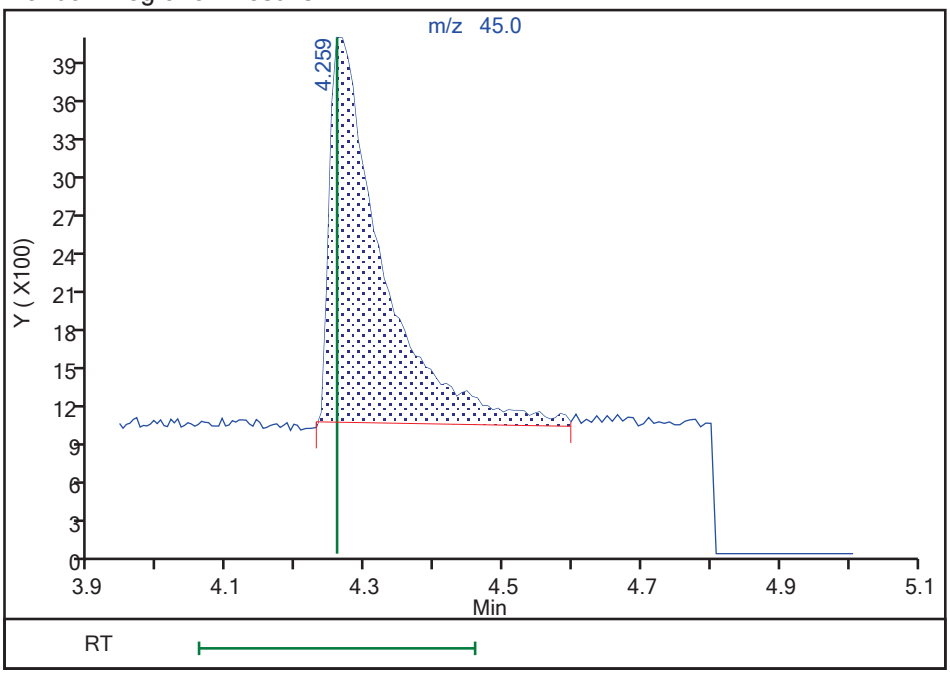
Processing Integration Results

RT: 4.26
Area: 22294
Amount: 0.068599
Amount Units: ppb v/v




Manual Integration Results

RT: 4.26
Area: 15901
Amount: 0.048928
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:27:31
Audit Action: Manually Integrated Audit Reason: Baseline

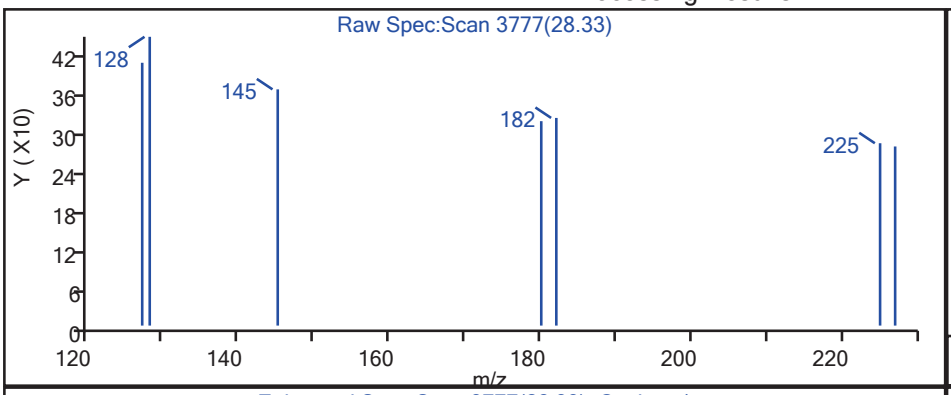
User Disabled Compound Report

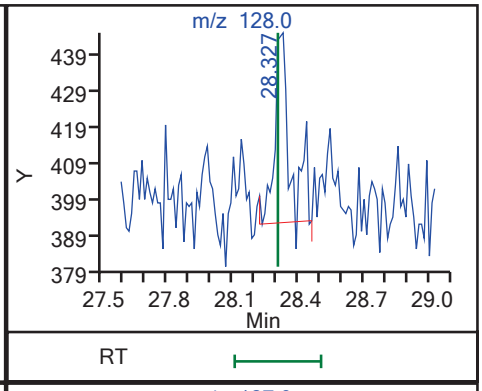
Eurofins Calscience LLC

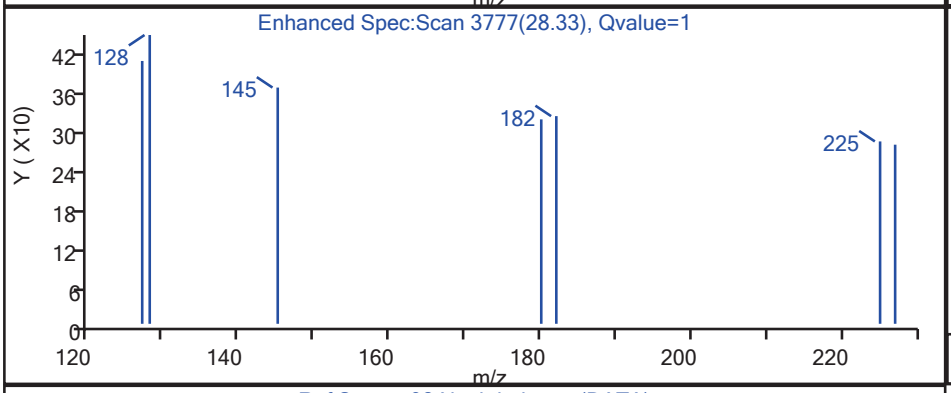
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

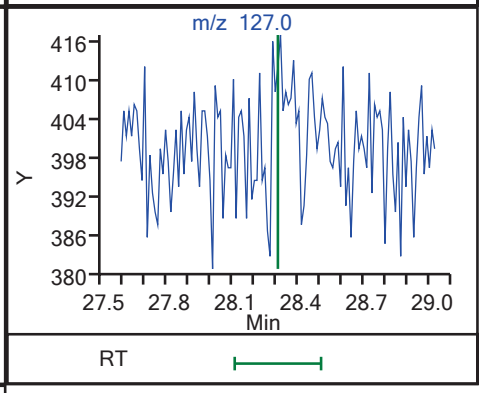
## 98 Naphthalene, CAS: 91-20-3

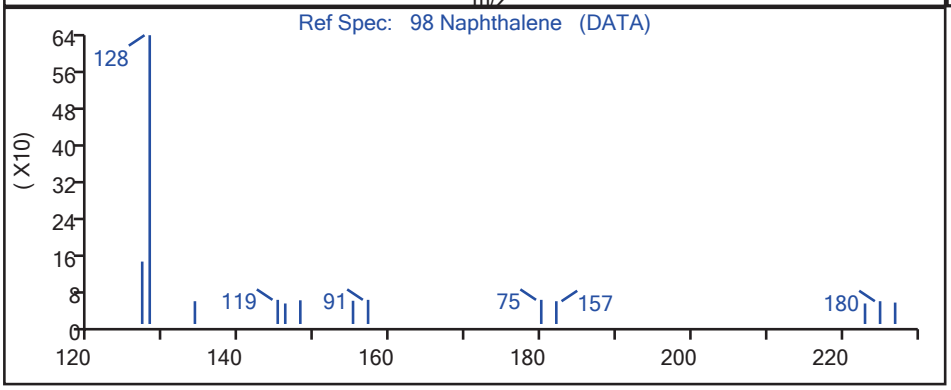
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 28.33 | 128.00 | 261 | 0.000733 |
| 28.30 | 127.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

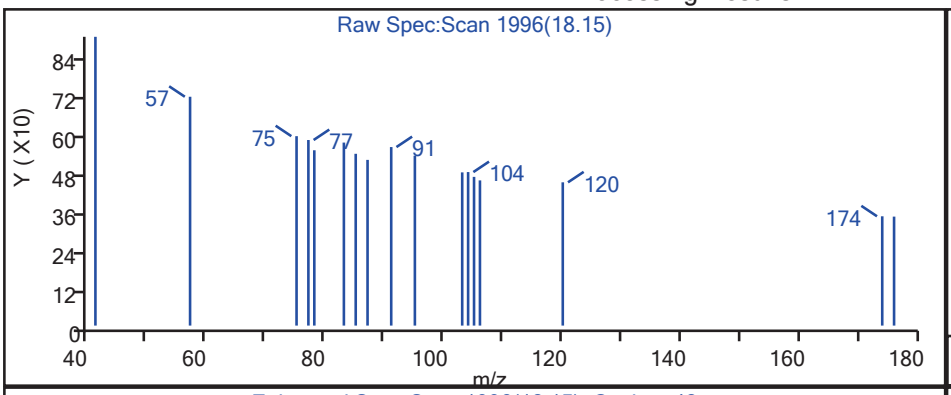
User Disabled Compound Report

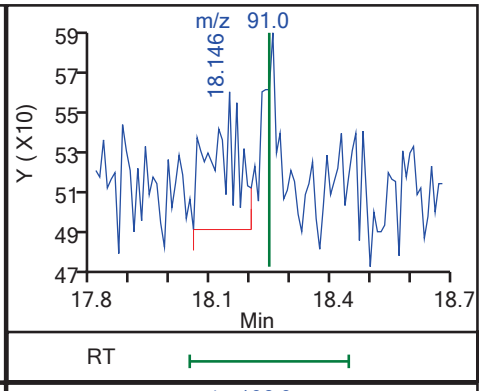
Eurofins Calscience LLC

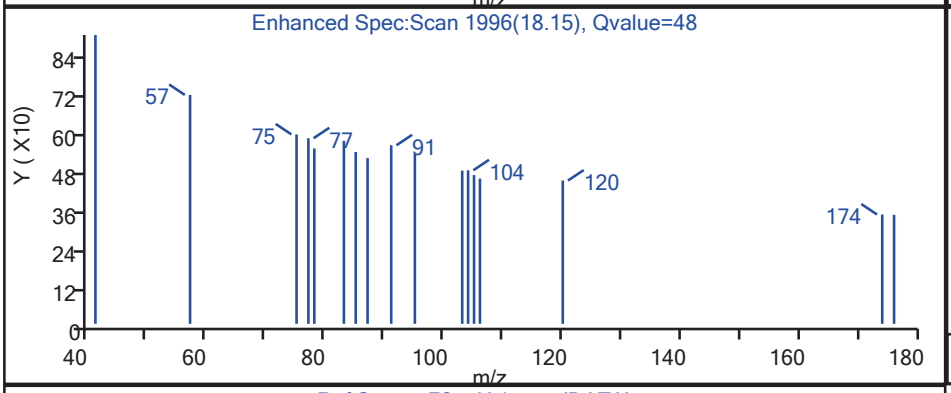
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

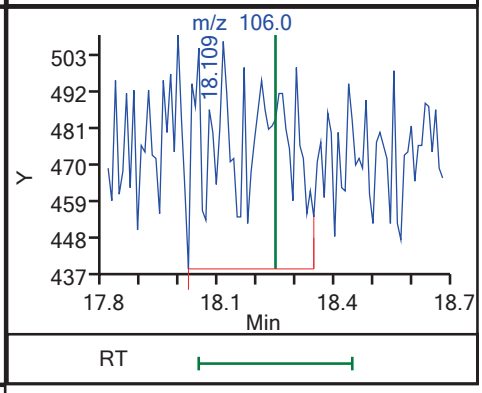
## 76 o-Xylene, CAS: 95-47-6

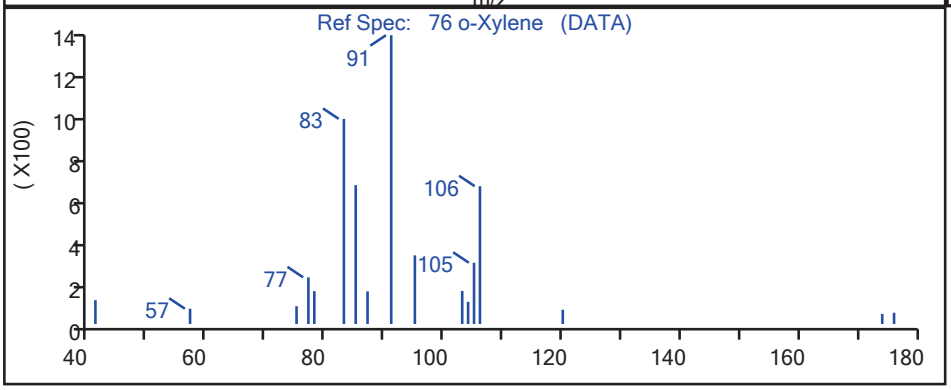
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.15 | 91.00 | 285 | 0.001308 |
| 18.11 | 106.00 | 776 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

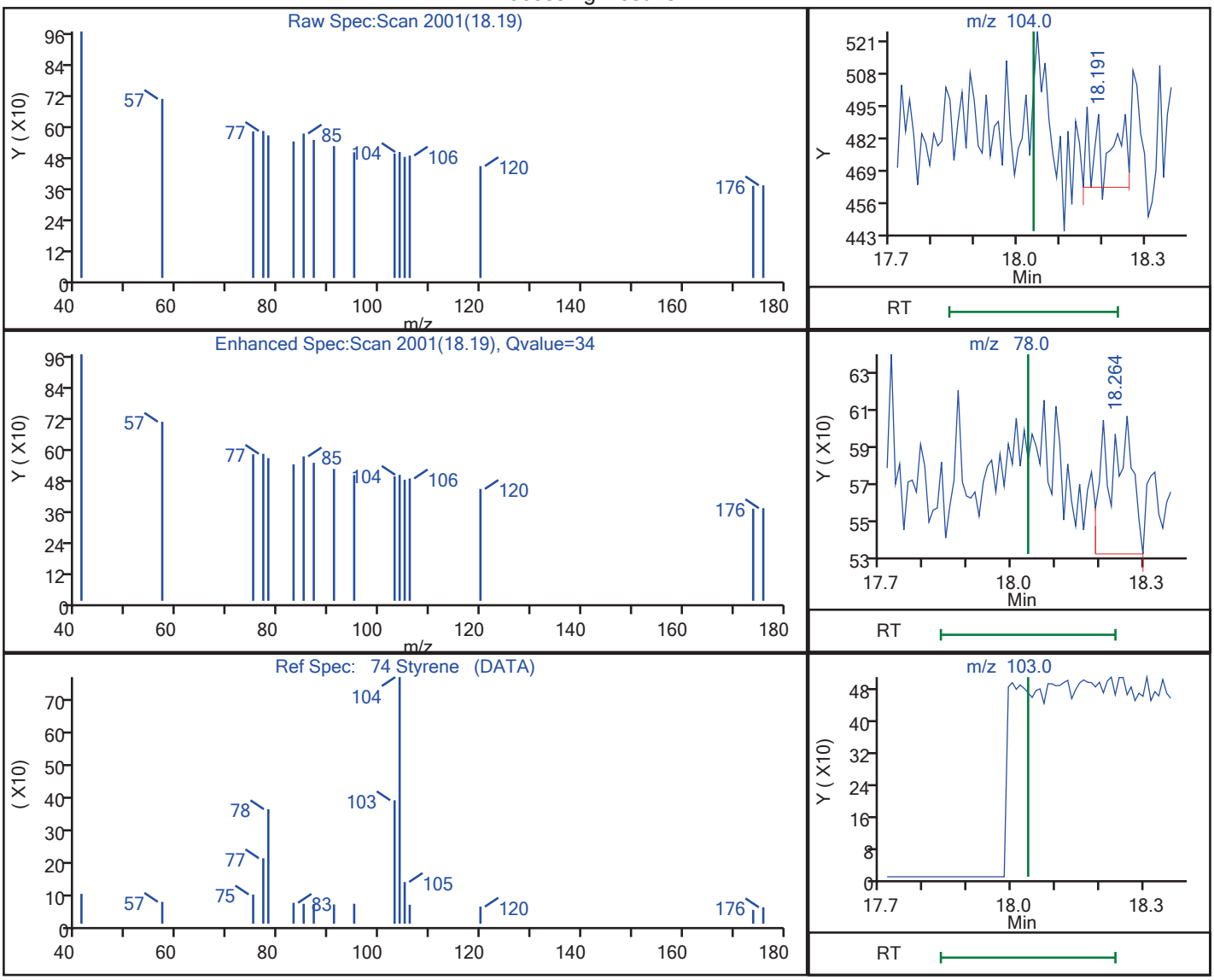
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 74 Styrene, CAS: 100-42-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.19 | 104.00 | 106 | 0.000883 |
| 18.26 | 78.00 | 269 | |
| 18.04 | 103.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

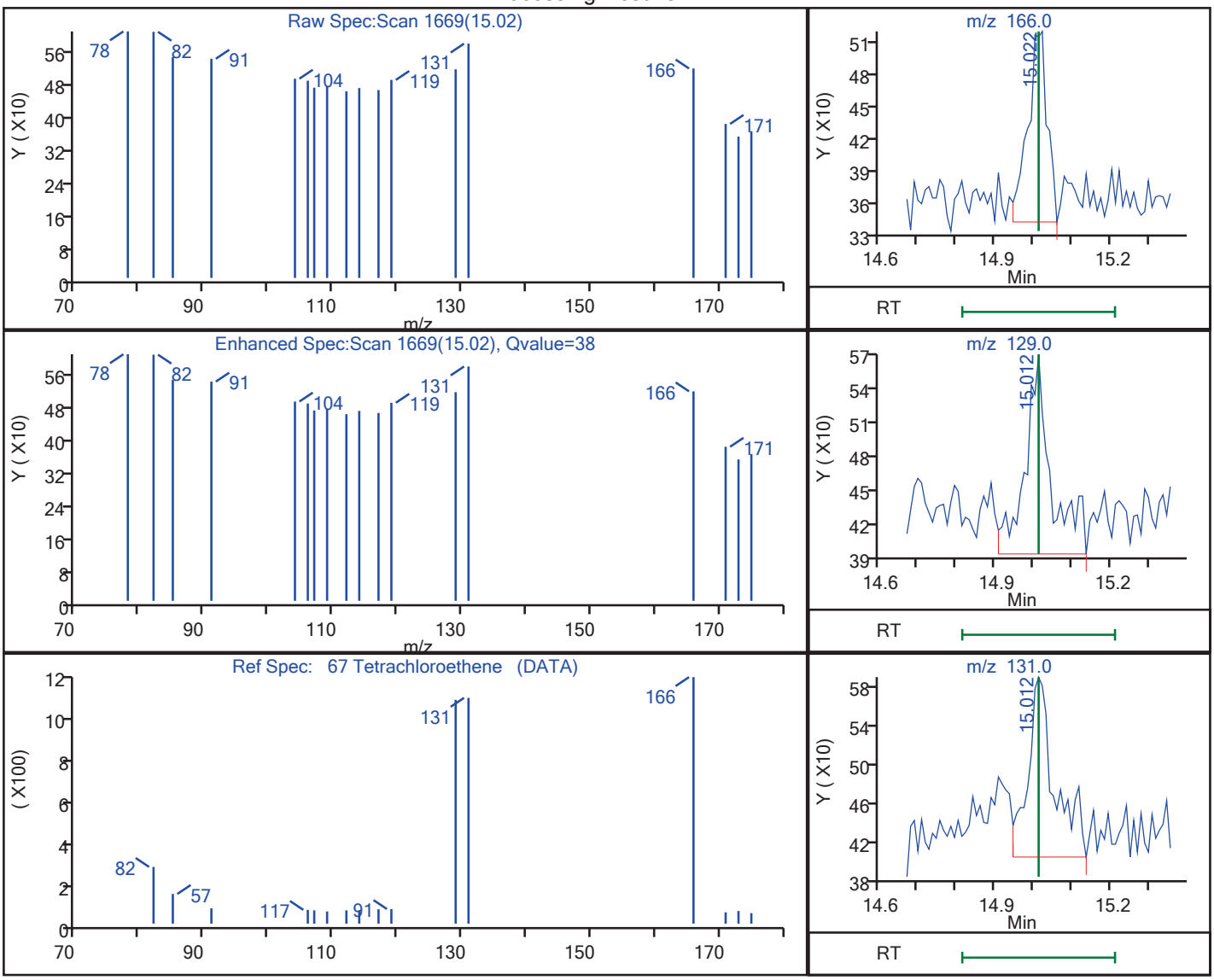
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 67 Tetrachloroethene, CAS: 127-18-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 15.02 | 166.00 | 594 | 0.003083 |
| 15.01 | 129.00 | 796 | |
| 15.01 | 131.00 | 890 | |
| 15.01 | 164.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

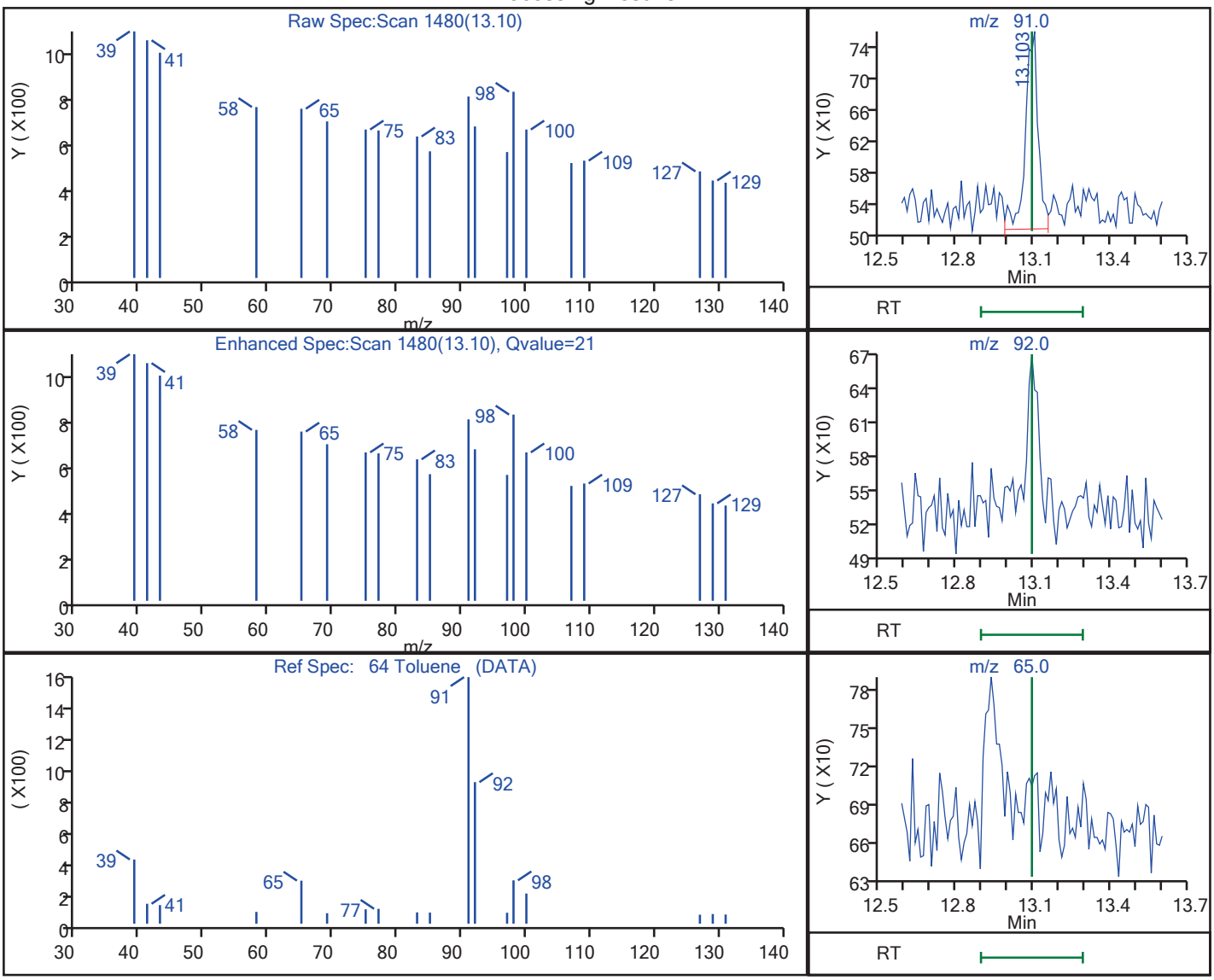
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR14.D | | | | |
| Injection Date: | 15-Mar-2021 20:59:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-2 | Lab Sample ID: | 570-53377-2 | | |
| Client ID: | D654 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 14 | Worklist Smp#: | 14 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 64 Toluene, CAS: 108-88-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.10 | 91.00 | 871 | 0.002979 |
| 13.09 | 92.00 | 0 | |
| 13.09 | 65.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:27:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D530 | Lab Sample ID: 570-53377-3

Matrix: Air | Lab File ID: MMM15MAR19.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 01:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.025 | 0.010 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 0.025 | 0.016 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.025 | 0.0091 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.025 | 0.015 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.025 | 0.012 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.025 | 0.013 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 0.25 | 0.11 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 0.050 | 0.042 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 0.050 | 0.0073 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 0.050 | 0.033 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 0.050 | 0.018 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.025 | 0.022 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.025 | 0.016 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.025 | 0.017 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.025 | 0.015 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.025 | 0.012 |
| 106-99-0 | 1,3-Butadiene | ND | | 0.025 | 0.013 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.025 | 0.014 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.025 | 0.013 |
| 123-91-1 | 1,4-Dioxane | ND | | 0.25 | 0.17 |
| 78-93-3 | 2-Butanone | ND | | 0.25 | 0.027 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.050 | 0.013 |
| 67-64-1 | Acetone | ND | | 0.50 | 0.41 |
| 71-43-2 | Benzene | ND | | 0.025 | 0.013 |
| 75-27-4 | Bromodichloromethane | ND | | 0.025 | 0.0098 |
| 74-83-9 | Bromomethane | ND | | 0.050 | 0.036 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.025 | 0.014 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.025 | 0.011 |
| 75-15-0 | Carbon disulfide | ND | | 0.25 | 0.16 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.050 | 0.040 |
| 108-90-7 | Chlorobenzene | ND | | 0.050 | 0.017 |
| 75-00-3 | Chloroethane | ND | | 0.025 | 0.020 |
| 67-66-3 | Chloroform | ND | | 0.025 | 0.012 |
| 74-87-3 | Chloromethane | ND | | 0.025 | 0.013 |
| 124-48-1 | Dibromochloromethane | ND | | 0.025 | 0.010 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D530 | Lab Sample ID: 570-53377-3

Matrix: Air | Lab File ID: MMM15MAR19.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 01:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.025 | 0.010 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 0.025 | 0.0090 |
| 100-41-4 | Ethylbenzene | ND | | 0.025 | 0.012 |
| 87-68-3 | Hexachloro-1,3-butadiene | ND | | 0.10 | 0.050 |
| 110-54-3 | Hexane | ND | | 0.10 | 0.011 |
| 67-63-0 | Isopropanol | 0.21 | J E | 0.25 | 0.13 |
| 75-09-2 | Methylene Chloride | 0.030 | J | 0.050 | 0.026 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 0.025 | 0.011 |
| 91-20-3 | Naphthalene | ND | | 0.050 | 0.033 |
| 95-47-6 | o-Xylene | ND | | 0.025 | 0.013 |
| 179601-23-1 | m,p-Xylene | ND | | 0.050 | 0.026 |
| 100-42-5 | Styrene | ND | | 0.025 | 0.0099 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.025 | 0.011 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 0.025 | 0.010 |
| 127-18-4 | Tetrachloroethene | ND | | 0.025 | 0.014 |
| 108-88-3 | Toluene | ND | | 0.050 | 0.015 |
| 1330-20-7 | Xylenes, Total | ND | | 0.075 | 0.039 |
| 79-01-6 | Trichloroethene | ND | | 0.025 | 0.018 |
| 75-69-4 | Trichlorofluoromethane | ND | | 0.025 | 0.0082 |
| 75-01-4 | Vinyl chloride | ND | | 0.050 | 0.023 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 96 | | 61-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 75 | | 59-130 |
| 2037-26-5 | Toluene-d8 (Surr) | 100 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D
Lims ID: 570-53377-A-3
Client ID: D530
Sample Type: Client
Inject. Date: 16-Mar-2021 01:04:30 ALS Bottle#: 4 Worklist Smp#: 19
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53377-a-3
Misc. Info.: A_SIMIS/SS_00005
Operator ID: 12GR Instrument ID: GCMSMMM

Method: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\AIRMS_GCMSMMM.m
Limit Group: MSV - TO15 SIM TO15 SIMLL
Last Update: 16-Mar-2021 13:38:16 Calib Date: 09-Feb-2021 18:41:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSMMM\20210210-38552.b\MMM09FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: rhoadesw Date: 16-Mar-2021 13:34:30

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 11 1,1-Difluoroethane | 51 | | 2.755 | | | | ND | U |
| 13 Chloromethane | 50 | | 2.966 | | | | ND | U |
| 8 Dichlorodifluoromethane | 85 | | 3.033 | | | | ND | U |
| 15 Vinyl chloride | 62 | | 3.111 | | | | ND | |
| 6 Butadiene | 54 | | 3.200 | | | | ND | |
| 14 Bromomethane | 94 | | 3.378 | | | | ND | |
| 18 Chloroethane | 64 | | 3.493 | | | | ND | U |
| 23 Trichlorofluoromethane | 101 | 4.033 | 4.033 | 0.000 | 52 | 2476 | 0.004871 | |
| 20 Acetone | 43 | 4.052 | 4.052 | 0.000 | 27 | 23115 | 0.0612 | |
| 21 Isopropyl alcohol | 45 | 4.213 | 4.259 | -0.046 | 10 | 64548 | 0.2060 | EM |
| 24 1,1-Dichloroethene | 61 | | 4.522 | | | | ND | |
| 25 Methylene Chloride | 84 | 4.612 | 4.612 | 0.000 | 35 | 6299 | 0.0296 | |
| 31 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 4.867 | | | | ND | U |
| 29 1,2-Dichloro-1,1,2,2-tetrafluoro | 151 | | 4.867 | | | | ND | |
| 30 Carbon disulfide | 76 | | 4.872 | | | | ND | |
| 26 trans-1,2-Dichloroethene | 96 | | 5.483 | | | | ND | |
| 32 1,1-Dichloroethane | 63 | | 5.684 | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 5.900 | | | | ND | |
| 34 2-Butanone (MEK) | 43 | | 6.484 | | | | ND | |
| 35 cis-1,2-Dichloroethene | 96 | | 6.587 | | | | ND | |
| * 36 Chlorobromomethane (IS) | 130 | 6.758 | 6.758 | 0.000 | 79 | 36316 | 0.5000 | |
| 40 Hexane | 57 | | 6.869 | | | | ND | U |
| 39 Chloroform | 83 | | 6.920 | | | | ND | |
| $ 42 1,2-Dichloroethane-d4 (Surr) | 65 | 7.670 | 7.670 | 0.000 | 95 | 78228 | 0.4814 | |
| 38 1,2-Dichloroethane | 62 | | 7.806 | | | | ND | U |
| 45 1,1,1-Trichloroethane | 97 | | 8.132 | | | | ND | U |
| 48 Benzene | 78 | | 8.721 | | | | ND | U |
| 49 Carbon tetrachloride | 117 | | 8.927 | | | | ND | |
| * 50 1,4-Difluorobenzene | 114 | 9.267 | 9.267 | 0.000 | 63 | 109043 | 0.5000 | |
| 41 1,2-Dichloropropane | 63 | | 9.860 | | | | ND | |
| 52 Dichlorobromomethane | 83 | | 10.127 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 53 Trichloroethene | 95 | | 10.213 | | | | ND | U |
| 54 1,4-Dioxane | 57 | | 10.761 | | | | ND | |
| 57 cis-1,3-Dichloropropene | 75 | | 11.547 | | | | ND | |
| 60 trans-1,3-Dichloropropene | 75 | | 12.399 | | | | ND | U |
| 61 1,1,2-Trichloroethane | 83 | | 12.623 | | | | ND | |
| $ 63 Toluene-d8 (Surr) | 98 | 12.932 | 12.932 | 0.000 | 97 | 102521 | 0.5013 | |
| 64 Toluene | 91 | 13.092 | 13.092 | 0.000 | 57 | 3560 | 0.0118 | |
| 66 Chlorodibromomethane | 129 | | 13.731 | | | | ND | U |
| 59 Ethylene Dibromide | 107 | | 14.136 | | | | ND | U |
| 67 Tetrachloroethene | 166 | | 15.012 | | | | ND | U |
| * 68 Chlorobenzene-d5 | 117 | 16.143 | 16.143 | 0.000 | 96 | 102359 | 0.5000 | |
| 69 Chlorobenzene | 112 | | 16.219 | | | | ND | U |
| 71 Ethylbenzene | 91 | | 16.995 | | | | ND | U |
| 72 m-Xylene & p-Xylene | 91 | | 17.330 | | | | ND | |
| 74 Styrene | 104 | | 18.037 | | | | ND | U |
| 75 1,1,2,2-Tetrachloroethane | 83 | | 18.209 | | | | ND | U |
| 76 o-Xylene | 91 | | 18.245 | | | | ND | |
| 77 1,2,3-Trichloropropane | 75 | | 18.472 | | | | ND | |
| $ 79 4-Bromofluorobenzene (Surr) | 95 | 19.143 | 19.143 | 0.000 | 99 | 56533 | 0.3757 | |
| 86 4-Ethyltoluene | 105 | | 20.959 | | | | ND | U |
| 81 1,3,5-Trimethylbenzene | 105 | | 21.154 | | | | ND | U |
| 85 1,2,4-Trimethylbenzene | 105 | | 22.073 | | | | ND | |
| 92 1,3-Dichlorobenzene | 146 | | 22.305 | | | | ND | |
| 93 1,4-Dichlorobenzene | 146 | | 22.487 | | | | ND | |
| 89 1,2-Dichlorobenzene | 146 | | 23.286 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 28.061 | | | | ND | |
| 98 Naphthalene | 128 | | 28.303 | | | | ND | U |
| 97 1,2,3-Trichlorobenzene | 180 | | 29.029 | | | | ND | U |
| 99 Hexachlorobutadiene | 225 | | 29.416 | | | | ND | U |
| 102 Xylenes, Total | 1 | | 0.000 | | | | ND | |

## QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated
U - Marked Undetected

## Reagents:

A_Sim IS/SS_00005 Amount Added: 100.00 Units: mL Run Reagent

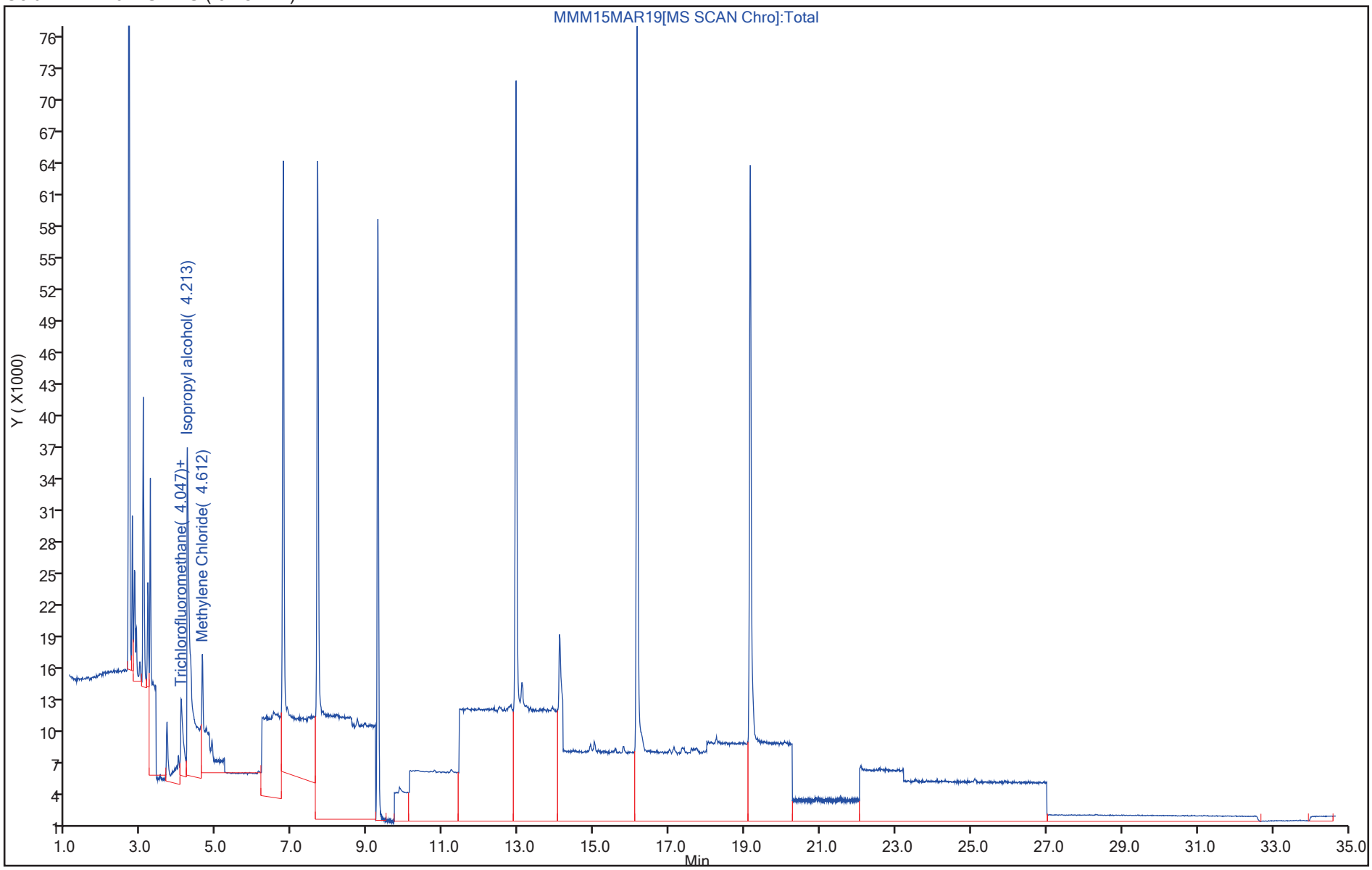
Report Date: 16-Mar-2021 13:38:52 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | Operator ID: | 12GR |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | Worklist Smp#: | 19 |
| Client ID: | D530 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |

Column: Rxi-624Sil MS ( 0.18 mm)



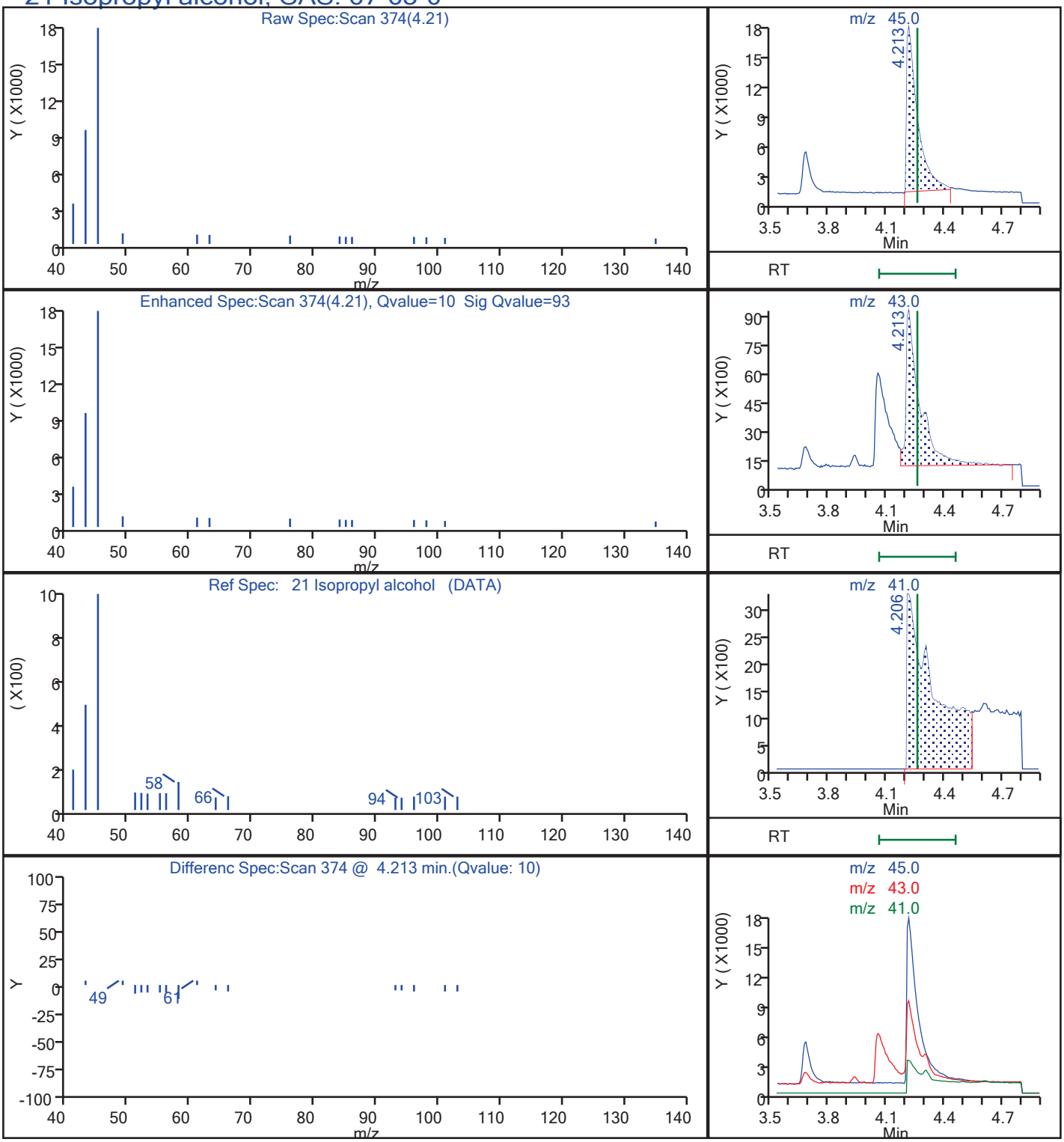
Report Date: 16-Mar-2021 13:38:53 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 21 Isopropyl alcohol, CAS: 67-63-0



Report Date: 16-Mar-2021 13:38:53 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D

Injection Date: 16-Mar-2021 01:04:30 Instrument ID: GCMSMMM

Lims ID: 570-53377-A-3 Lab Sample ID: 570-53377-3

Client ID: D530

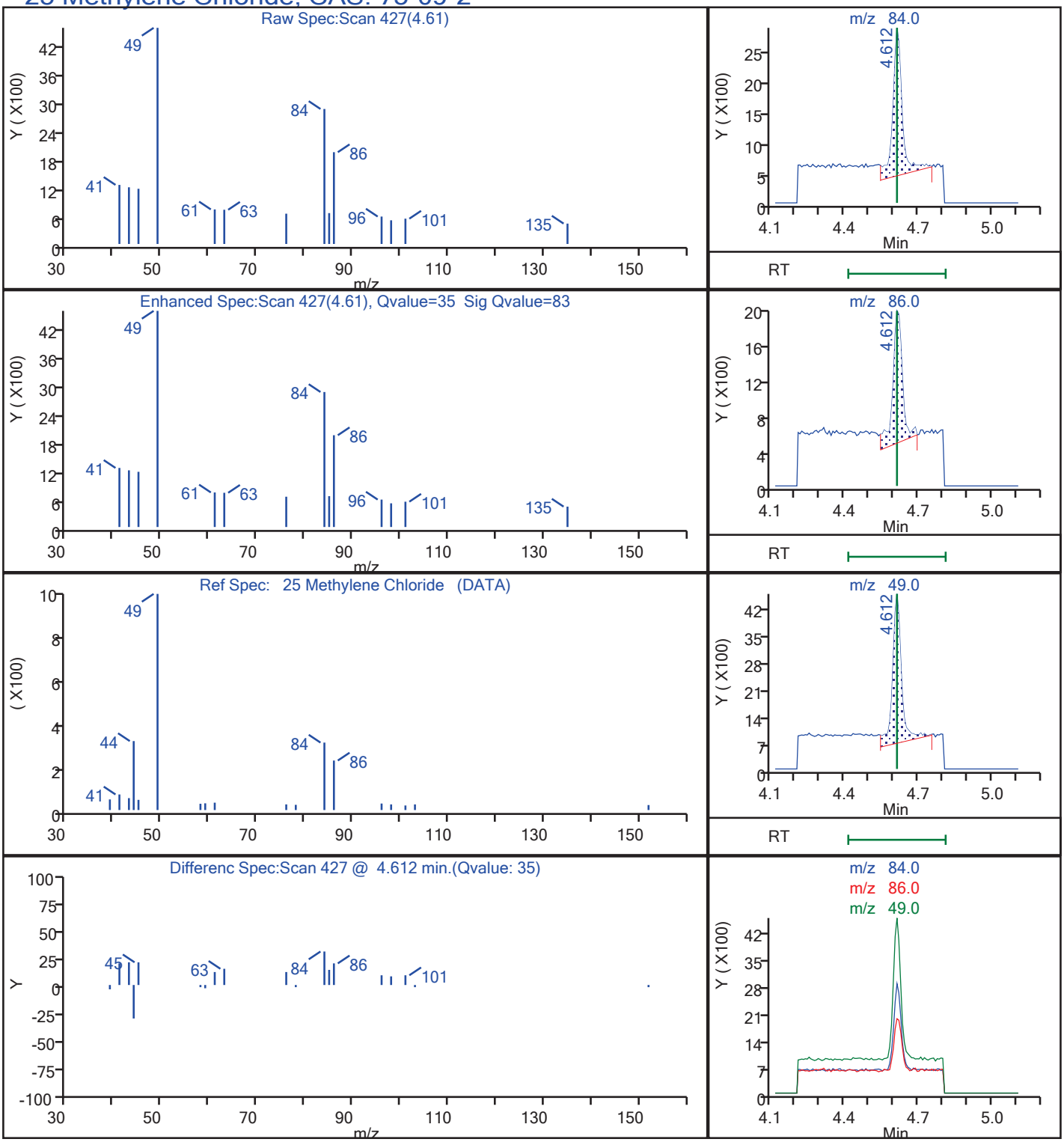
Operator ID: 12GR ALS Bottle#: 4 Worklist Smp#: 19

Purge Vol: 400.000 mL Dil. Factor: 1.0000

Method: AIRMS_GCMSMMM Limit Group: MSV - TO15 SIM TO15 SIMLL

Column: Rxi-624Sil MS ( 0.18 mm) Detector MS SCAN

## 25 Methylene Chloride, CAS: 75-09-2



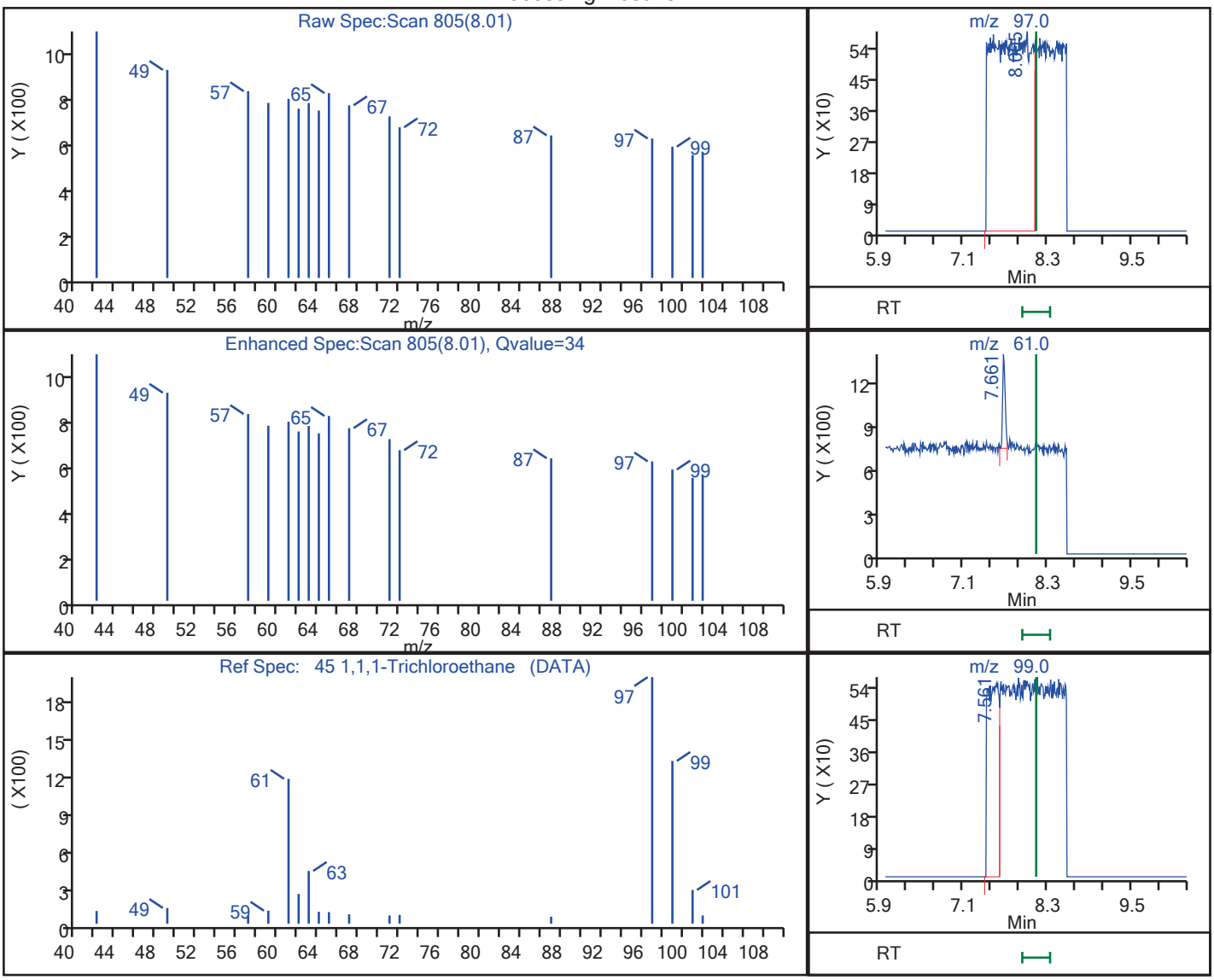
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 45 1,1,1-Trichloroethane, CAS: 71-55-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.01 | 97.00 | 22642 | 0.059434 |
| 7.66 | 61.00 | 1661 | |
| 7.56 | 99.00 | 6178 | |
| 7.72 | 101.00 | 17691 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

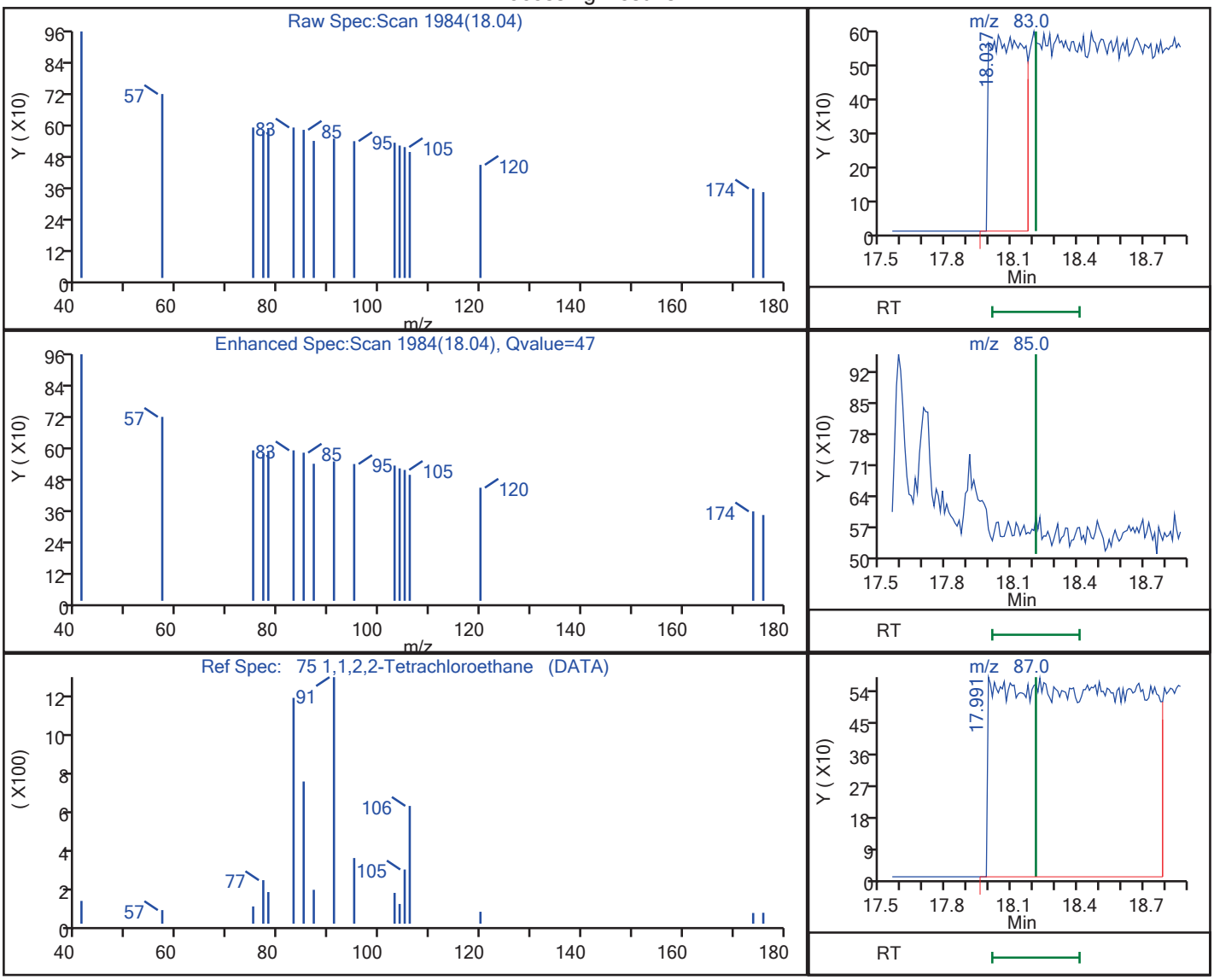
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 75 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.04 | 83.00 | 6368 | 0.013324 |
| 18.21 | 85.00 | 0 | |
| 17.99 | 87.00 | 26021 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

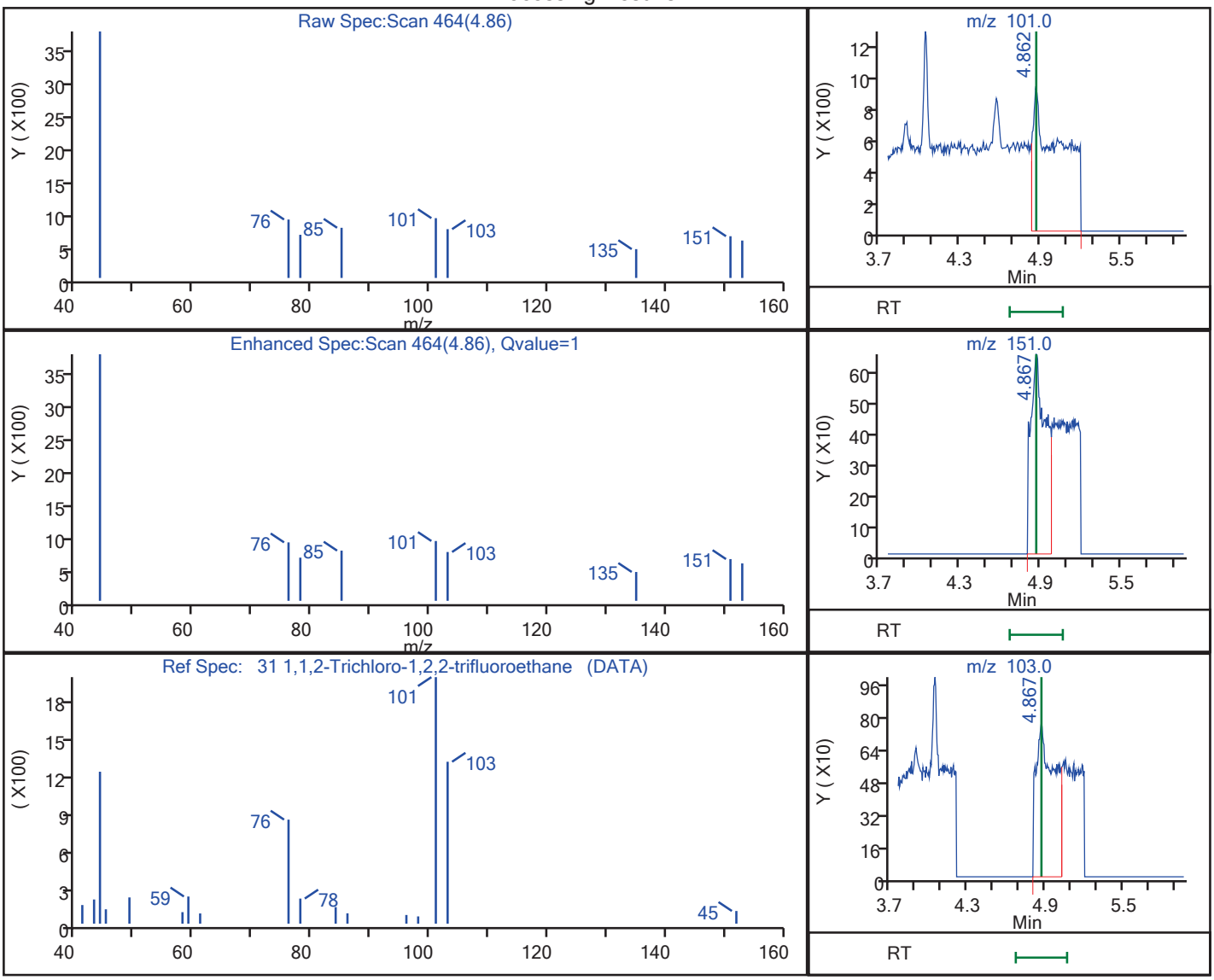
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 31 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.86 | 101.00 | 12911 | 0.030373 |
| 4.87 | 151.00 | 5160 | |
| 4.87 | 103.00 | 7744 | |
| 4.87 | 153.00 | 7471 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

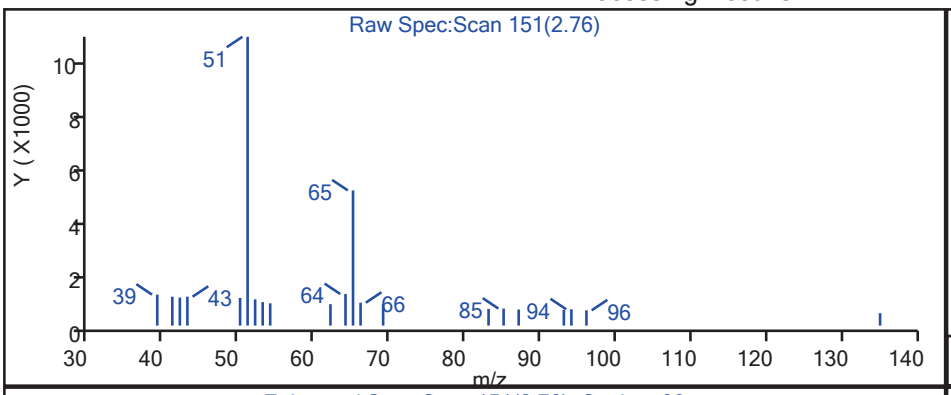
User Disabled Compound Report

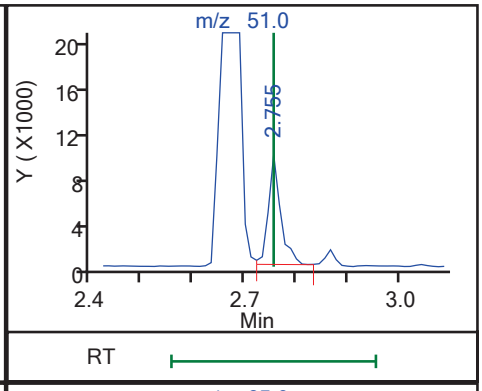
Eurofins Calscience LLC

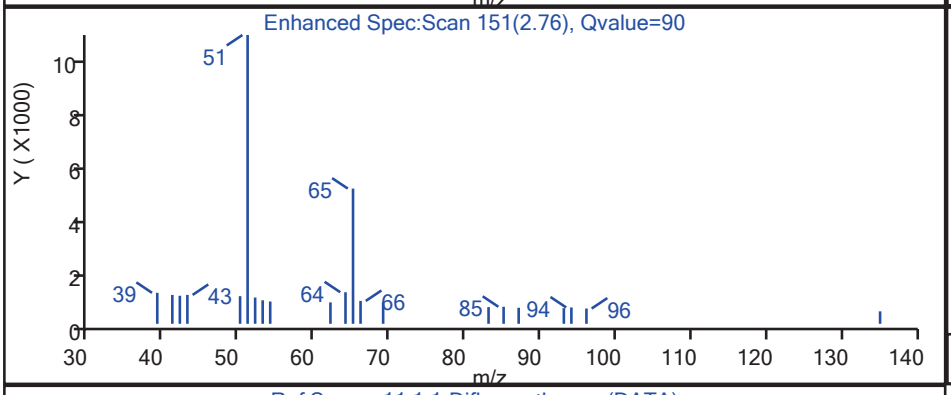
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

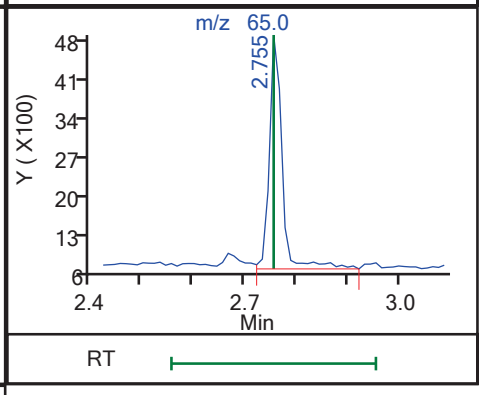
## 11 1,1-Difluoroethane, CAS: 75-37-6

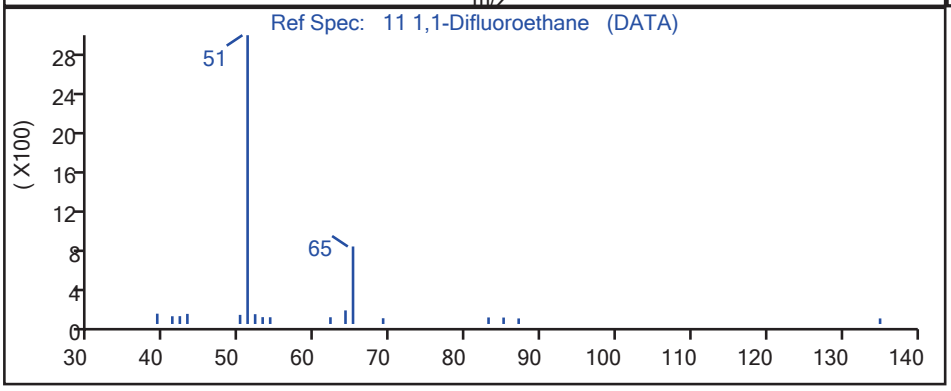
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.76 | 51.00 | 15793 | 0.062937 |
| 2.76 | 65.00 | 7336 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

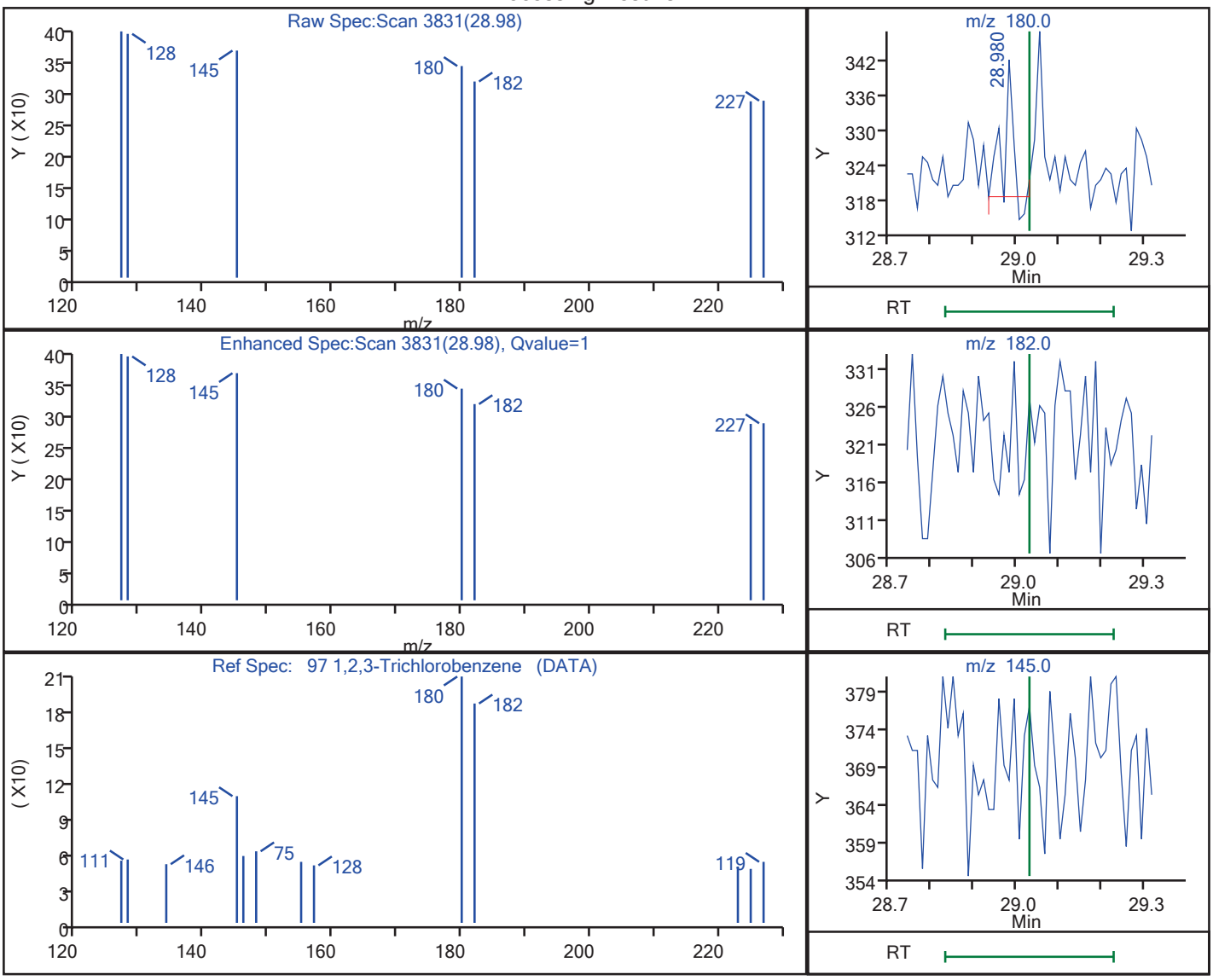
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 97 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 28.98 | 180.00 | 34 | 0.000150 |
| 29.03 | 182.00 | 0 | |
| 29.03 | 145.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

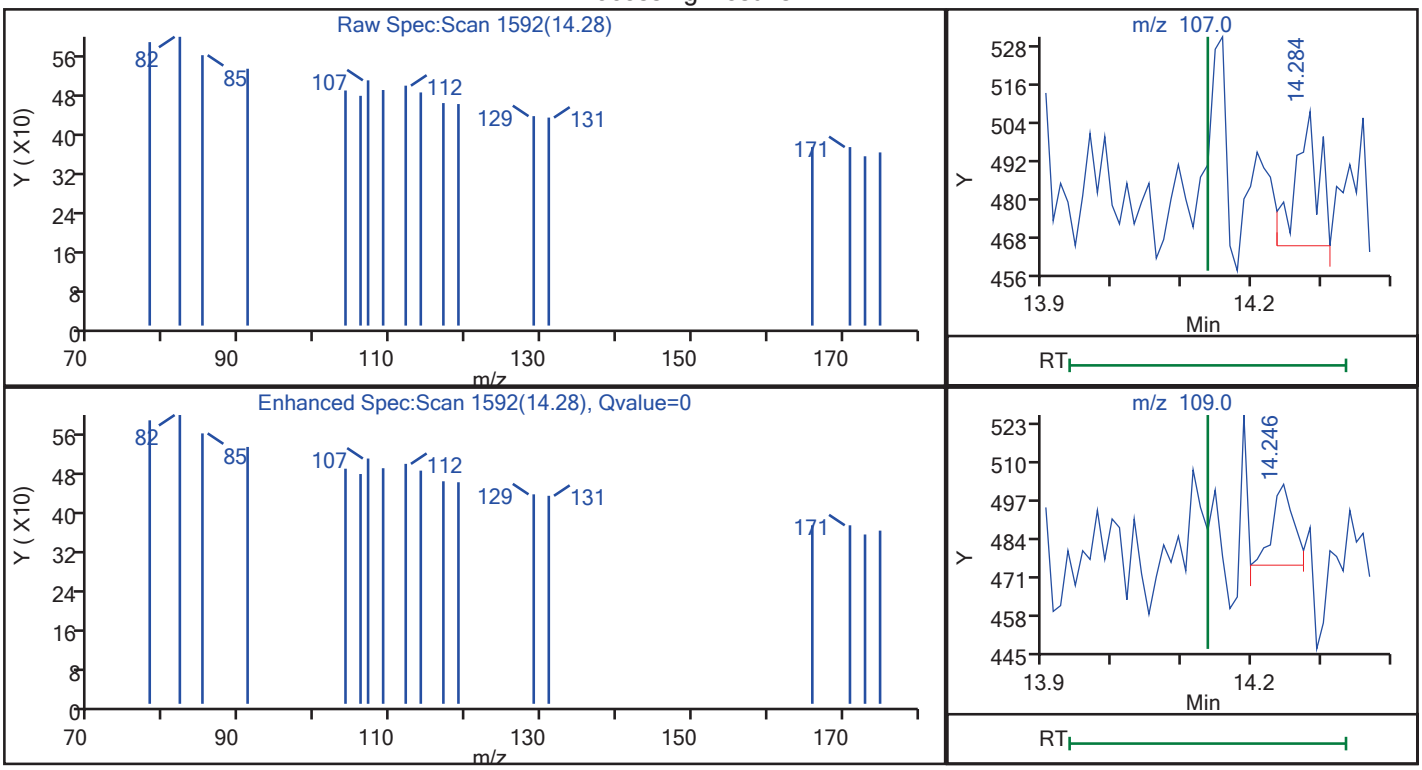
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 59 Ethylene Dibromide, CAS: 106-93-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 14.28 | 107.00 | 101 | 0.000441 |
| 14.25 | 109.00 | 59 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

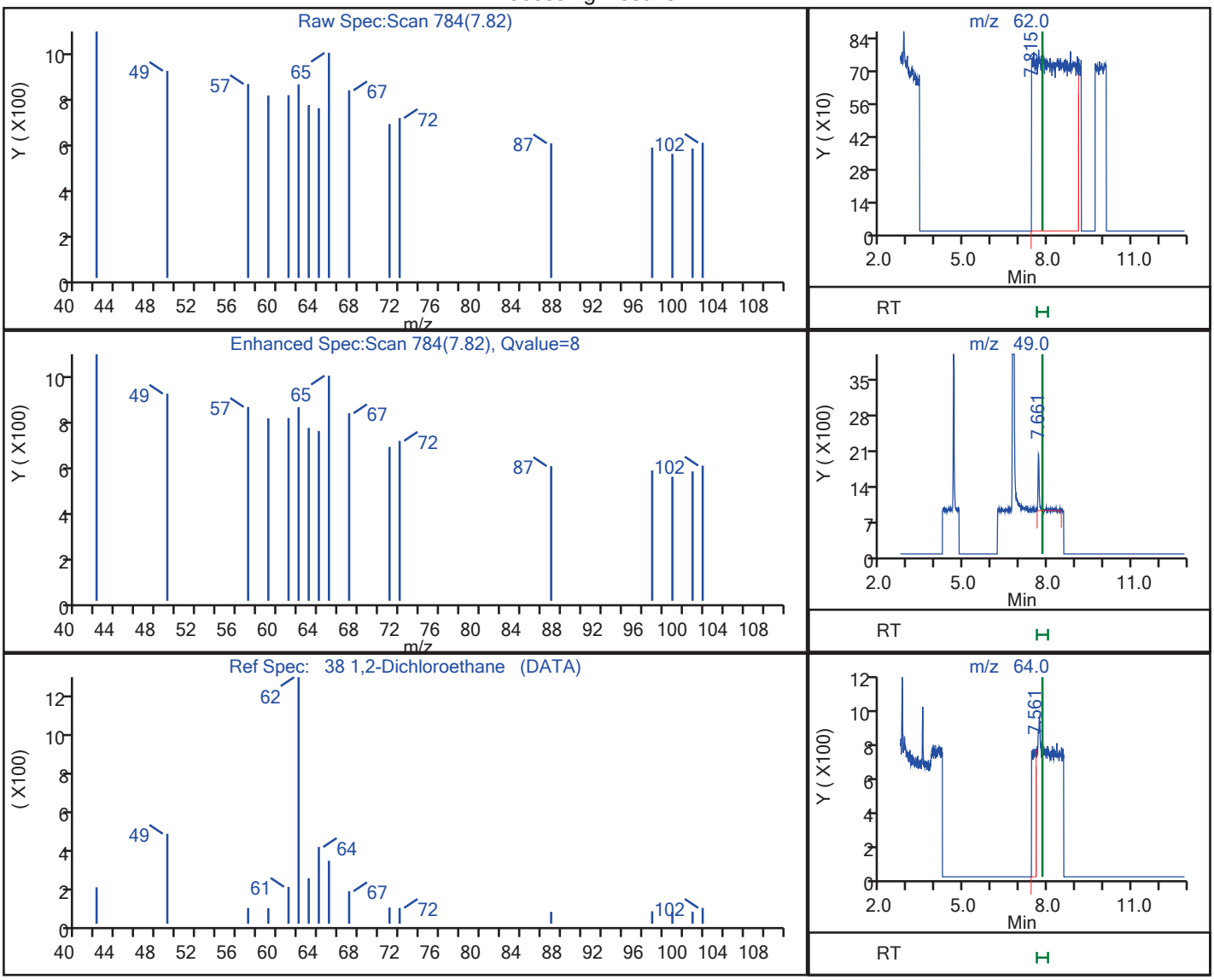
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 38 1,2-Dichloroethane, CAS: 107-06-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.82 | 62.00 | 73219 | 0.276678 |
| 7.66 | 49.00 | 3857 | |
| 7.56 | 64.00 | 7234 | |
| 7.67 | 63.00 | 7899 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

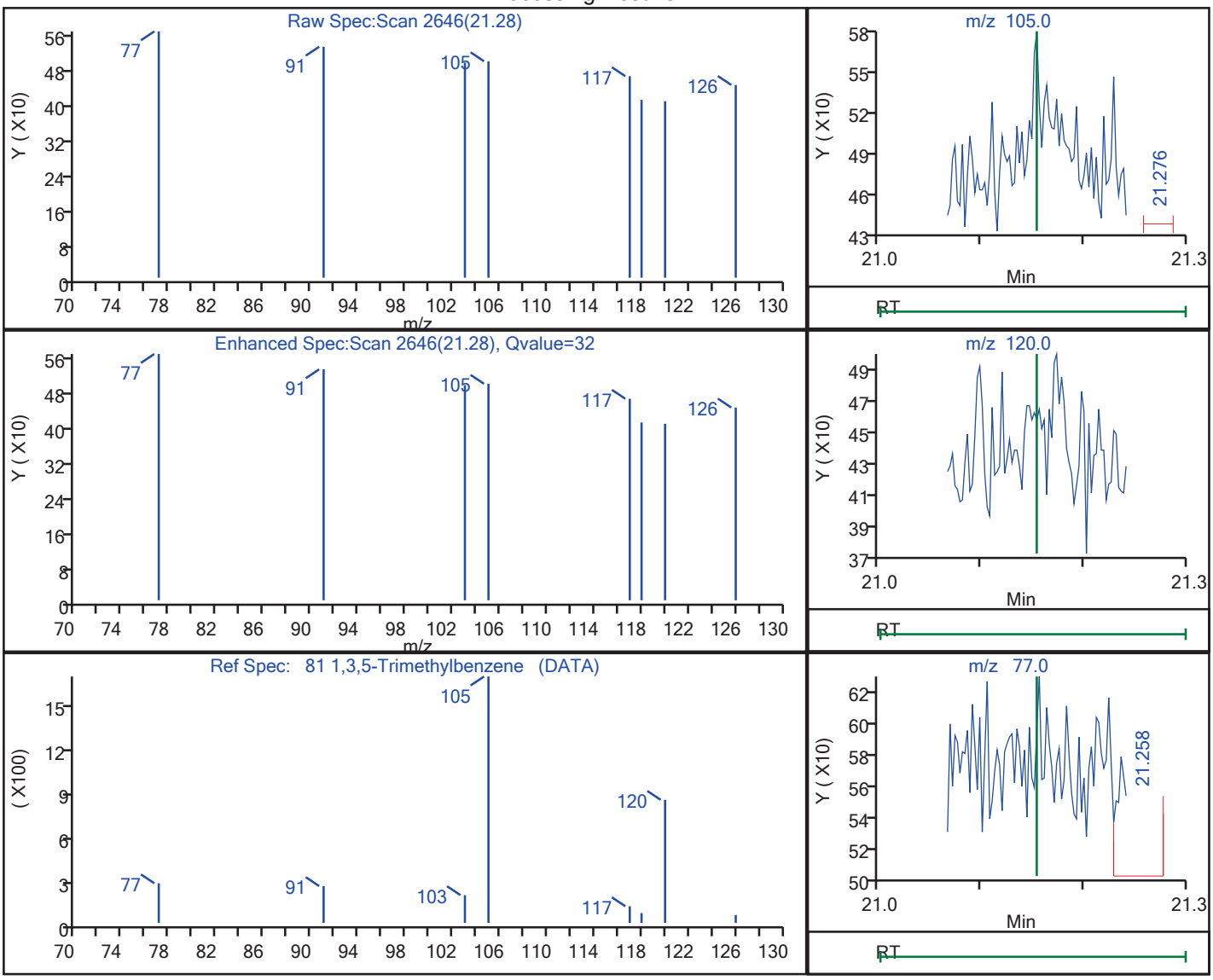
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 81 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 21.28 | 105.00 | 68 | 0.000288 |
| 21.15 | 120.00 | 0 | |
| 21.26 | 77.00 | 174 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

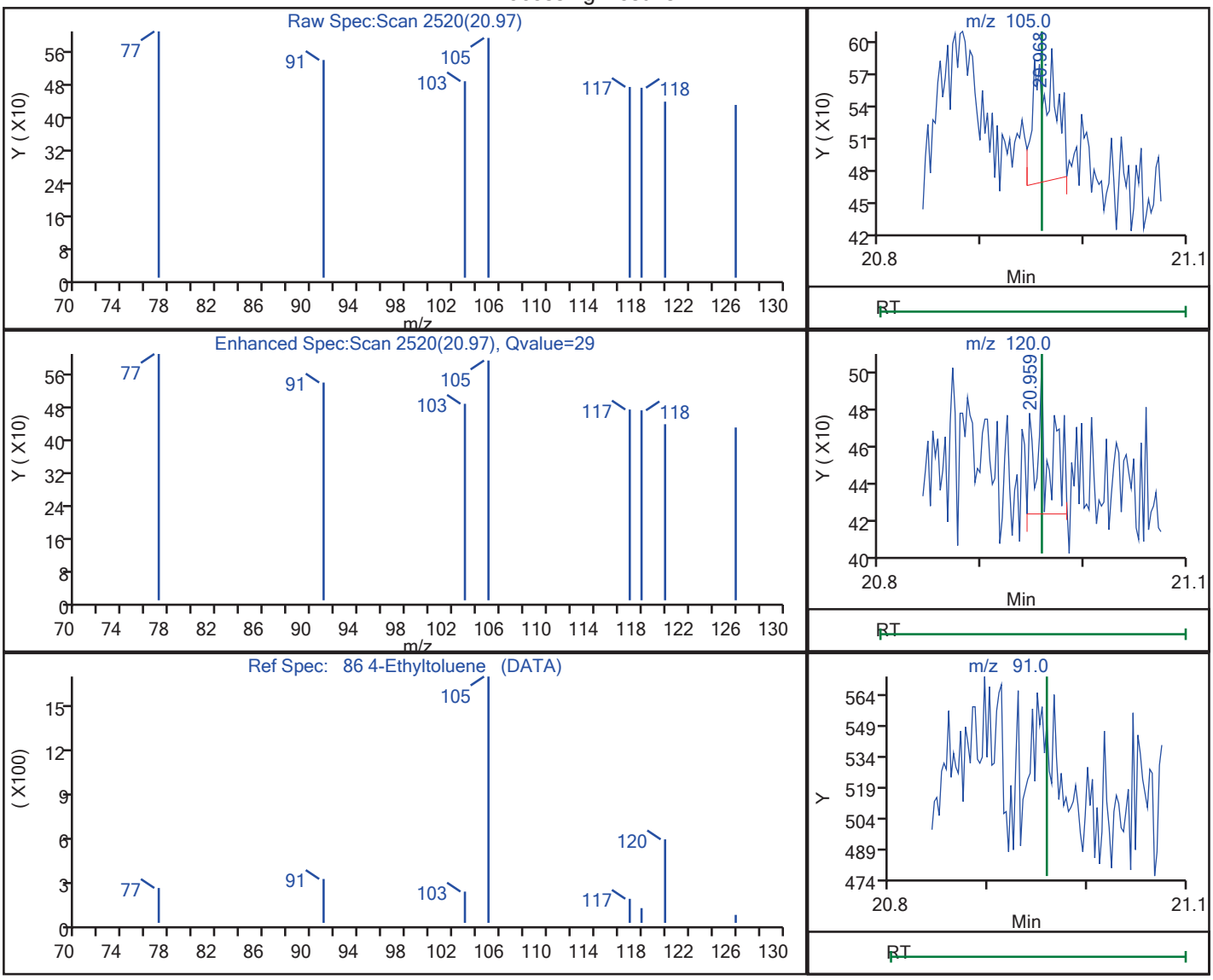
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 86 4-Ethyltoluene, CAS: 622-96-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 20.97 | 105.00 | 160 | 0.000611 |
| 20.96 | 120.00 | 72 | |
| 20.96 | 91.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

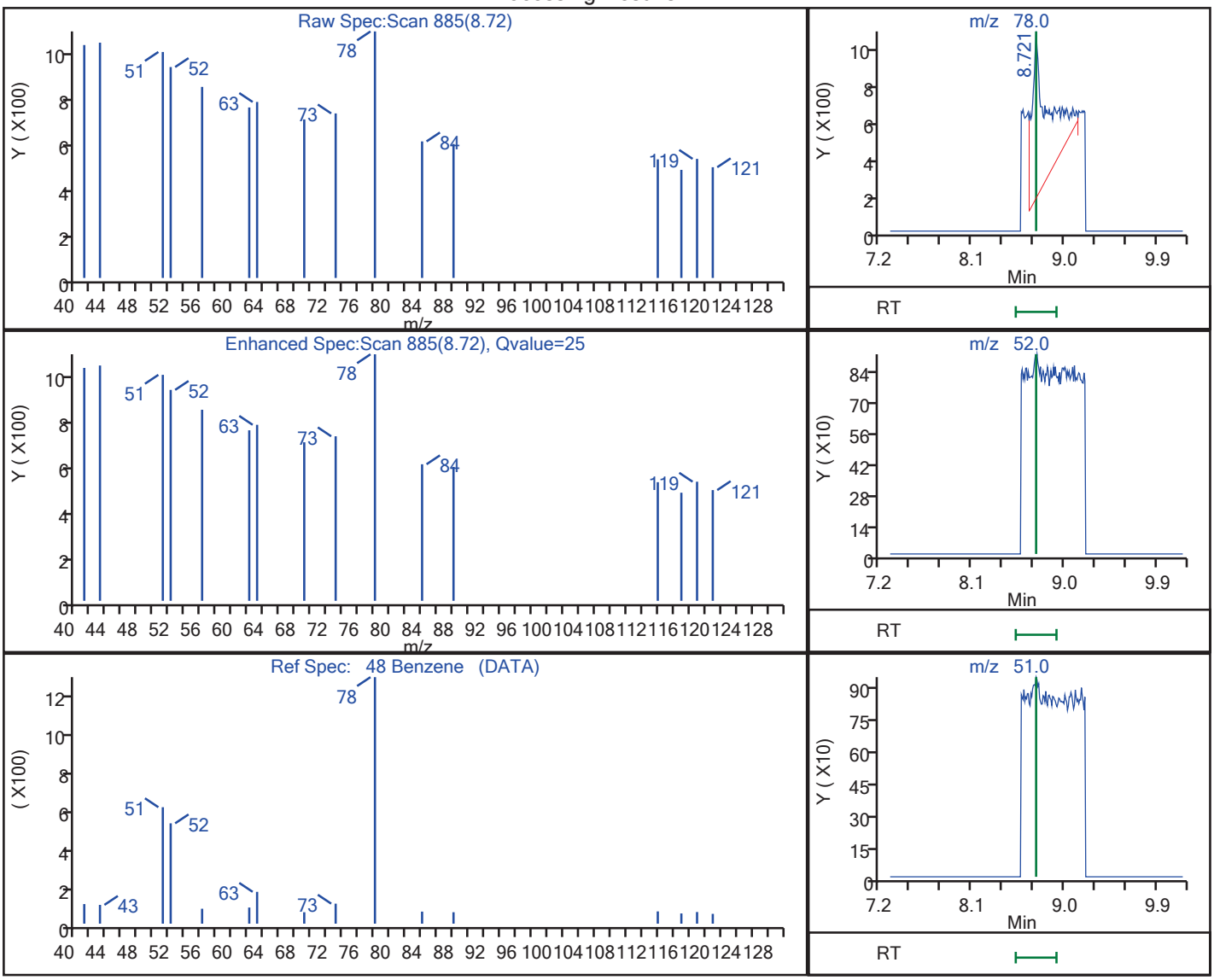
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 48 Benzene, CAS: 71-43-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.72 | 78.00 | 9035 | 0.029693 |
| 8.72 | 52.00 | 0 | |
| 8.72 | 51.00 | 0 | |
| 8.72 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

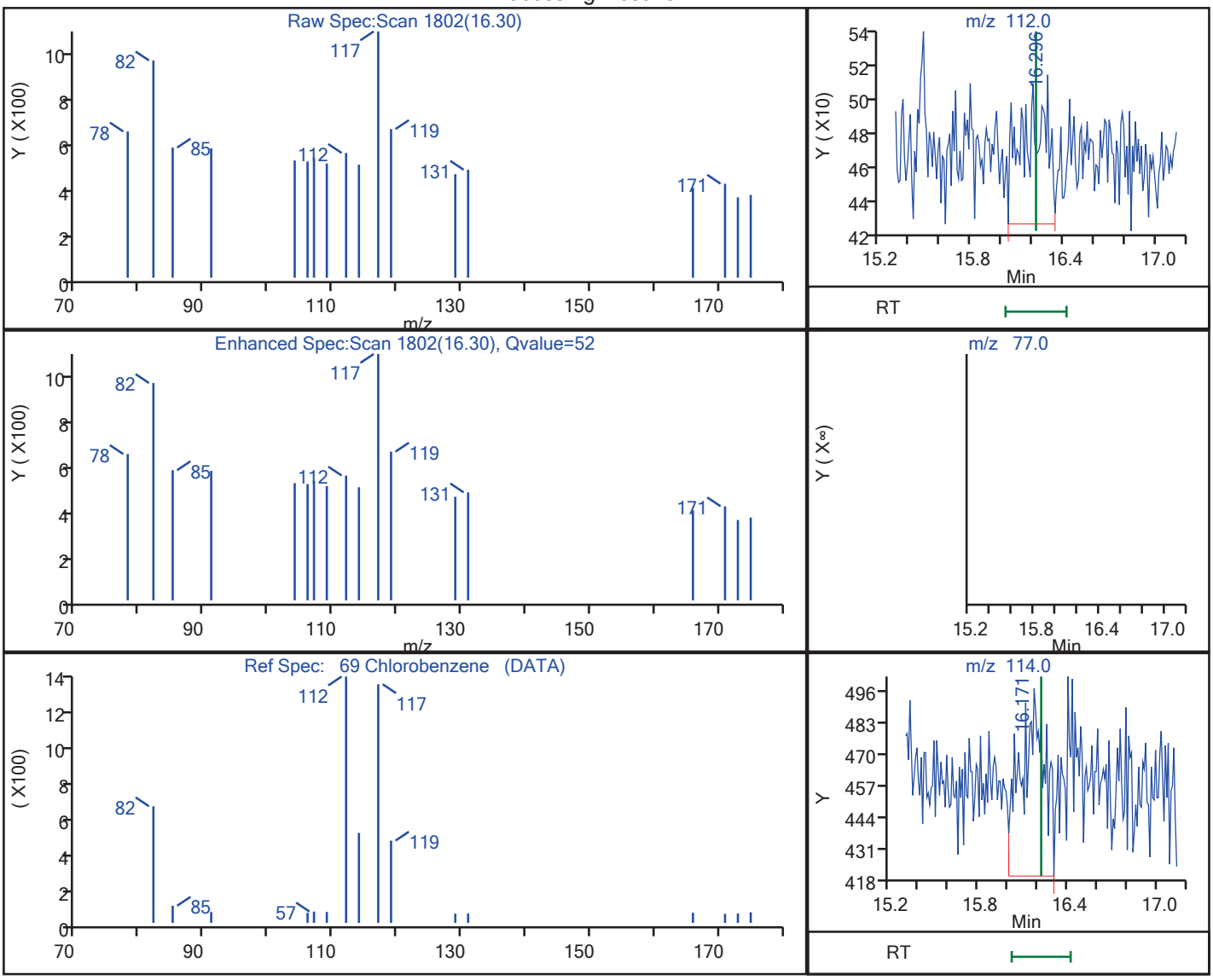
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 69 Chlorobenzene, CAS: 108-90-7

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 16.30 | 112.00 | 886 | 0.003418 |
| 16.22 | 77.00 | 0 | |
| 16.17 | 114.00 | 869 | |
| 16.22 | 51.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:07

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

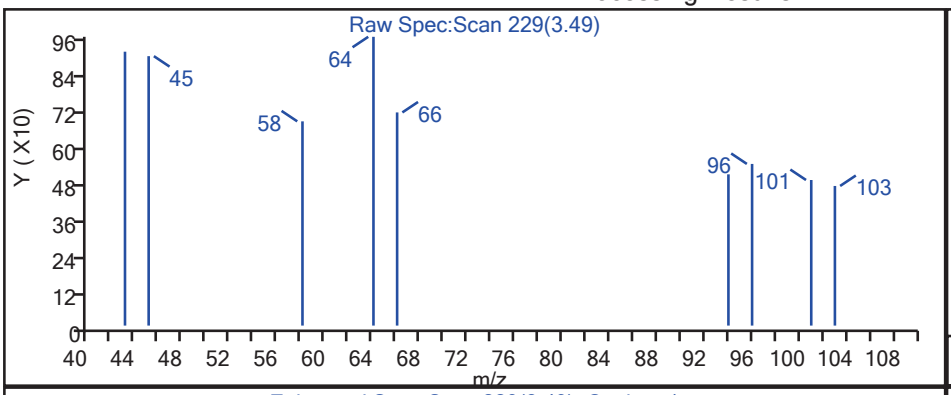
User Disabled Compound Report

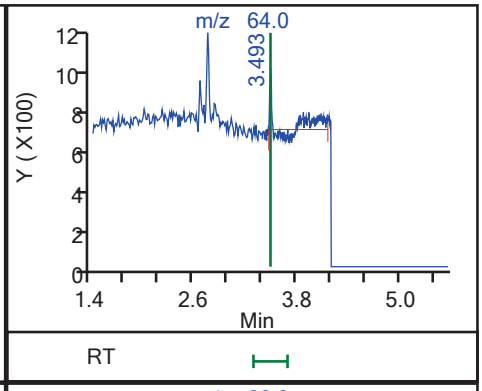
Eurofins Calscience LLC

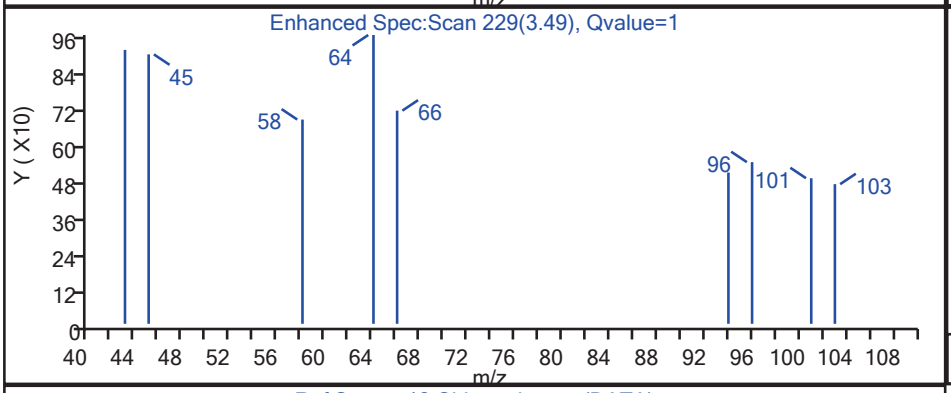
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

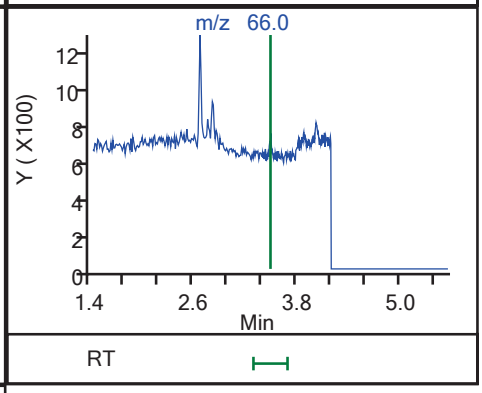
## 18 Chloroethane, CAS: 75-00-3

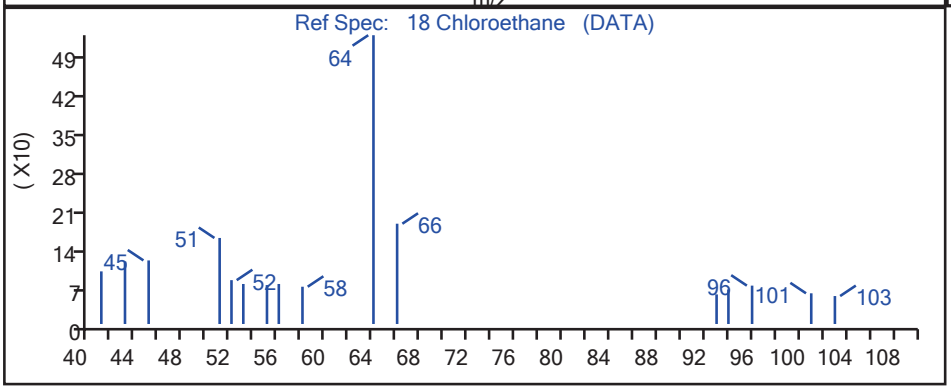
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.49 | 64.00 | 923 | 0.009887 |
| 3.49 | 66.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

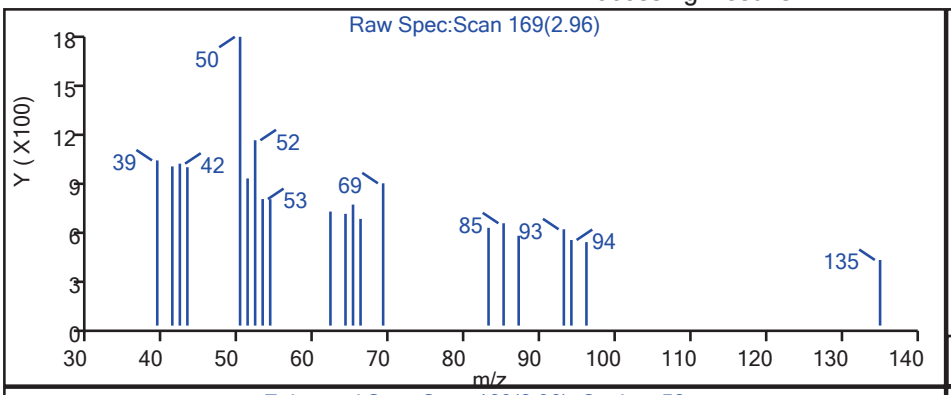
User Disabled Compound Report

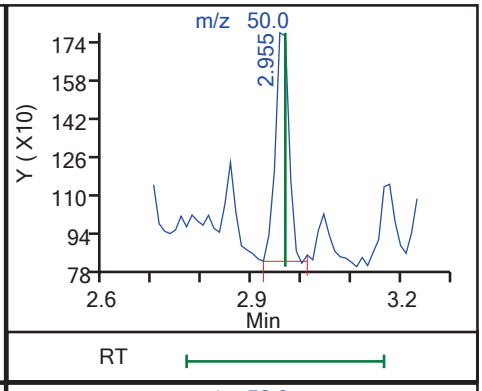
Eurofins Calscience LLC

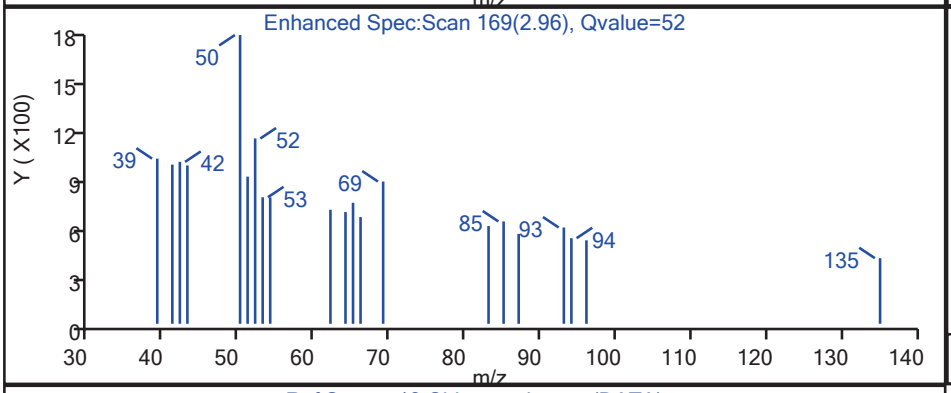
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

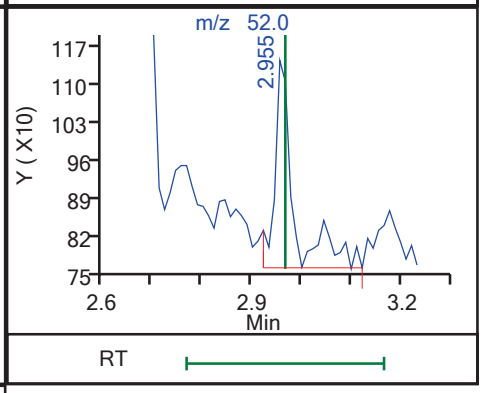
## 13 Chloromethane, CAS: 74-87-3

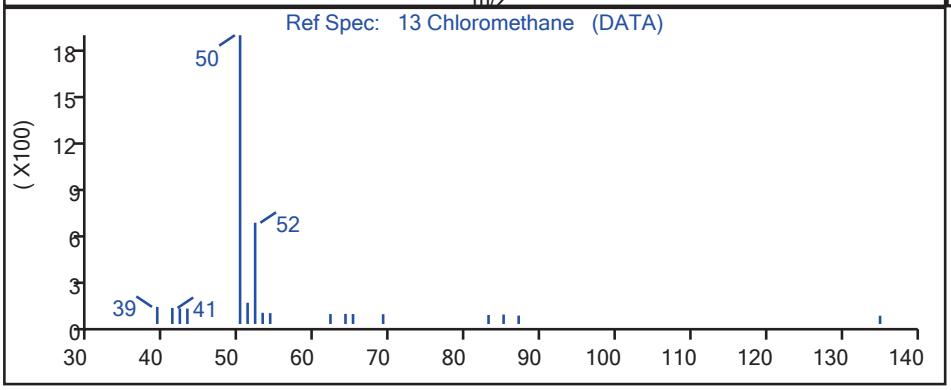
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.96 | 50.00 | 1888 | 0.009691 |
| 2.96 | 52.00 | 1020 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

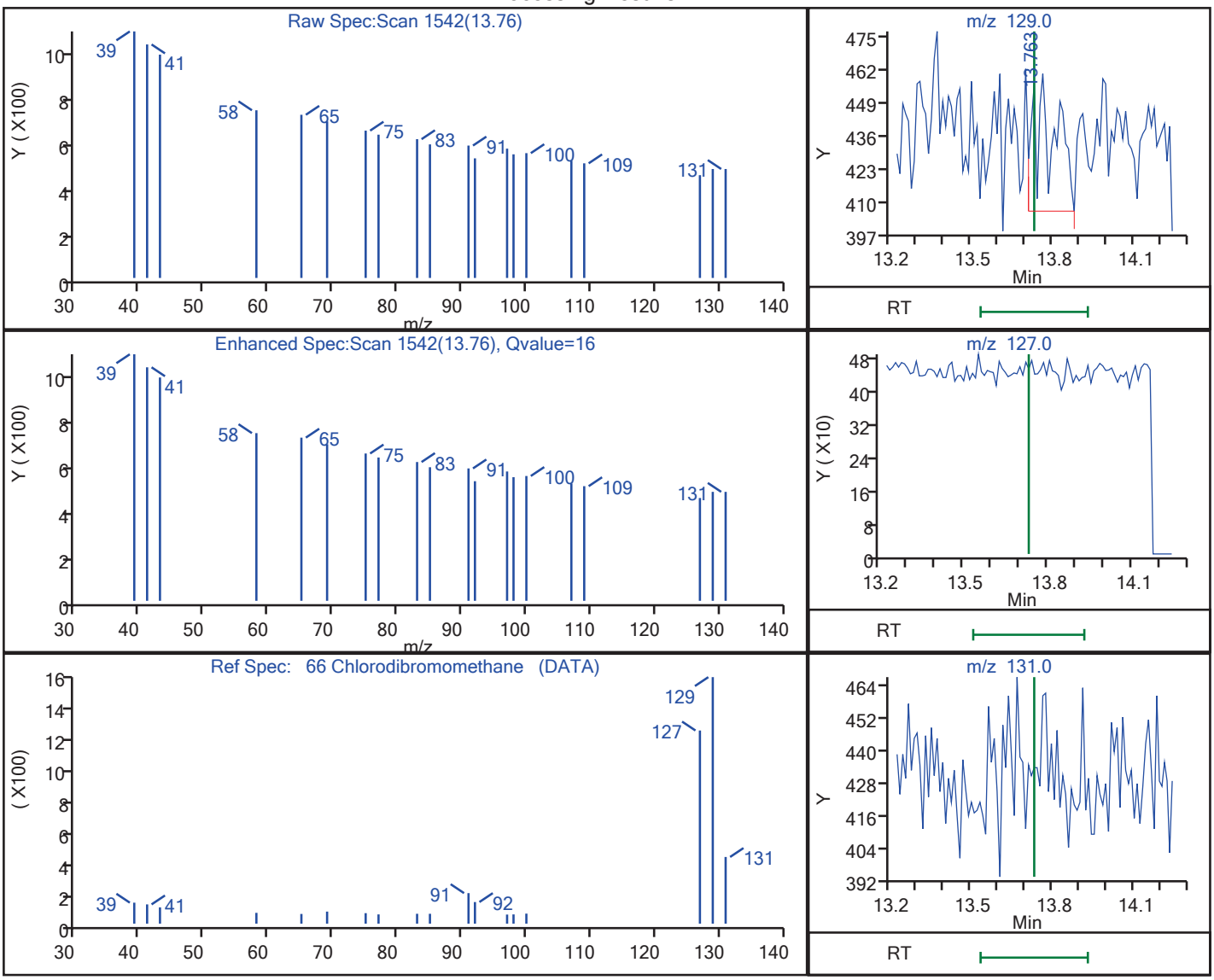
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 66 Chlorodibromomethane, CAS: 124-48-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.76 | 129.00 | 308 | 0.000981 |
| 13.73 | 127.00 | 0 | |
| 13.73 | 131.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

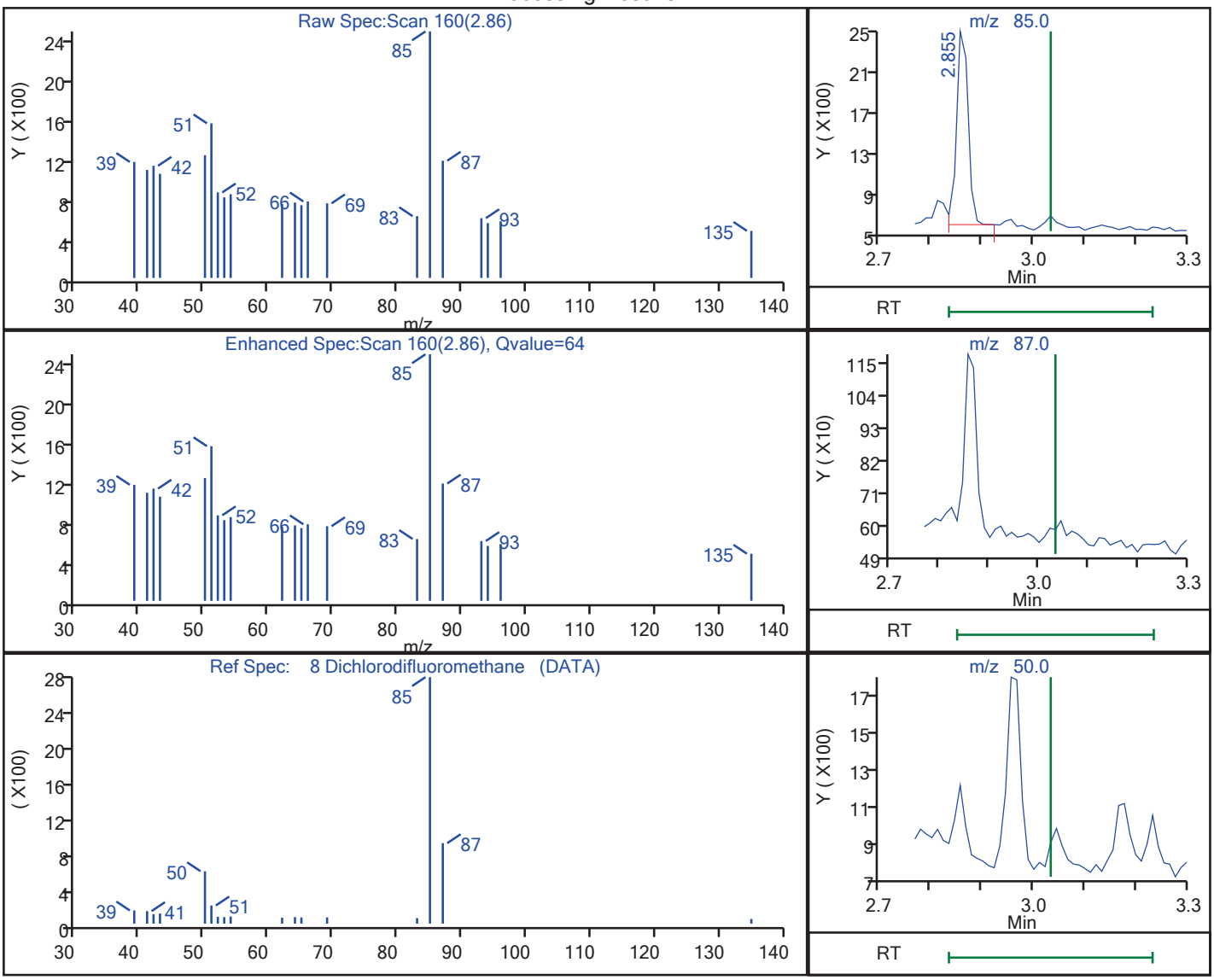
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 8 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.86 | 85.00 | 2987 | 0.005450 |
| 2.86 | 87.00 | 2070 | |
| 3.03 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

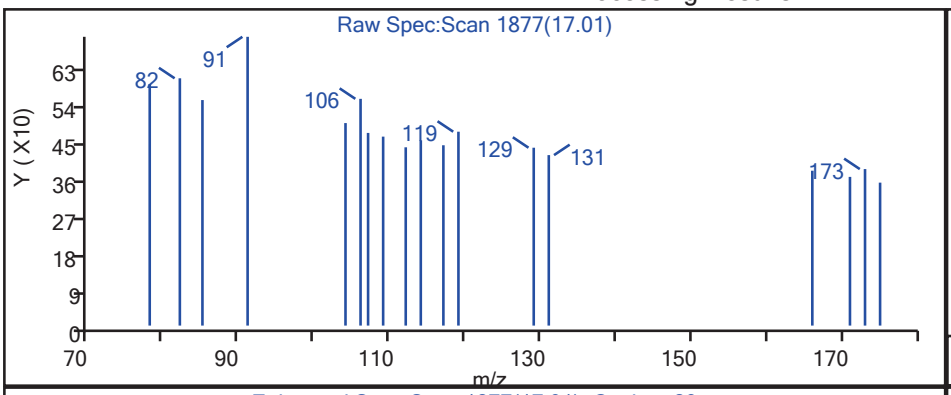
User Disabled Compound Report

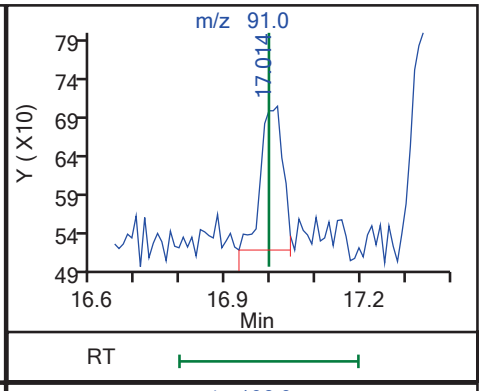
Eurofins Calscience LLC

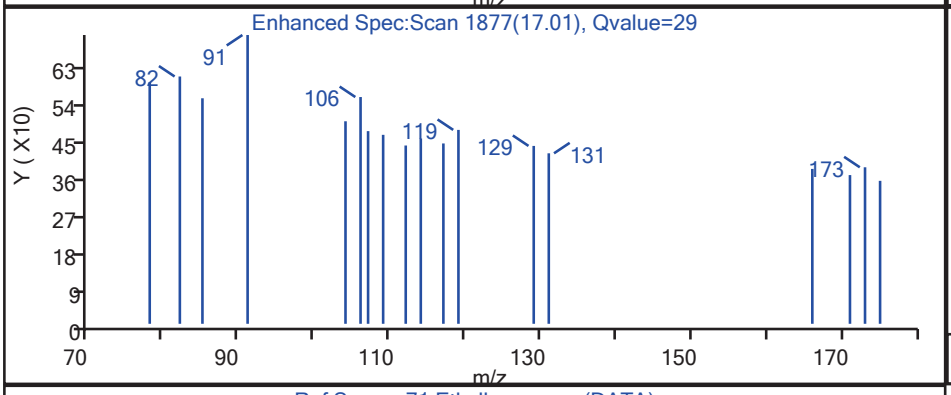
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

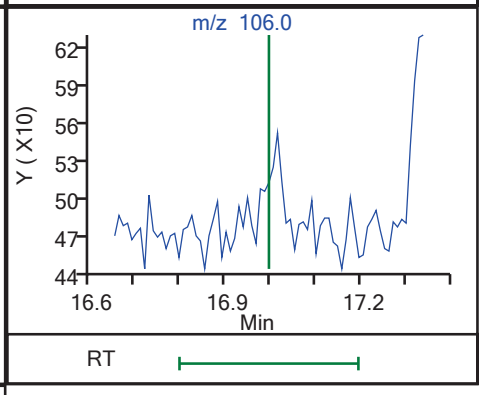
## 71 Ethylbenzene, CAS: 100-41-4

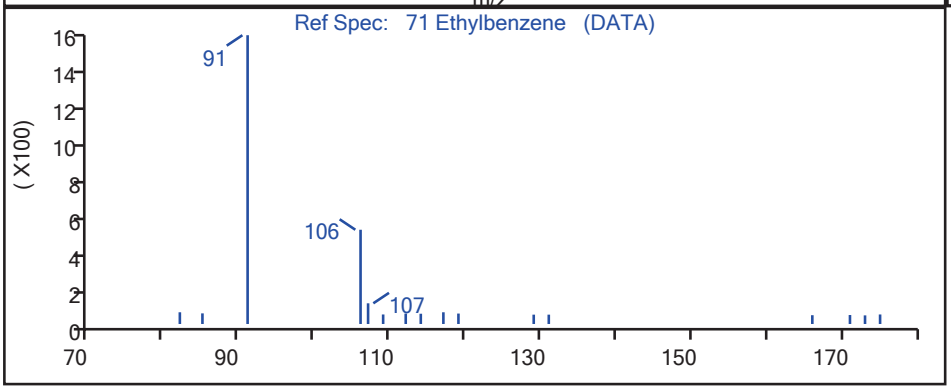
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 17.01 | 91.00 | 655 | 0.002381 |
| 17.00 | 106.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

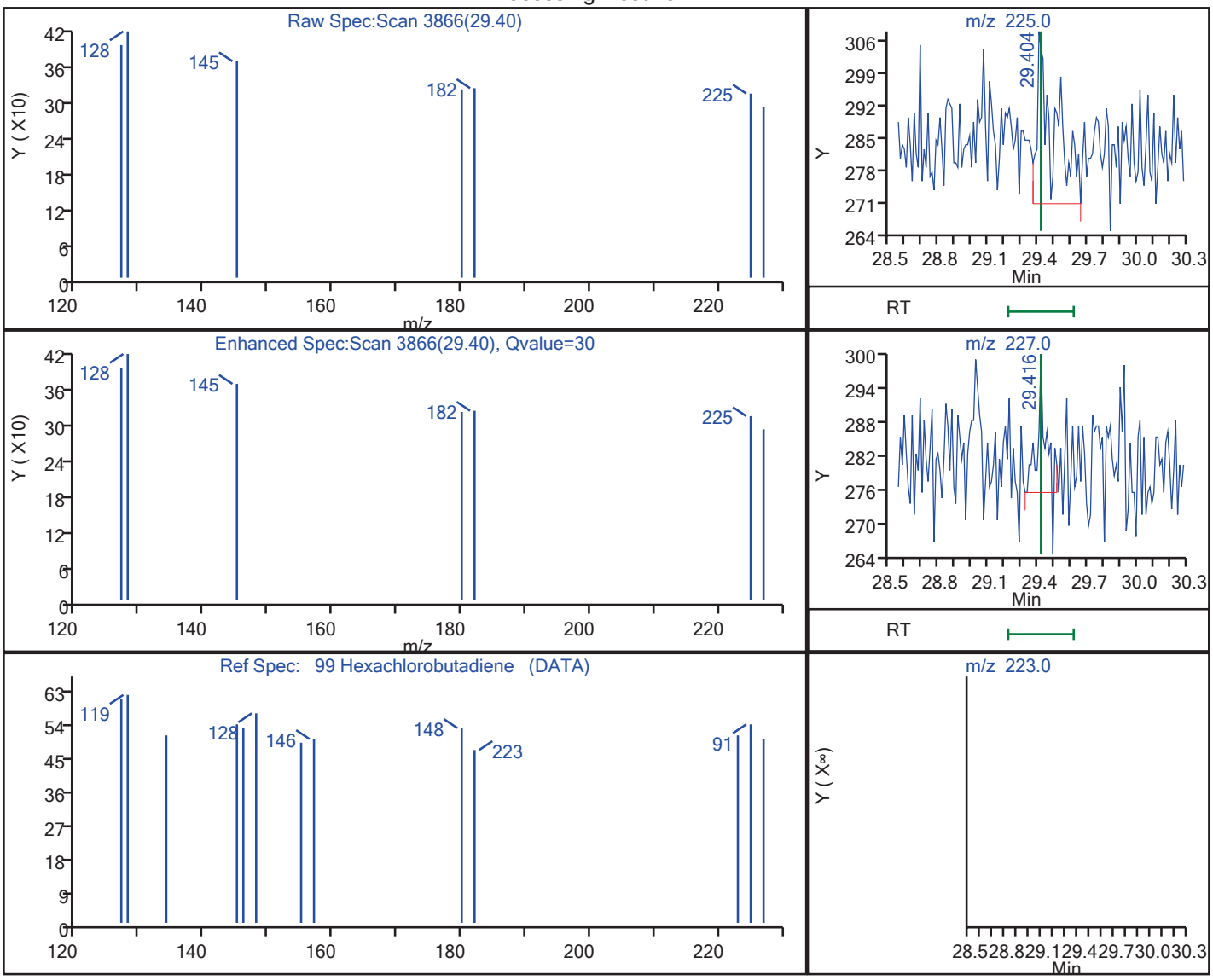
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 99 Hexachlorobutadiene, CAS: 87-68-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.40 | 225.00 | 273 | 0.000579 |
| 29.42 | 227.00 | 80 | |
| 29.42 | 223.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

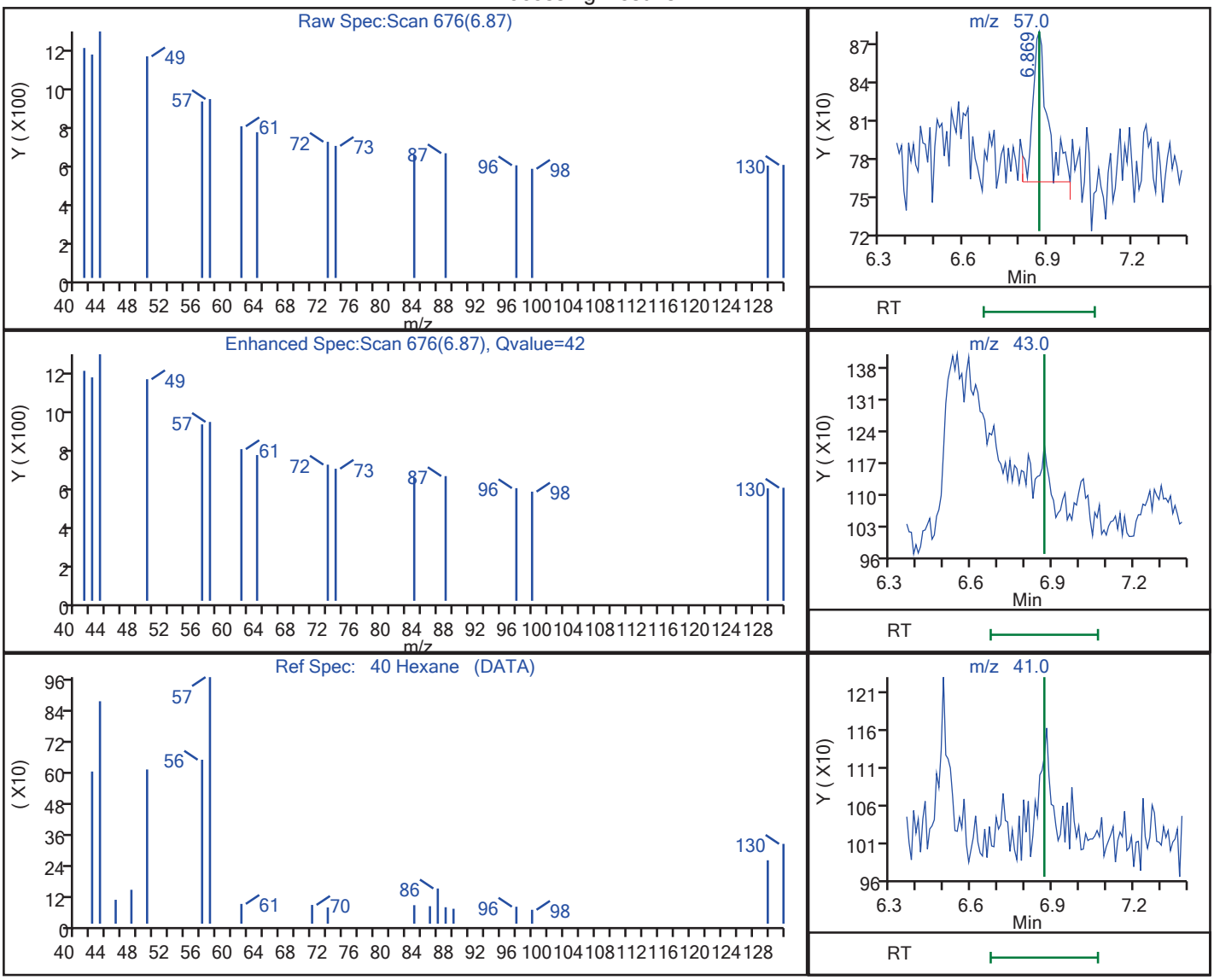
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 40 Hexane, CAS: 110-54-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.87 | 57.00 | 429 | 0.003615 |
| 6.87 | 43.00 | 0 | |
| 6.87 | 41.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

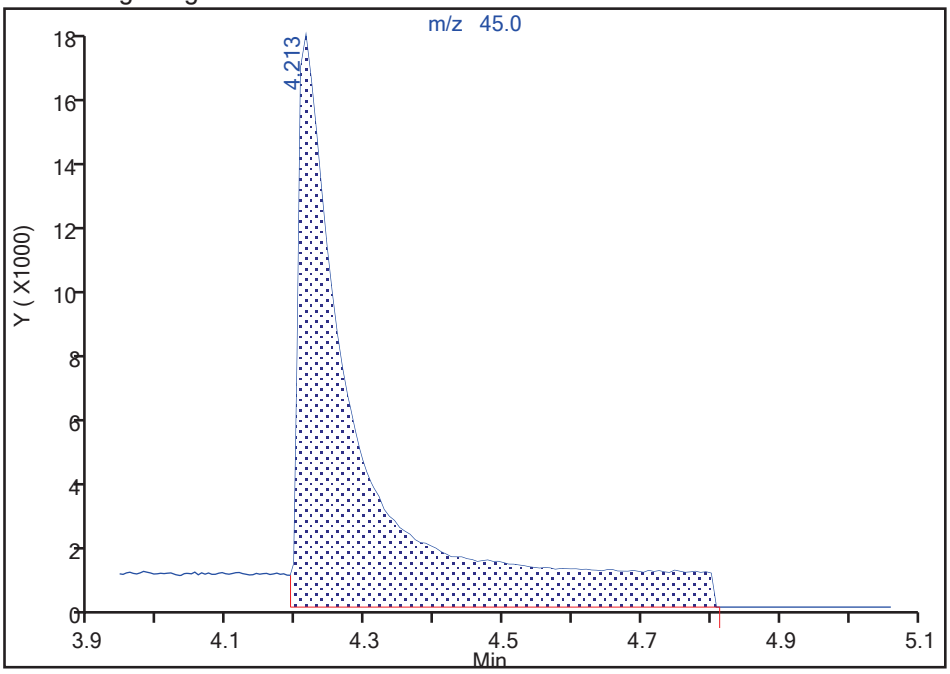
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 21 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

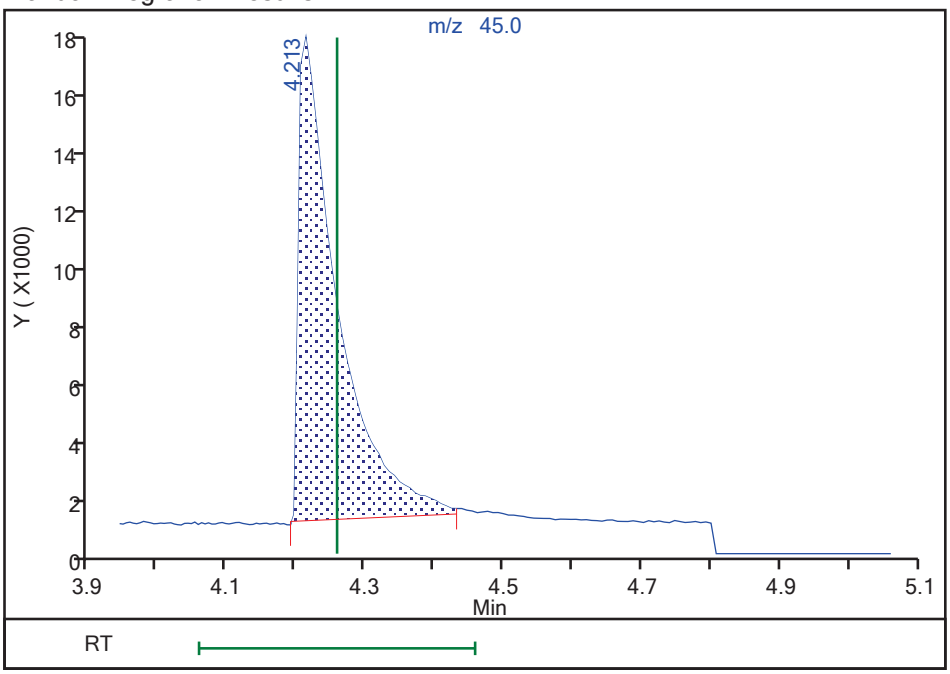
Processing Integration Results

RT: 4.21
Area: 110097
Amount: 0.351450
Amount Units: ppb v/v




Manual Integration Results

RT: 4.21
Area: 64548
Amount: 0.206049
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:33:38
Audit Action: Manually Integrated Audit Reason: Baseline

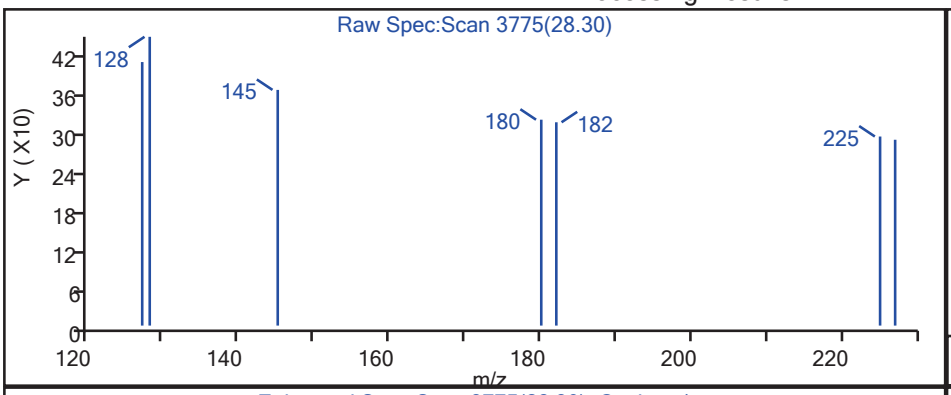
User Disabled Compound Report

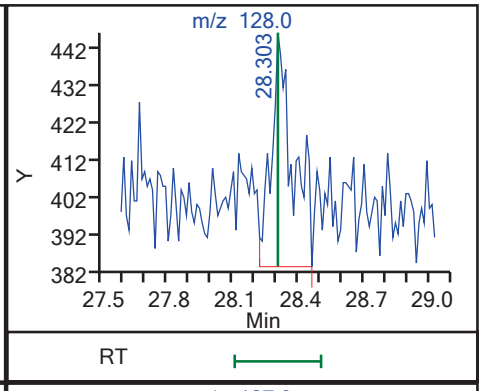
Eurofins Calscience LLC

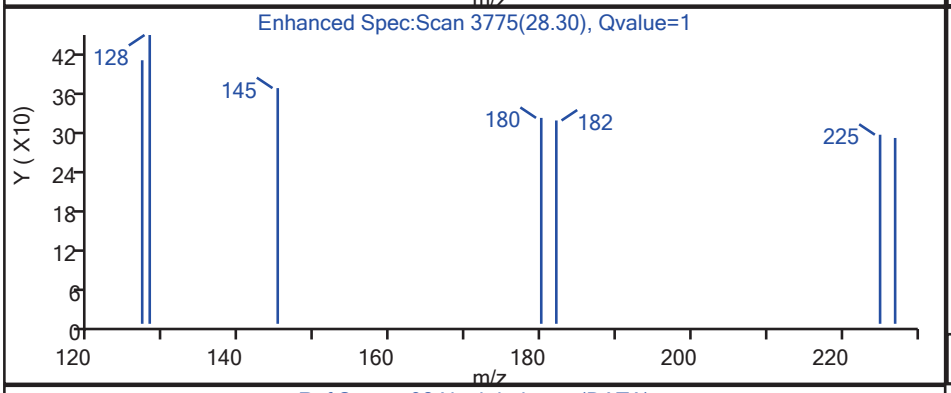
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

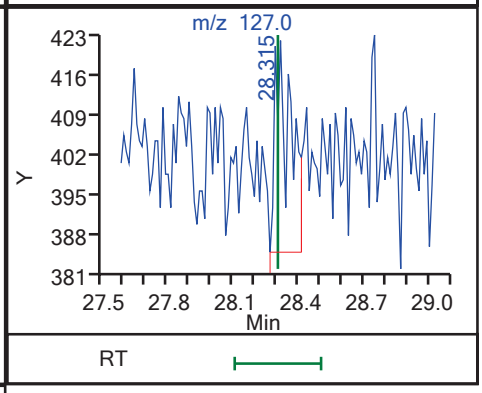
## 98 Naphthalene, CAS: 91-20-3

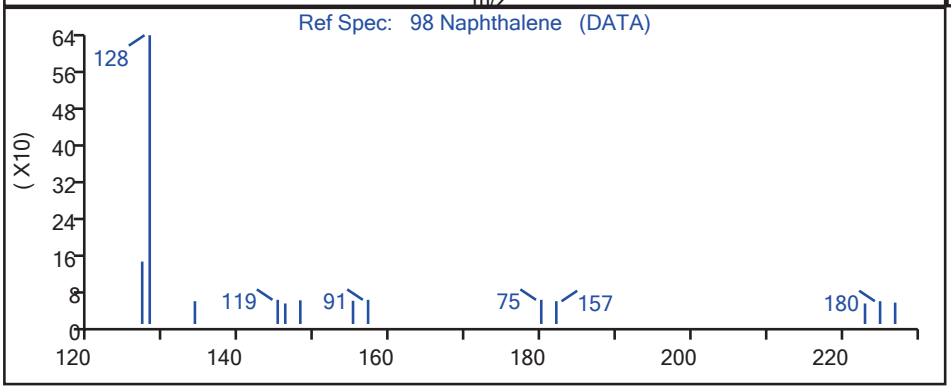
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 28.30 | 128.00 | 447 | 0.001213 |
| 28.32 | 127.00 | 195 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

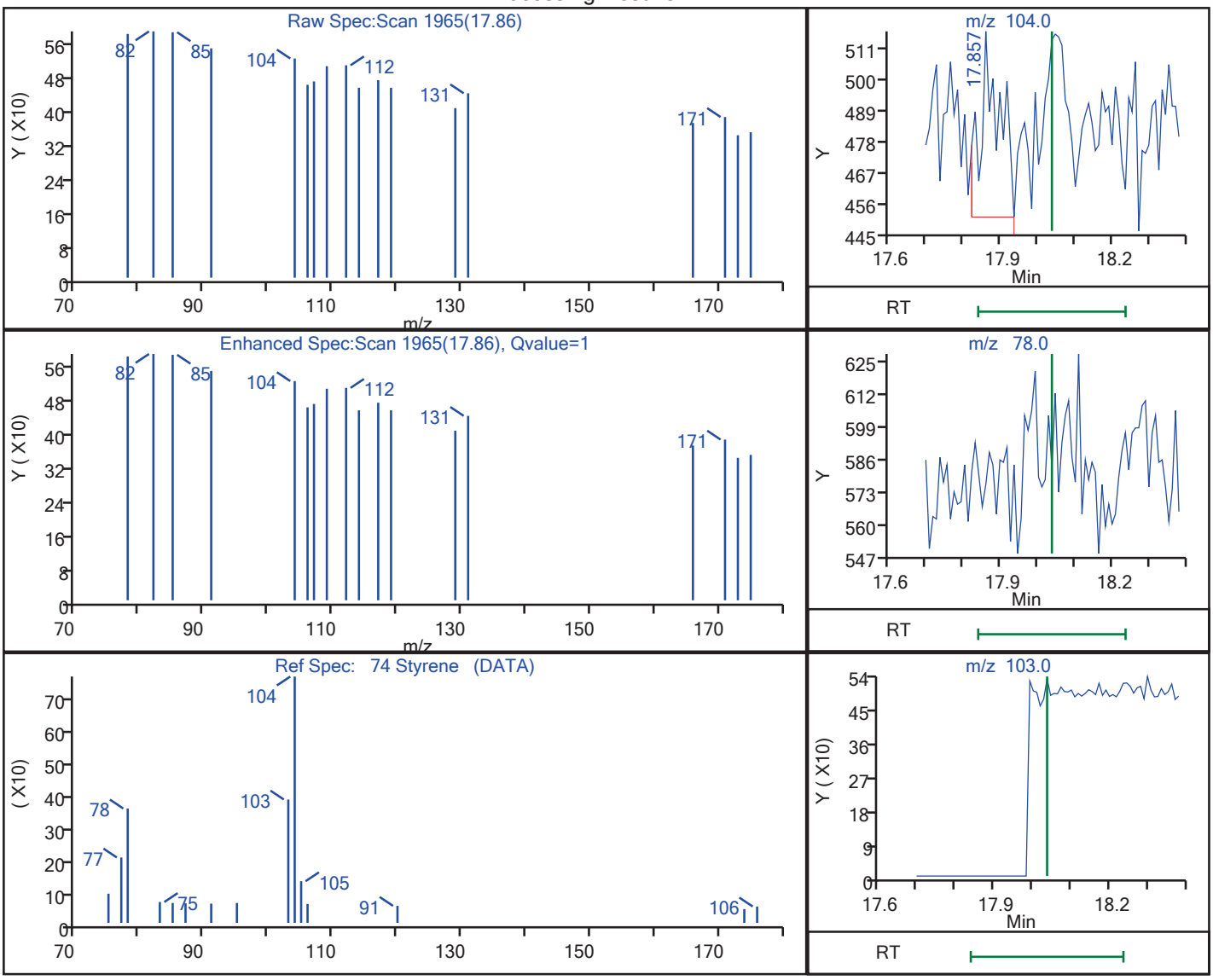
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 74 Styrene, CAS: 100-42-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 17.86 | 104.00 | 246 | 0.001982 |
| 18.04 | 78.00 | 0 | |
| 18.04 | 103.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

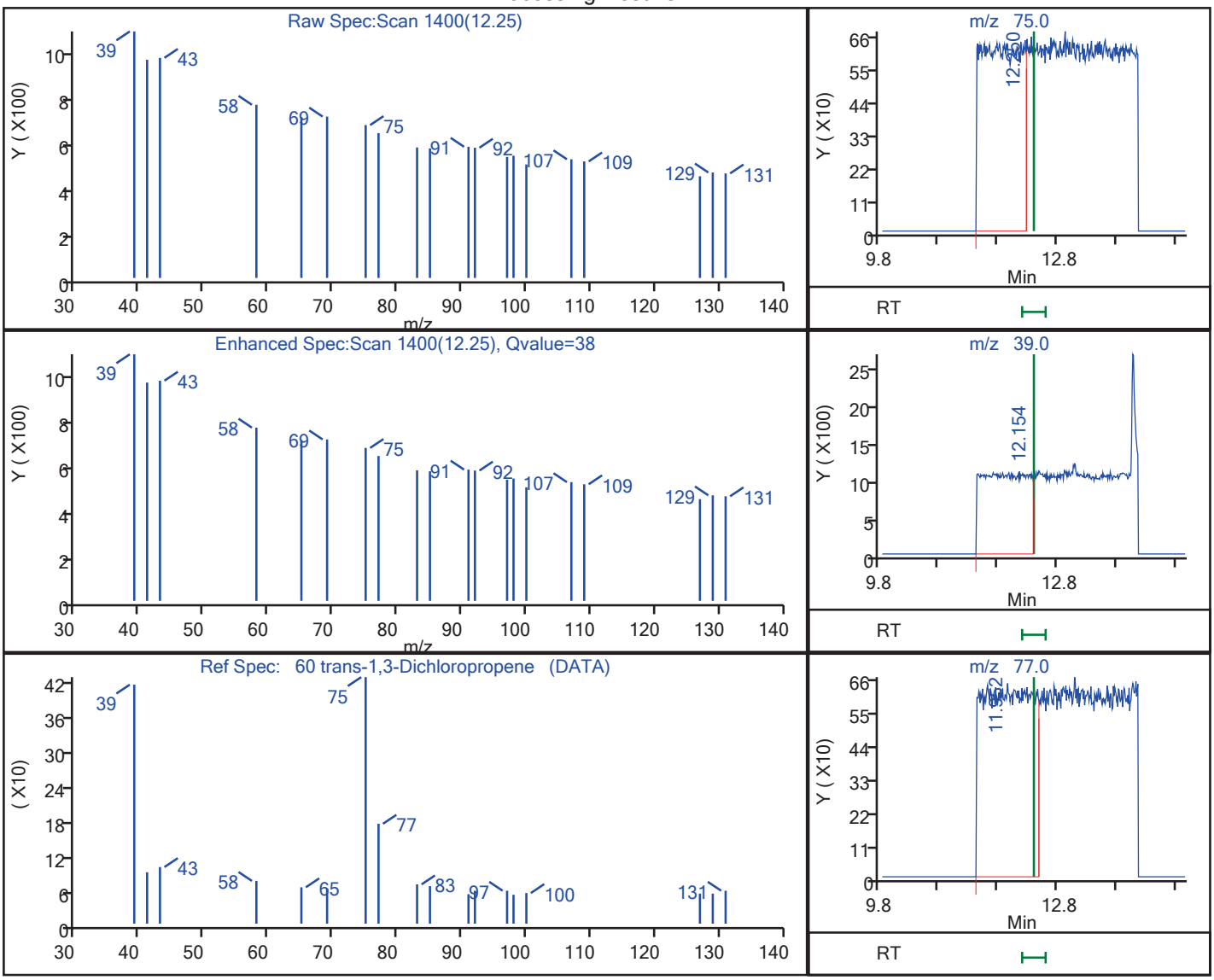
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 60 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 12.25 | 75.00 | 31496 | 0.246694 |
| 12.15 | 39.00 | 61588 | |
| 11.95 | 77.00 | 38962 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

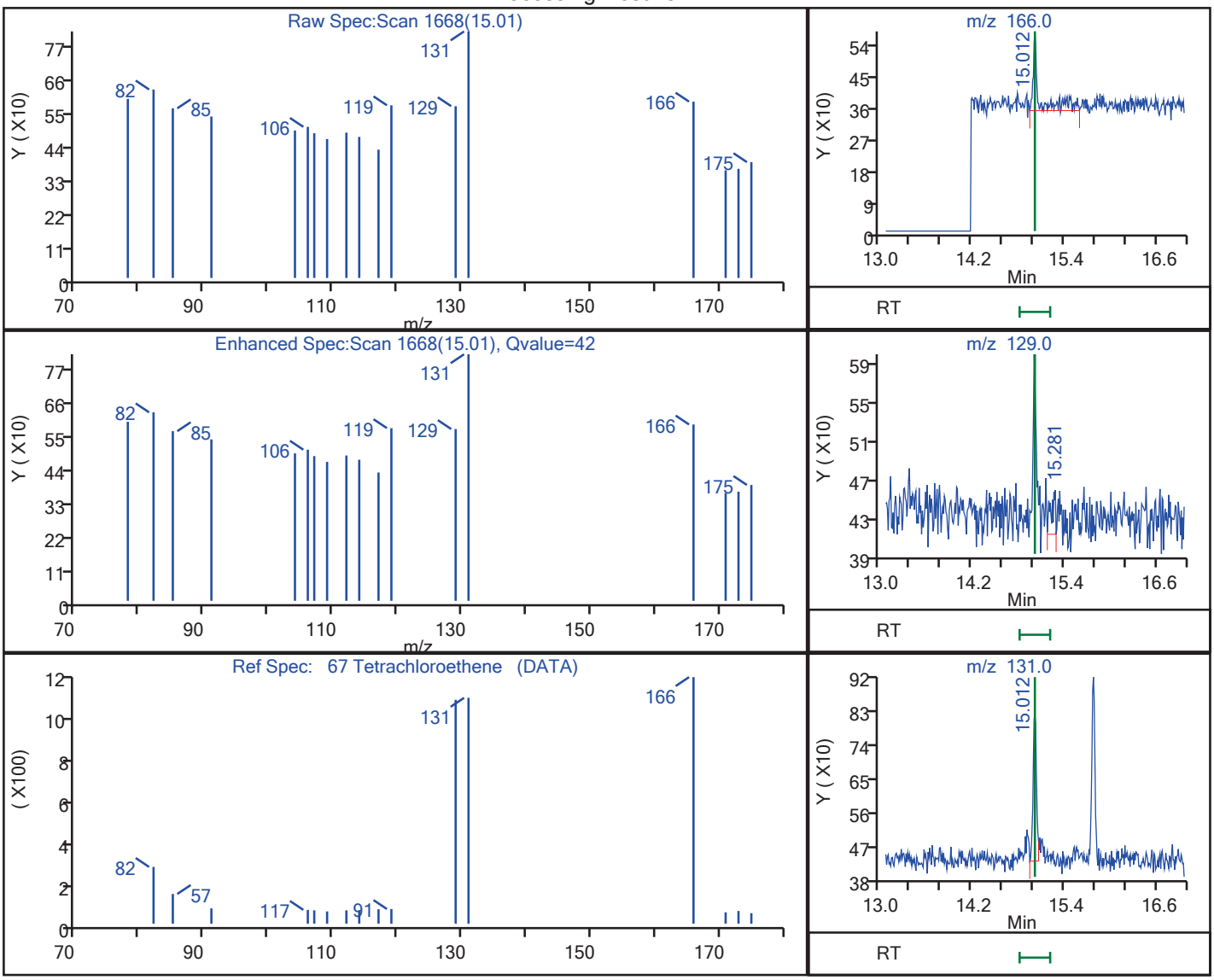
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 67 Tetrachloroethene, CAS: 127-18-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 15.01 | 166.00 | 1222 | 0.006132 |
| 15.28 | 129.00 | 178 | |
| 15.01 | 131.00 | 1239 | |
| 15.01 | 164.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:34:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

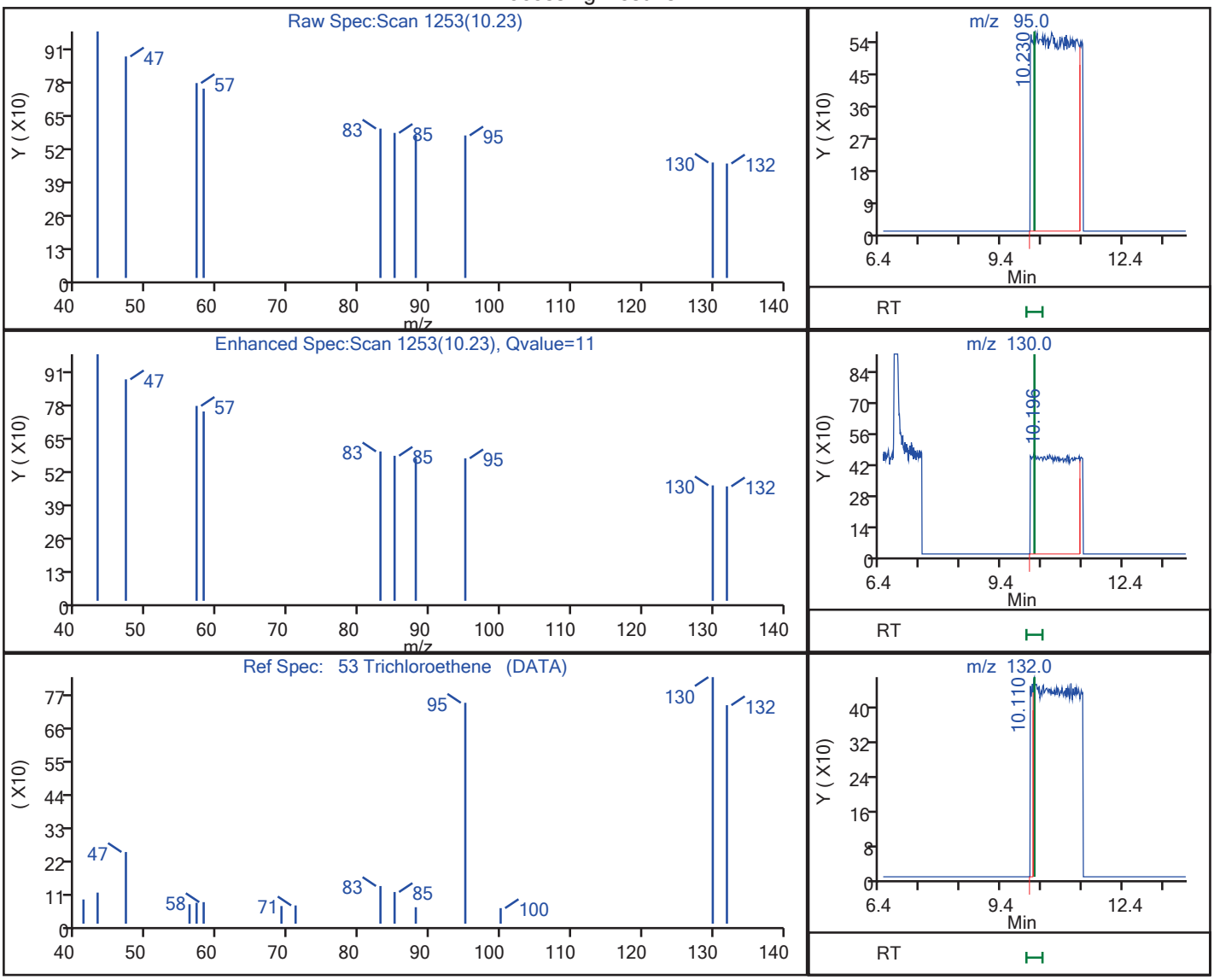
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 53 Trichloroethene, CAS: 79-01-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 10.23 | 95.00 | 39683 | 0.261942 |
| 10.20 | 130.00 | 32679 | |
| 10.11 | 132.00 | 1964 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

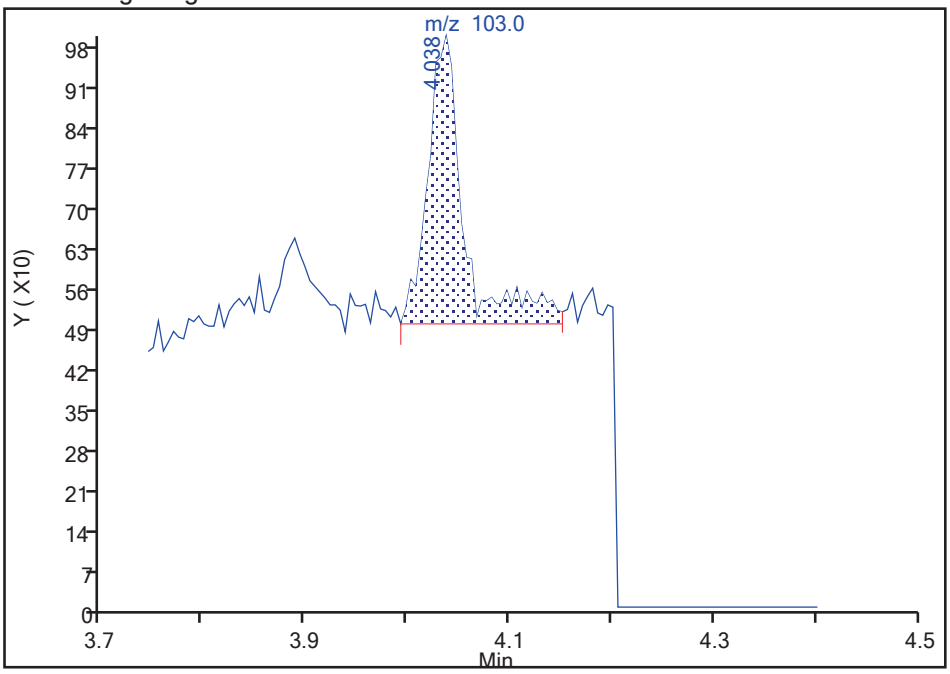
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 23 Trichlorofluoromethane, CAS: 75-69-4

Signal: 2

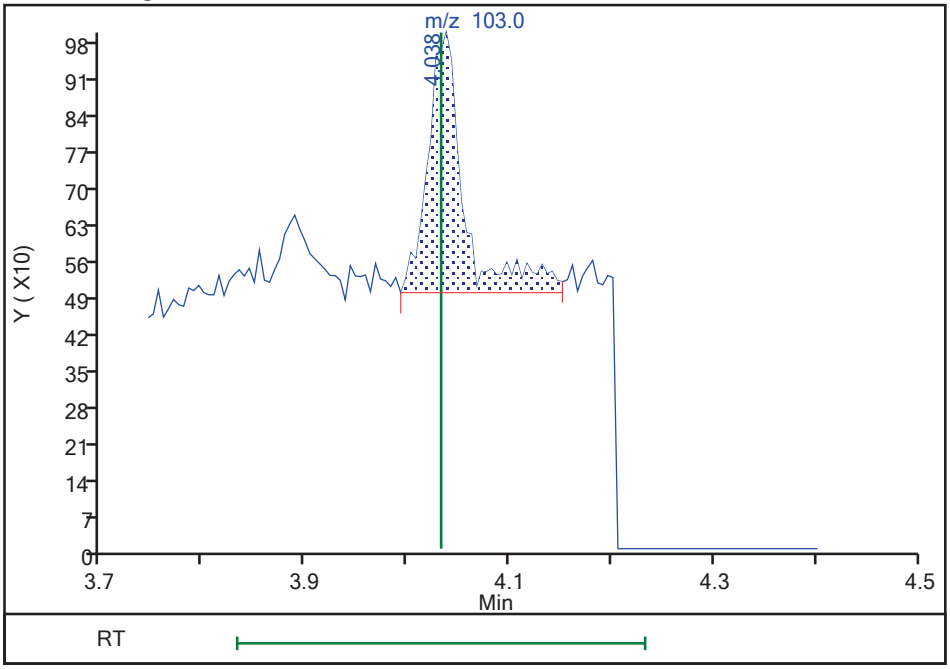
Processing Integration Results

RT: 4.04
Area: 1212
Amount: 0.004871
Amount Units: ppb v/v




Manual Integration Results

RT: 4.04
Area: 1212
Amount: 0.004871
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:33:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

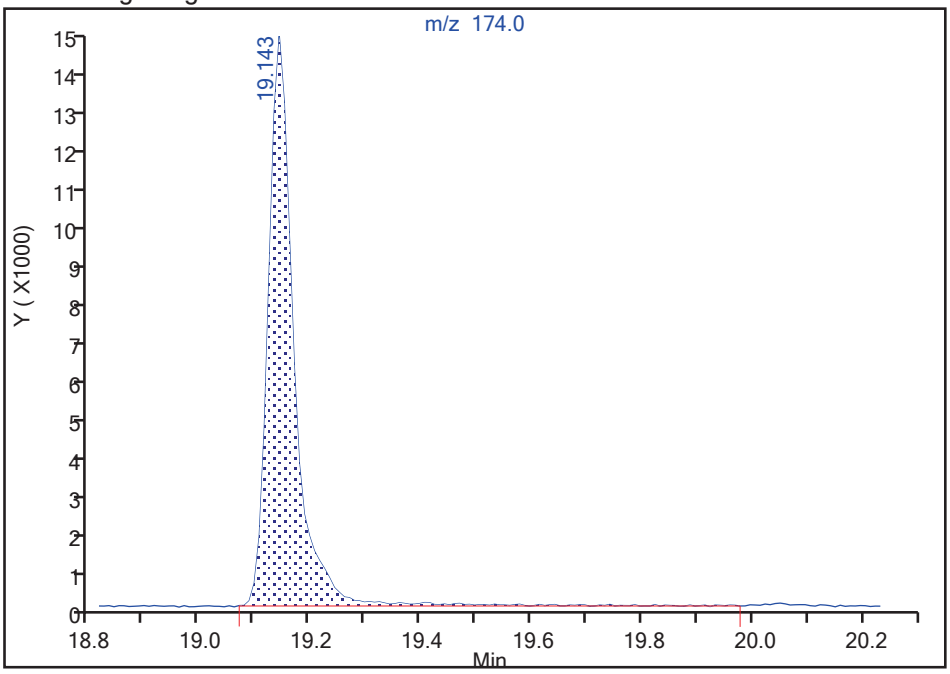
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## $ 79 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Signal: 2

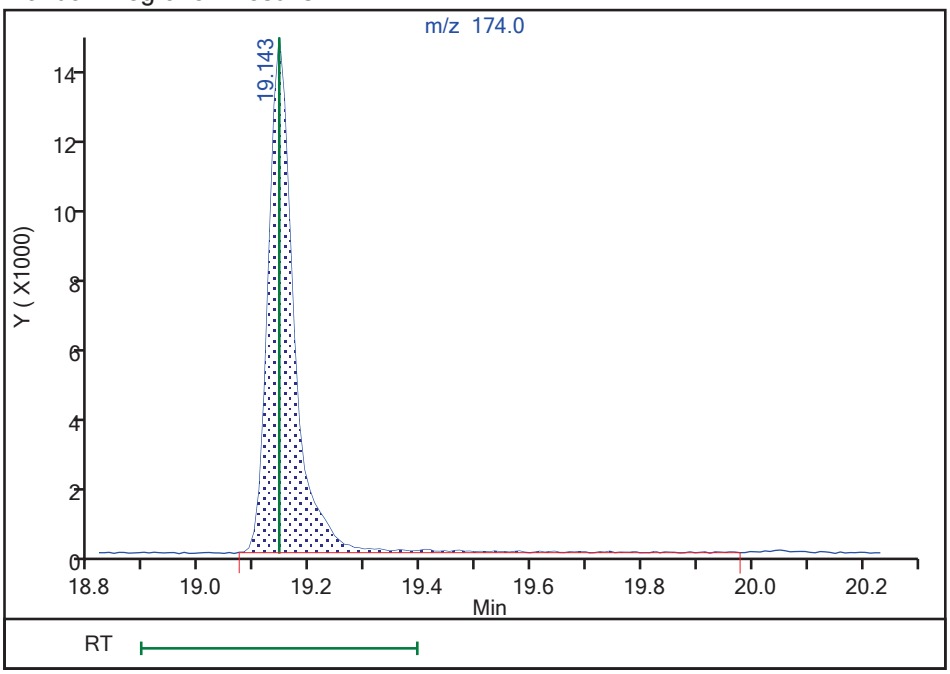
Processing Integration Results

RT: 19.14
Area: 46862
Amount: 0.375718
Amount Units: ppb v/v




Manual Integration Results

RT: 19.14
Area: 46862
Amount: 0.375718
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:34:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Calscience LLC

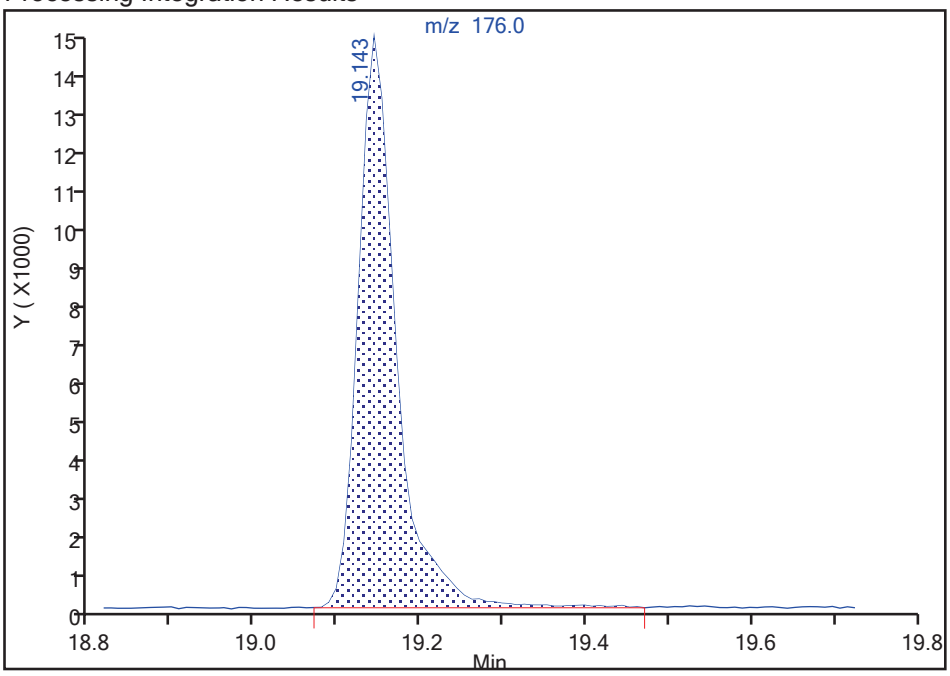
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR19.D | | | | |
| Injection Date: | 16-Mar-2021 01:04:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-3 | Lab Sample ID: | 570-53377-3 | | |
| Client ID: | D530 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 4 | Worklist Smp#: | 19 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## $ 79 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Signal: 3

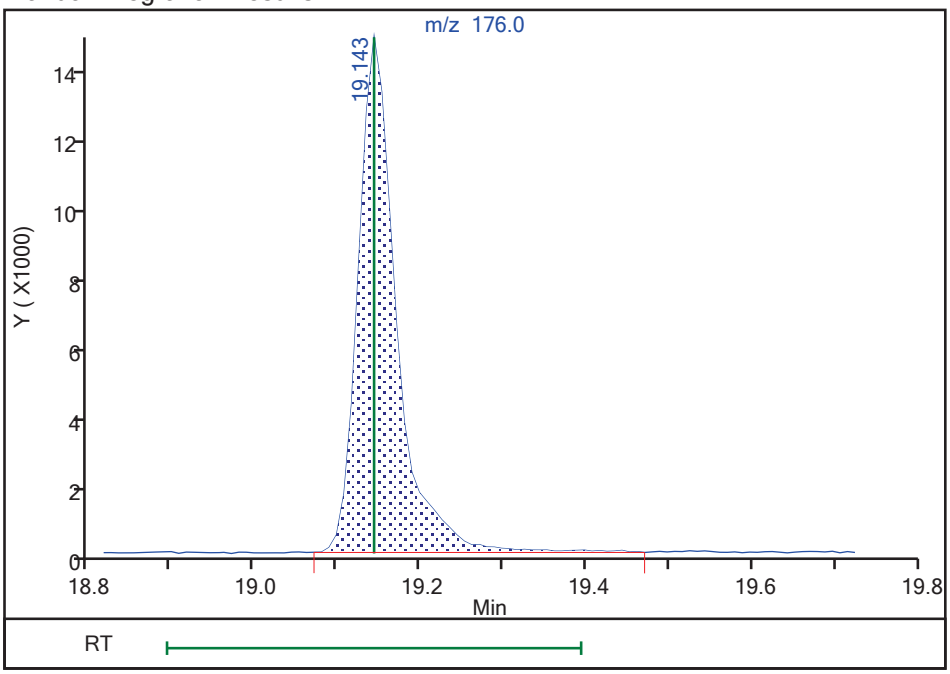
Processing Integration Results

RT: 19.14
Area: 44789
Amount: 0.375718
Amount Units: ppb v/v




Manual Integration Results

RT: 19.14
Area: 44789
Amount: 0.375718
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:34:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D863 | Lab Sample ID: 570-53377-4

Matrix: Air | Lab File ID: MMM15MAR16.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/15/2021 22:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.025 | 0.010 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 0.025 | 0.016 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.025 | 0.0091 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.025 | 0.015 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.025 | 0.012 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.025 | 0.013 |
| 75-37-6 | 1,1-Difluoroethane | 0.17 | J | 0.25 | 0.11 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 0.050 | 0.042 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 0.050 | 0.0073 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 0.050 | 0.033 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 0.050 | 0.018 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.025 | 0.022 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.025 | 0.016 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.025 | 0.017 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.025 | 0.015 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.025 | 0.012 |
| 106-99-0 | 1,3-Butadiene | ND | | 0.025 | 0.013 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.025 | 0.014 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.025 | 0.013 |
| 123-91-1 | 1,4-Dioxane | ND | | 0.25 | 0.17 |
| 78-93-3 | 2-Butanone | ND | | 0.25 | 0.027 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.050 | 0.013 |
| 67-64-1 | Acetone | ND | | 0.50 | 0.41 |
| 71-43-2 | Benzene | ND | | 0.025 | 0.013 |
| 75-27-4 | Bromodichloromethane | ND | | 0.025 | 0.0098 |
| 74-83-9 | Bromomethane | ND | | 0.050 | 0.036 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.025 | 0.014 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.025 | 0.011 |
| 75-15-0 | Carbon disulfide | ND | | 0.25 | 0.16 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.050 | 0.040 |
| 108-90-7 | Chlorobenzene | ND | | 0.050 | 0.017 |
| 75-00-3 | Chloroethane | ND | | 0.025 | 0.020 |
| 67-66-3 | Chloroform | ND | | 0.025 | 0.012 |
| 74-87-3 | Chloromethane | ND | | 0.025 | 0.013 |
| 124-48-1 | Dibromochloromethane | ND | | 0.025 | 0.010 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D863 | Lab Sample ID: 570-53377-4

Matrix: Air | Lab File ID: MMM15MAR16.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/15/2021 22:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.025 | 0.010 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 0.025 | 0.0090 |
| 100-41-4 | Ethylbenzene | ND | | 0.025 | 0.012 |
| 87-68-3 | Hexachloro-1,3-butadiene | ND | | 0.10 | 0.050 |
| 110-54-3 | Hexane | ND | | 0.10 | 0.011 |
| 67-63-0 | Isopropanol | 0.14 | J | 0.25 | 0.13 |
| 75-09-2 | Methylene Chloride | 0.026 | J | 0.050 | 0.026 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 0.025 | 0.011 |
| 91-20-3 | Naphthalene | ND | | 0.050 | 0.033 |
| 95-47-6 | o-Xylene | ND | | 0.025 | 0.013 |
| 179601-23-1 | m,p-Xylene | ND | | 0.050 | 0.026 |
| 100-42-5 | Styrene | ND | | 0.025 | 0.0099 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.025 | 0.011 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 0.025 | 0.010 |
| 127-18-4 | Tetrachloroethene | ND | | 0.025 | 0.014 |
| 108-88-3 | Toluene | ND | | 0.050 | 0.015 |
| 1330-20-7 | Xylenes, Total | ND | | 0.075 | 0.039 |
| 79-01-6 | Trichloroethene | ND | | 0.025 | 0.018 |
| 75-69-4 | Trichlorofluoromethane | ND | | 0.025 | 0.0082 |
| 75-01-4 | Vinyl chloride | ND | | 0.050 | 0.023 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 95 | | 61-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 79 | | 59-130 |
| 2037-26-5 | Toluene-d8 (Surr) | 99 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D
Lims ID: 570-53377-A-4
Client ID: D863
Sample Type: Client
Inject. Date: 15-Mar-2021 22:37:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53377-a-4
Misc. Info.: A_SIMIS/SS_00005
Operator ID: 12GR Instrument ID: GCMSMMM

Method: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\AIRMS_GCMSMMM.m
Limit Group: MSV - TO15 SIM TO15 SIMLL
Last Update: 16-Mar-2021 13:38:16 Calib Date: 09-Feb-2021 18:41:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSMMM\20210210-38552.b\MMM09FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: rhoadesw Date: 16-Mar-2021 13:30:47

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 11 1,1-Difluoroethane | 51 | 2.755 | 2.755 | 0.000 | 94 | 44918 | 0.1732 | |
| 13 Chloromethane | 50 | | 2.966 | | | | ND | U |
| 8 Dichlorodifluoromethane | 85 | | 3.033 | | | | ND | U |
| 15 Vinyl chloride | 62 | | 3.111 | | | | ND | |
| 6 Butadiene | 54 | | 3.200 | | | | ND | |
| 14 Bromomethane | 94 | | 3.378 | | | | ND | |
| 18 Chloroethane | 64 | | 3.493 | | | | ND | |
| 23 Trichlorofluoromethane | 101 | 4.033 | 4.033 | 0.000 | 23 | 1950 | 0.003711 | |
| 20 Acetone | 43 | 4.047 | 4.052 | -0.005 | 28 | 27265 | 0.0698 | |
| 21 Isopropyl alcohol | 45 | 4.229 | 4.259 | -0.031 | 9 | 44029 | 0.1360 | |
| 24 1,1-Dichloroethene | 61 | | 4.522 | | | | ND | |
| 25 Methylene Chloride | 84 | 4.612 | 4.612 | 0.000 | 37 | 5742 | 0.0261 | |
| 31 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 4.867 | | | | ND | U |
| 29 1,2-Dichloro-1,1,2,2-tetrafluoro | 151 | | 4.867 | | | | ND | |
| 30 Carbon disulfide | 76 | | 4.872 | | | | ND | |
| 26 trans-1,2-Dichloroethene | 96 | | 5.483 | | | | ND | |
| 32 1,1-Dichloroethane | 63 | | 5.684 | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 5.900 | | | | ND | |
| 34 2-Butanone (MEK) | 43 | | 6.484 | | | | ND | U |
| 35 cis-1,2-Dichloroethene | 96 | | 6.587 | | | | ND | |
| * 36 Chlorobromomethane (IS) | 130 | 6.758 | 6.758 | 0.000 | 78 | 37535 | 0.5000 | |
| 40 Hexane | 57 | | 6.869 | | | | ND | U |
| 39 Chloroform | 83 | | 6.920 | | | | ND | |
| $ 42 1,2-Dichloroethane-d4 (Surr) | 65 | 7.670 | 7.670 | 0.000 | 95 | 79901 | 0.4757 | |
| 38 1,2-Dichloroethane | 62 | | 7.806 | | | | ND | U |
| 45 1,1,1-Trichloroethane | 97 | | 8.132 | | | | ND | |
| 48 Benzene | 78 | | 8.721 | | | | ND | U |
| 49 Carbon tetrachloride | 117 | | 8.927 | | | | ND | |
| * 50 1,4-Difluorobenzene | 114 | 9.265 | 9.267 | -0.002 | 63 | 111748 | 0.5000 | |
| 41 1,2-Dichloropropane | 63 | | 9.860 | | | | ND | |
| 52 Dichlorobromomethane | 83 | | 10.127 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 53 Trichloroethene | 95 | | 10.213 | | | | ND | U |
| 54 1,4-Dioxane | 57 | | 10.761 | | | | ND | |
| 57 cis-1,3-Dichloropropene | 75 | | 11.547 | | | | ND | U |
| 60 trans-1,3-Dichloropropene | 75 | | 12.399 | | | | ND | |
| 61 1,1,2-Trichloroethane | 83 | | 12.623 | | | | ND | |
| $ 63 Toluene-d8 (Surr) | 98 | 12.932 | 12.932 | 0.000 | 97 | 104165 | 0.4970 | |
| 64 Toluene | 91 | 13.092 | 13.092 | 0.000 | 53 | 3180 | 0.0108 | |
| 66 Chlorodibromomethane | 129 | | 13.731 | | | | ND | |
| 59 Ethylene Dibromide | 107 | | 14.136 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 15.012 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 16.143 | 16.143 | 0.000 | 95 | 99924 | 0.5000 | |
| 69 Chlorobenzene | 112 | | 16.219 | | | | ND | |
| 71 Ethylbenzene | 91 | | 16.995 | | | | ND | U |
| 72 m-Xylene & p-Xylene | 91 | | 17.330 | | | | ND | |
| 74 Styrene | 104 | | 18.037 | | | | ND | U |
| 75 1,1,2,2-Tetrachloroethane | 83 | | 18.209 | | | | ND | |
| 76 o-Xylene | 91 | | 18.245 | | | | ND | U |
| 77 1,2,3-Trichloropropane | 75 | | 18.472 | | | | ND | |
| $ 79 4-Bromofluorobenzene (Surr) | 95 | 19.144 | 19.143 | 0.001 | 99 | 57878 | 0.3940 | |
| 86 4-Ethyltoluene | 105 | | 20.959 | | | | ND | U |
| 81 1,3,5-Trimethylbenzene | 105 | | 21.154 | | | | ND | U |
| 85 1,2,4-Trimethylbenzene | 105 | | 22.073 | | | | ND | |
| 92 1,3-Dichlorobenzene | 146 | | 22.305 | | | | ND | |
| 93 1,4-Dichlorobenzene | 146 | | 22.487 | | | | ND | U |
| 89 1,2-Dichlorobenzene | 146 | | 23.286 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 28.061 | | | | ND | |
| 98 Naphthalene | 128 | | 28.303 | | | | ND | U |
| 97 1,2,3-Trichlorobenzene | 180 | | 29.029 | | | | ND | U |
| 99 Hexachlorobutadiene | 225 | | 29.416 | | | | ND | U |
| 102 Xylenes, Total | 1 | | 0.000 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

## Reagents:

A_Sim IS/SS_00005 Amount Added: 100.00 Units: mL Run Reagent

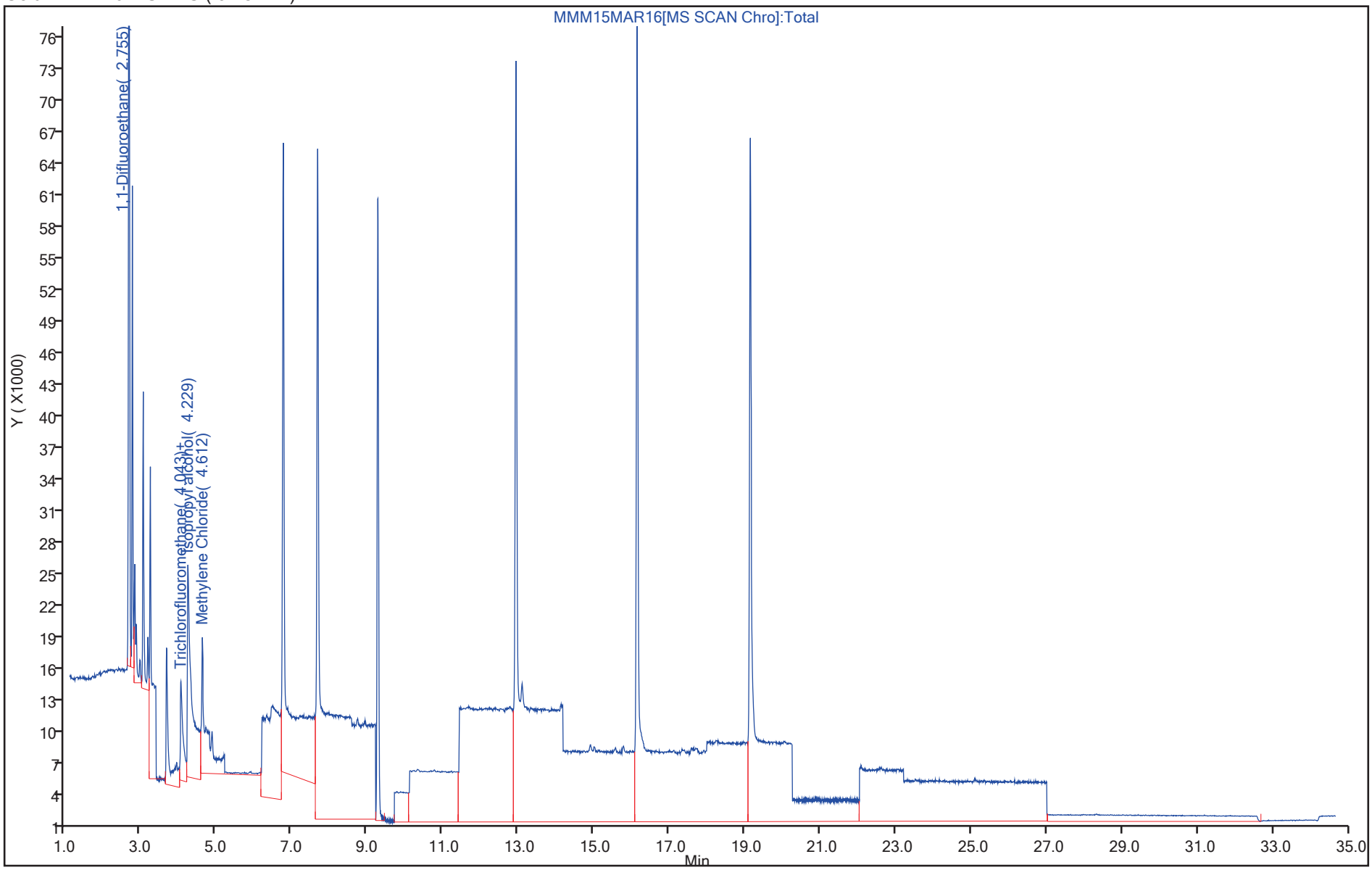
Report Date: 16-Mar-2021 13:38:46 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | Operator ID: | 12GR |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | Worklist Smp#: | 16 |
| Client ID: | D863 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 16 |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |

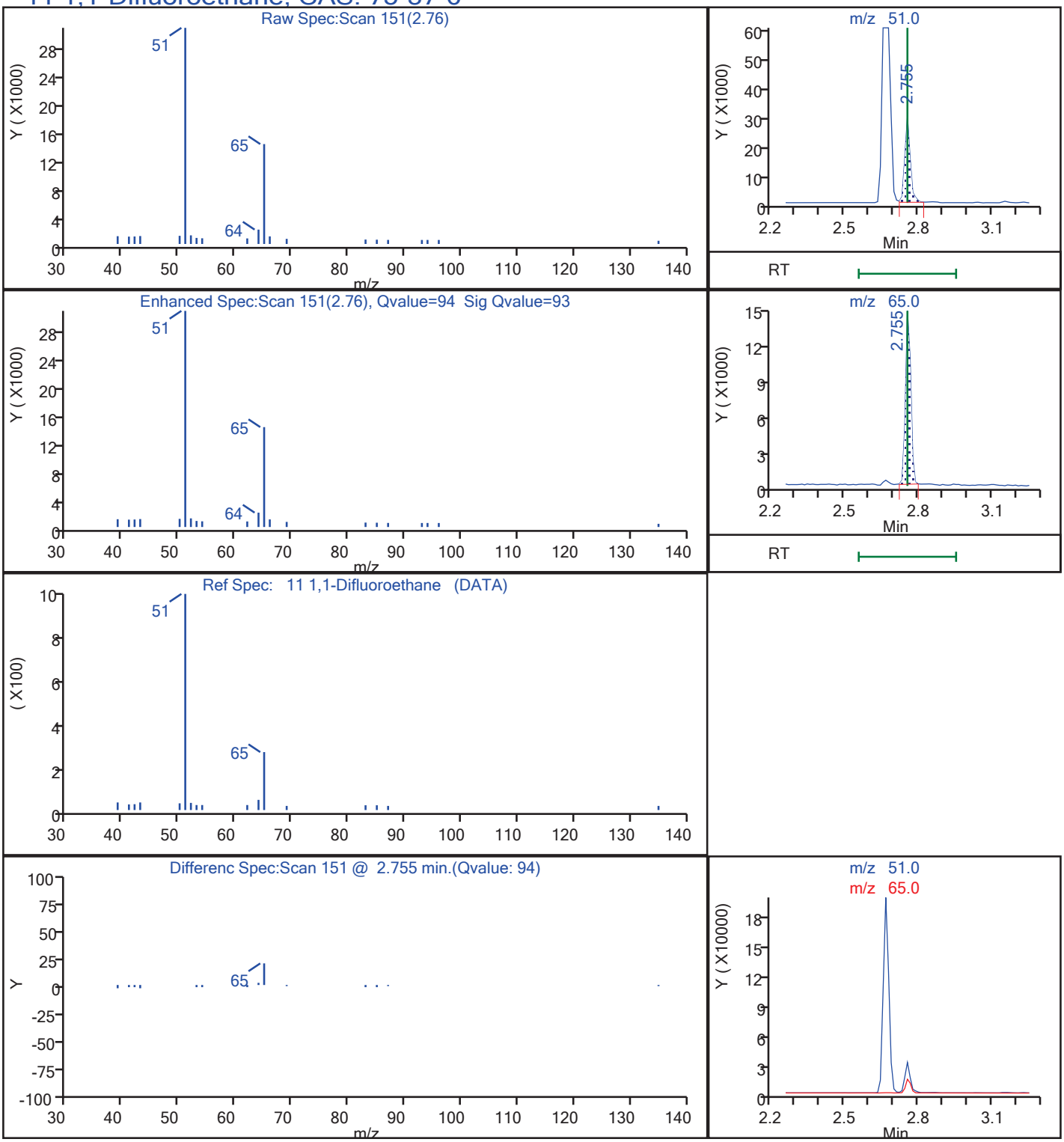
Column: Rxi-624Sil MS ( 0.18 mm)



Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D
Injection Date: 15-Mar-2021 22:37:30 Instrument ID: GCMSMMM
Lims ID: 570-53377-A-4 Lab Sample ID: 570-53377-4
Client ID: D863
Operator ID: 12GR ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Method: AIRMS_GCMSMMM Limit Group: MSV - TO15 SIM TO15 SIMLL
Column: Rxi-624Sil MS ( 0.18 mm) Detector MS SCAN

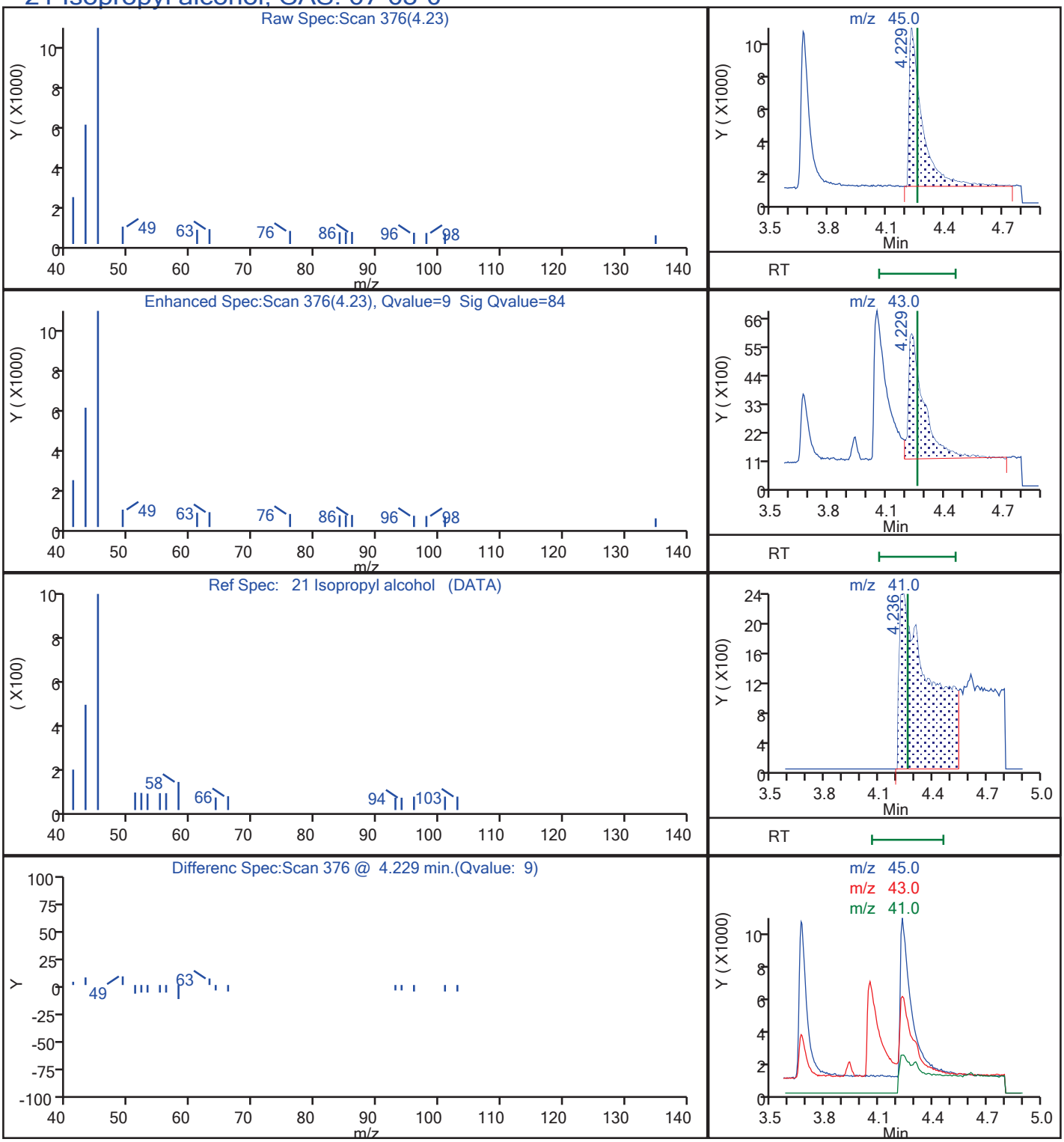
## 11 1,1-Difluoroethane, CAS: 75-37-6



Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

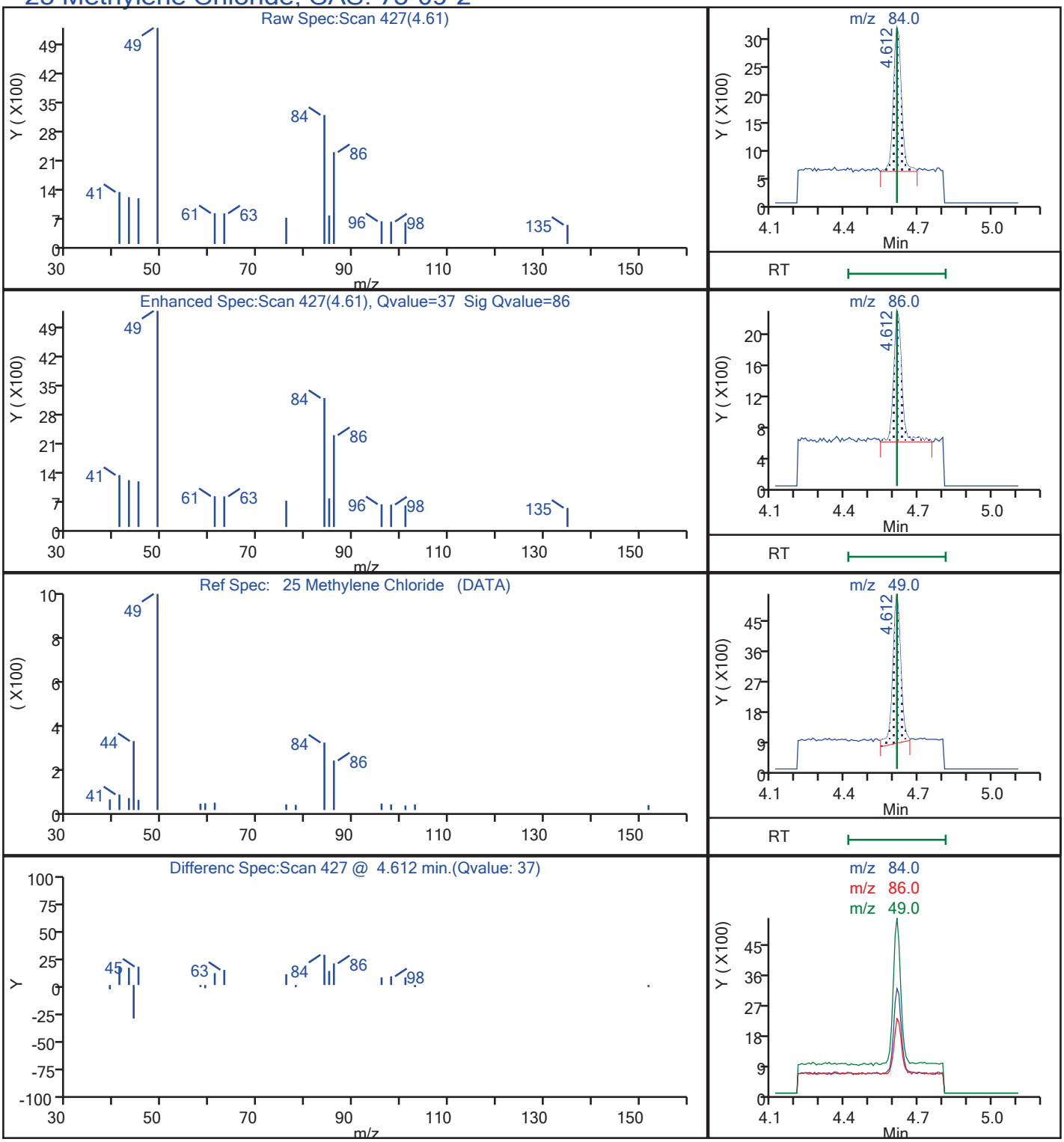
## 21 Isopropyl alcohol, CAS: 67-63-0



Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D
Injection Date: 15-Mar-2021 22:37:30 Instrument ID: GCMSMMM
Lims ID: 570-53377-A-4 Lab Sample ID: 570-53377-4
Client ID: D863
Operator ID: 12GR ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Method: AIRMS_GCMSMMM Limit Group: MSV - TO15 SIM TO15 SIMLL
Column: Rxi-624Sil MS ( 0.18 mm) Detector MS SCAN

## 25 Methylene Chloride, CAS: 75-09-2



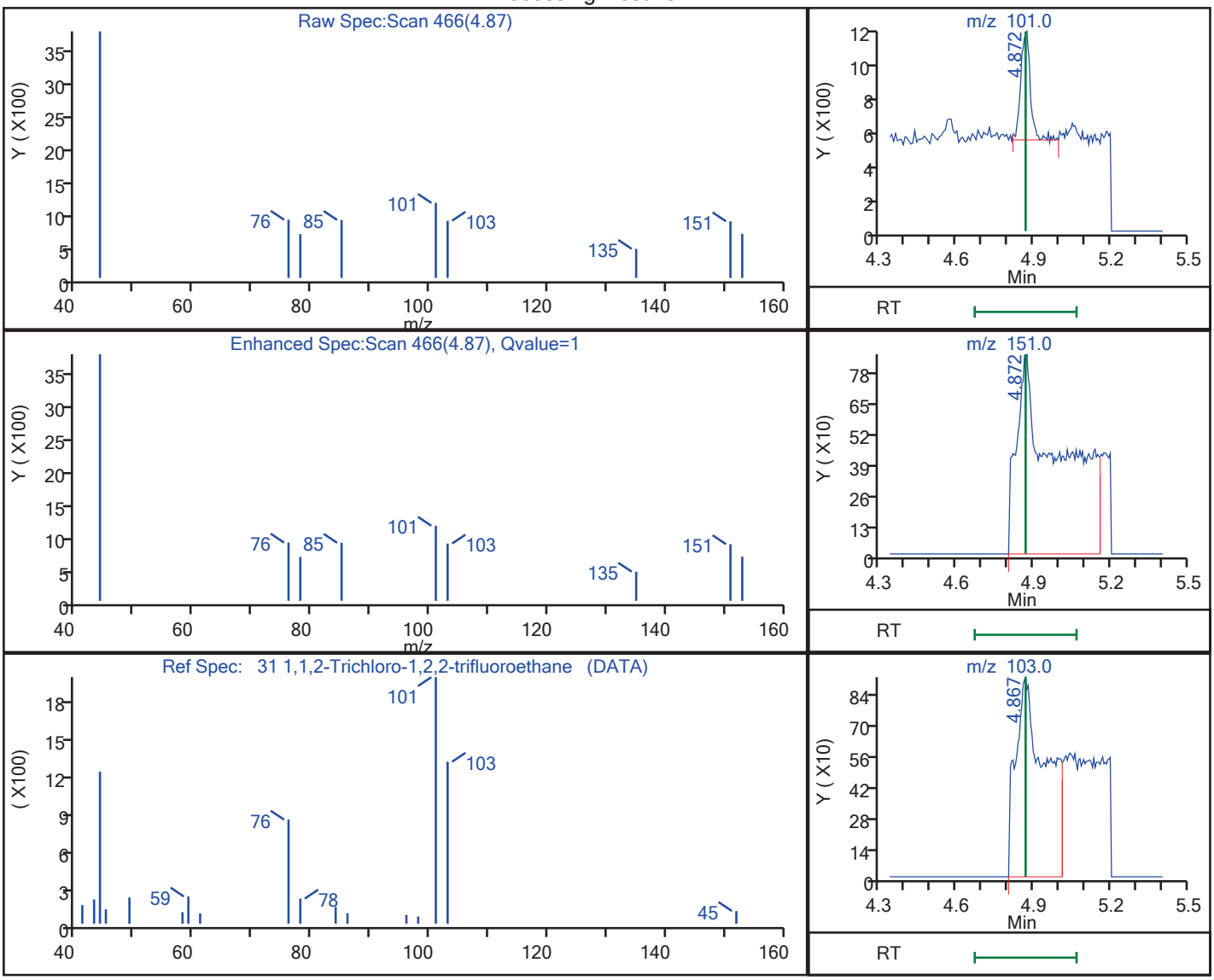
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 31 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.87 | 101.00 | 1605 | 0.003653 |
| 4.87 | 151.00 | 10029 | |
| 4.87 | 103.00 | 7601 | |
| 4.87 | 153.00 | 4028 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

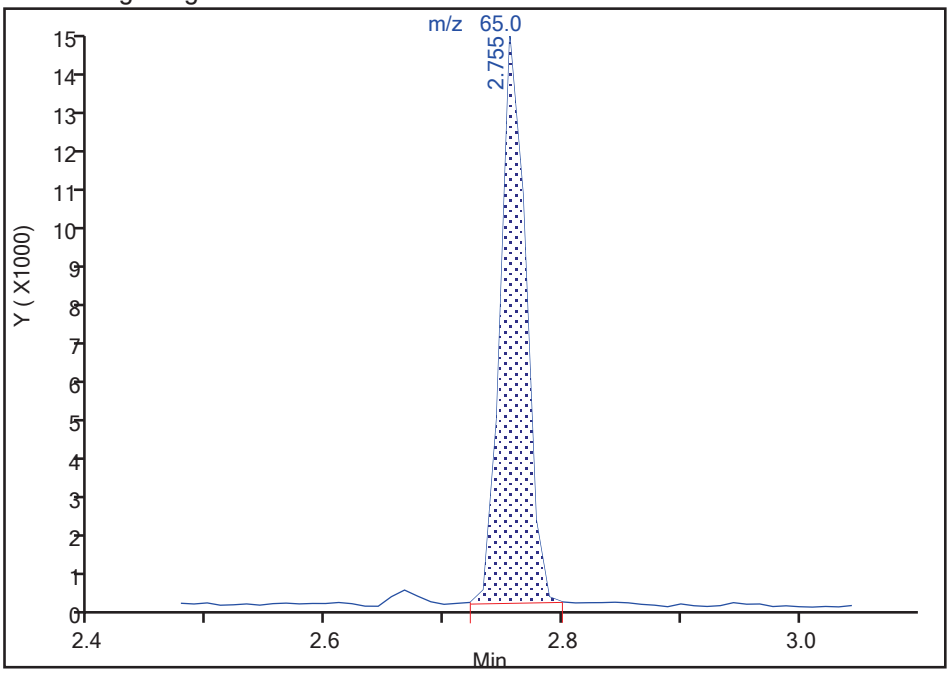
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 11 1,1-Difluoroethane, CAS: 75-37-6

Signal: 2

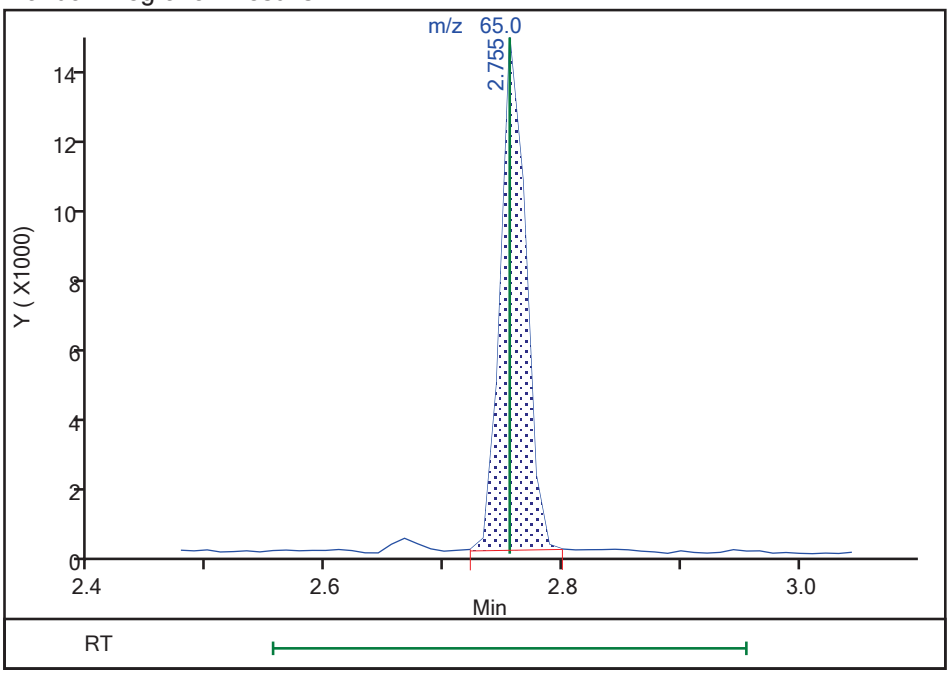
Processing Integration Results

RT: 2.76
Area: 19795
Amount: 0.173192
Amount Units: ppb v/v




Manual Integration Results

RT: 2.76
Area: 19795
Amount: 0.173192
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:29:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

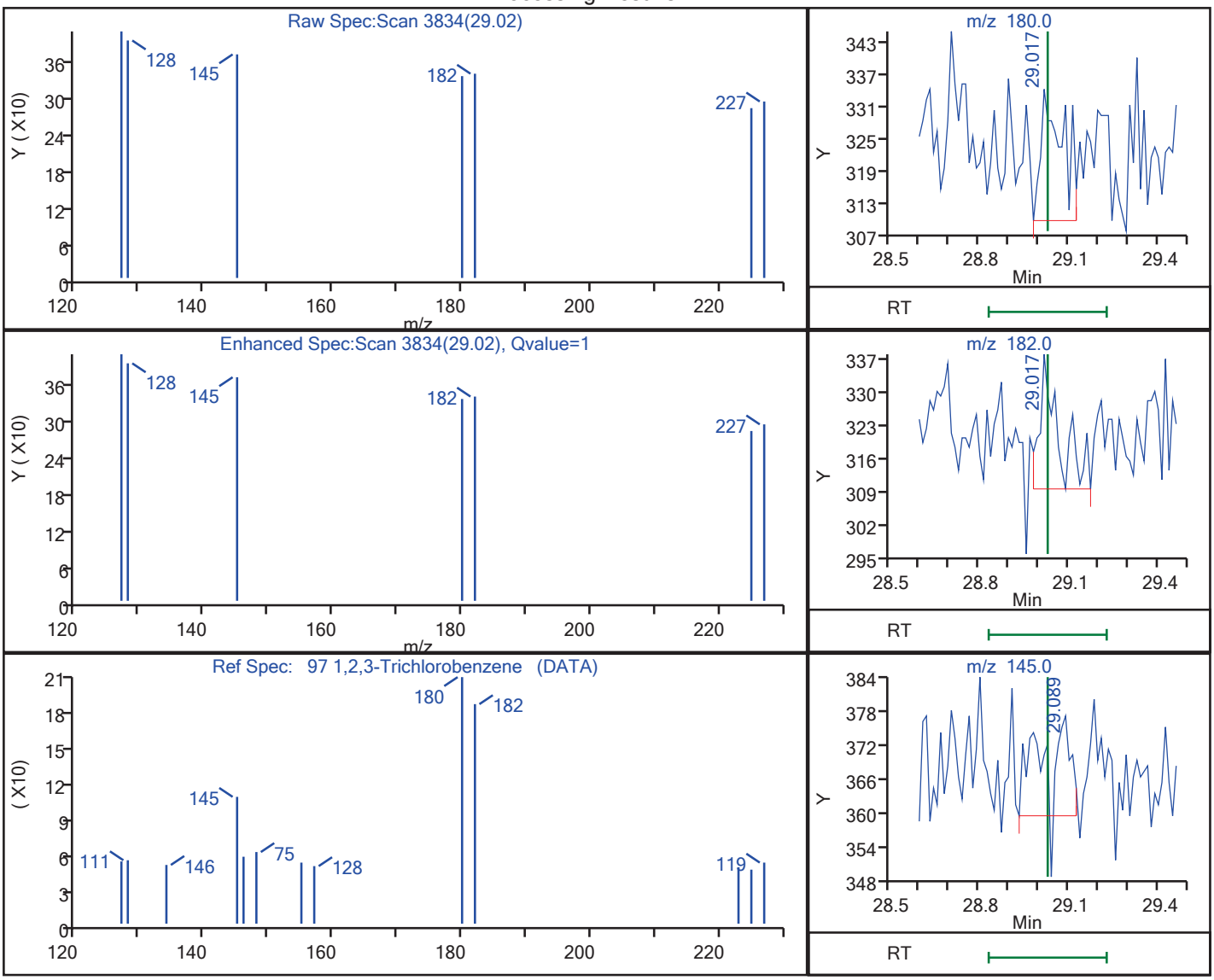
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 97 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.02 | 180.00 | 130 | 0.000589 |
| 29.02 | 182.00 | 131 | |
| 29.09 | 145.00 | 119 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

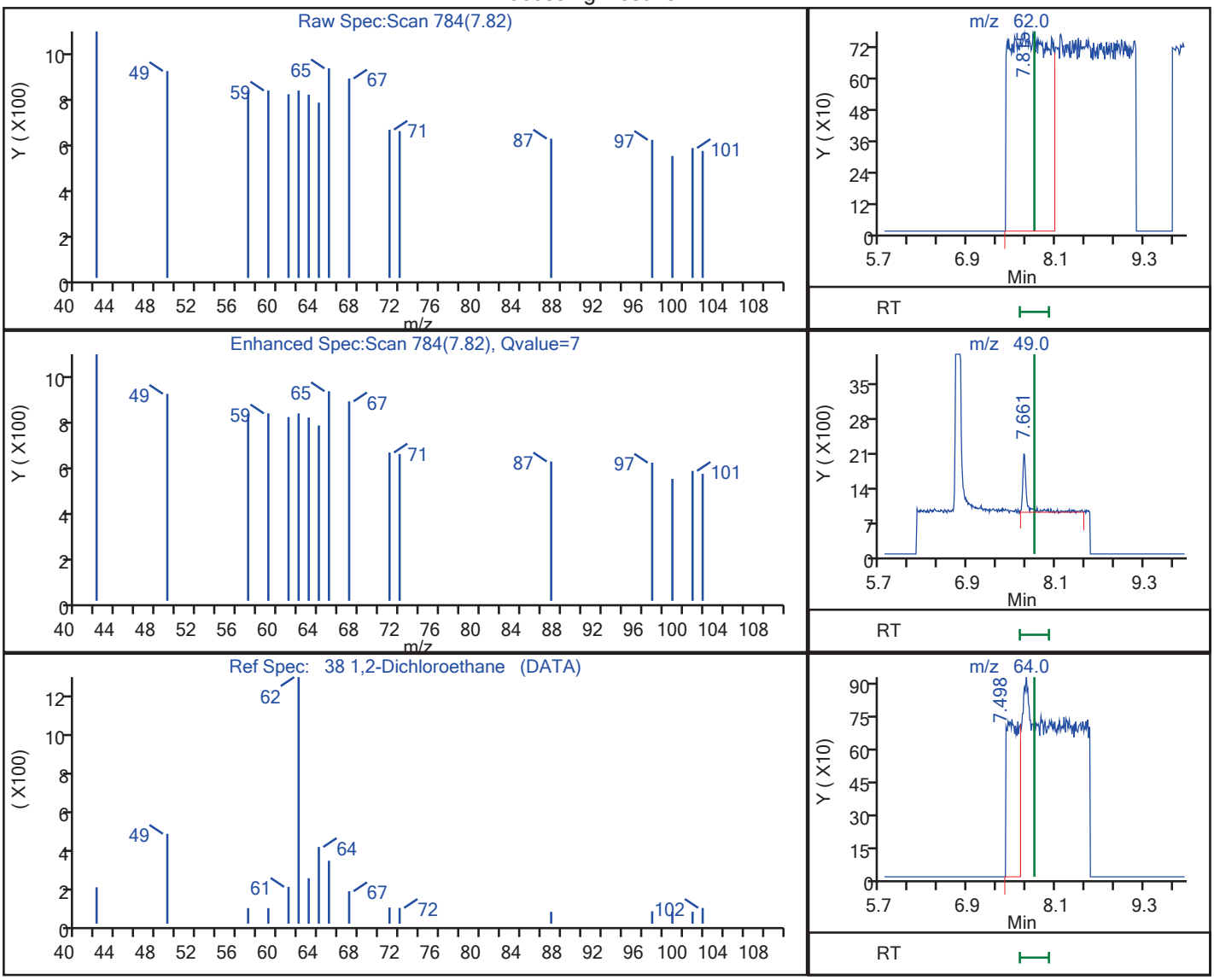
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 38 1,2-Dichloroethane, CAS: 107-06-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.82 | 62.00 | 29436 | 0.107620 |
| 7.66 | 49.00 | 4570 | |
| 7.50 | 64.00 | 8658 | |
| 7.67 | 63.00 | 8030 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

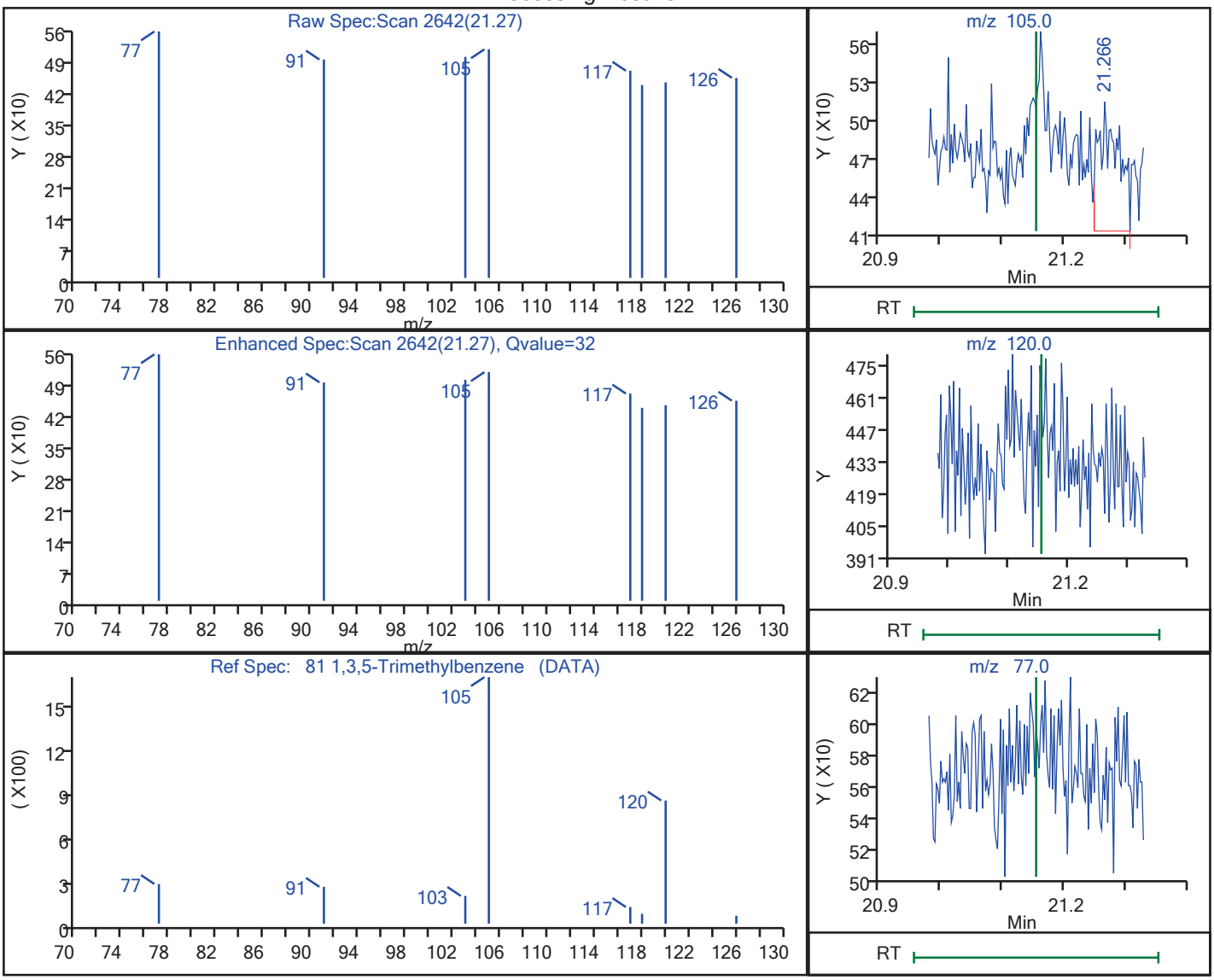
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 81 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 21.27 | 105.00 | 220 | 0.000953 |
| 21.15 | 120.00 | 0 | |
| 21.15 | 77.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

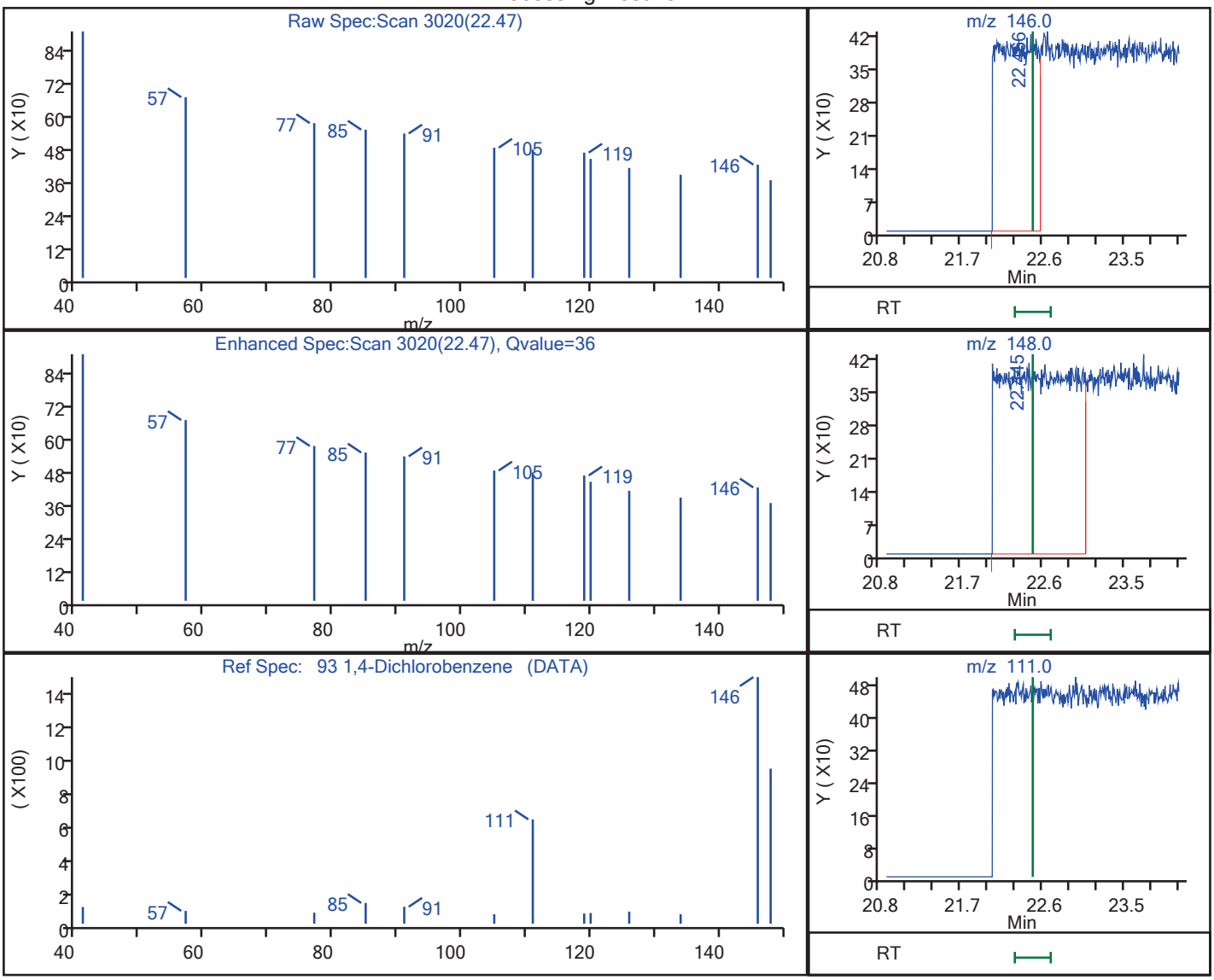
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 93 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 22.47 | 146.00 | 12221 | 0.052374 |
| 22.45 | 148.00 | 23515 | |
| 22.49 | 111.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

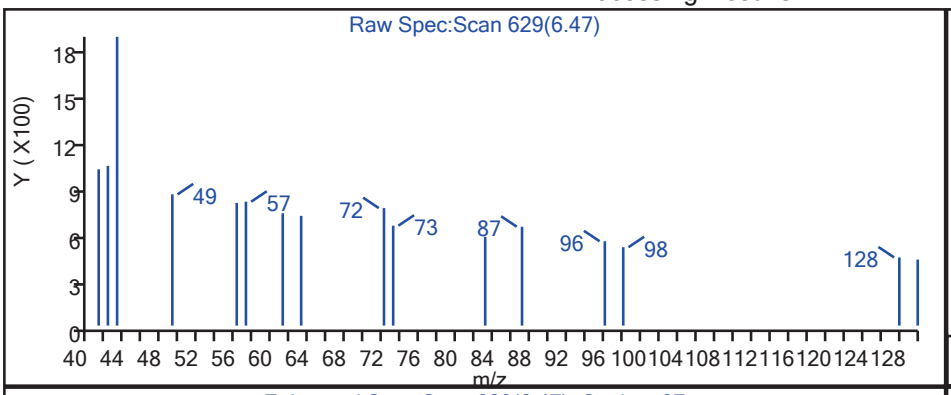
User Disabled Compound Report

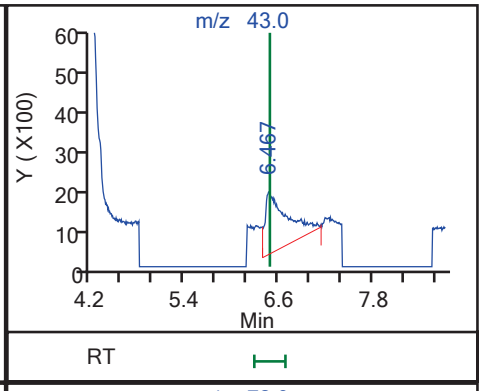
Eurofins Calscience LLC

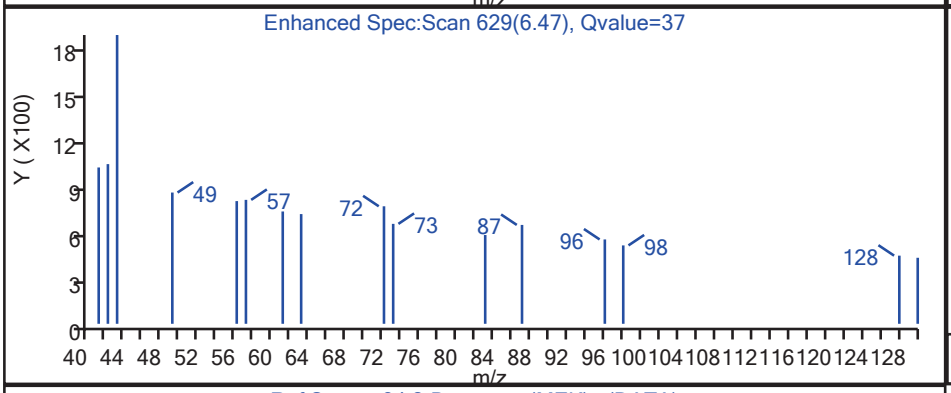
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

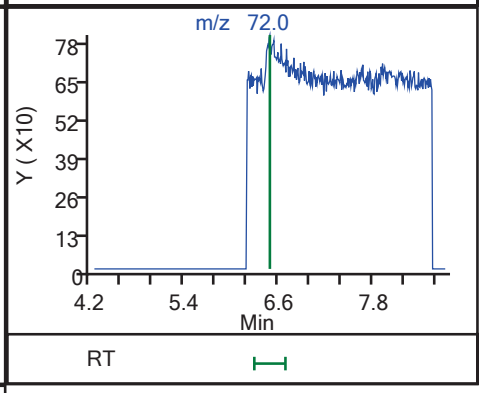
## 34 2-Butanone (MEK), CAS: 78-93-3

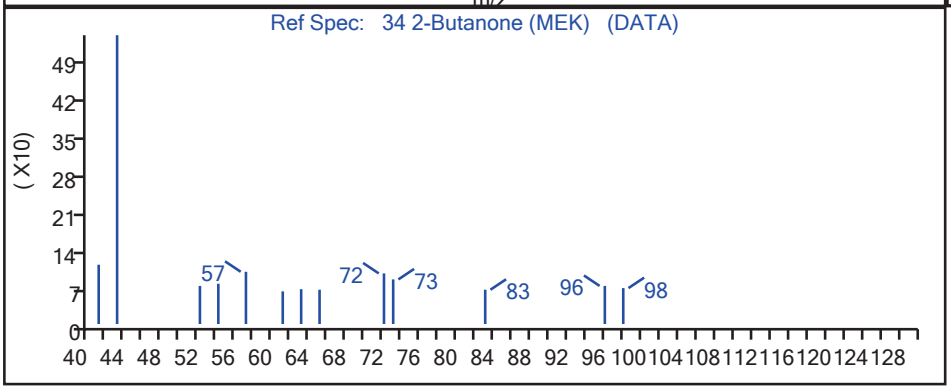
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.47 | 43.00 | 29779 | 0.111301 |
| 6.48 | 72.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

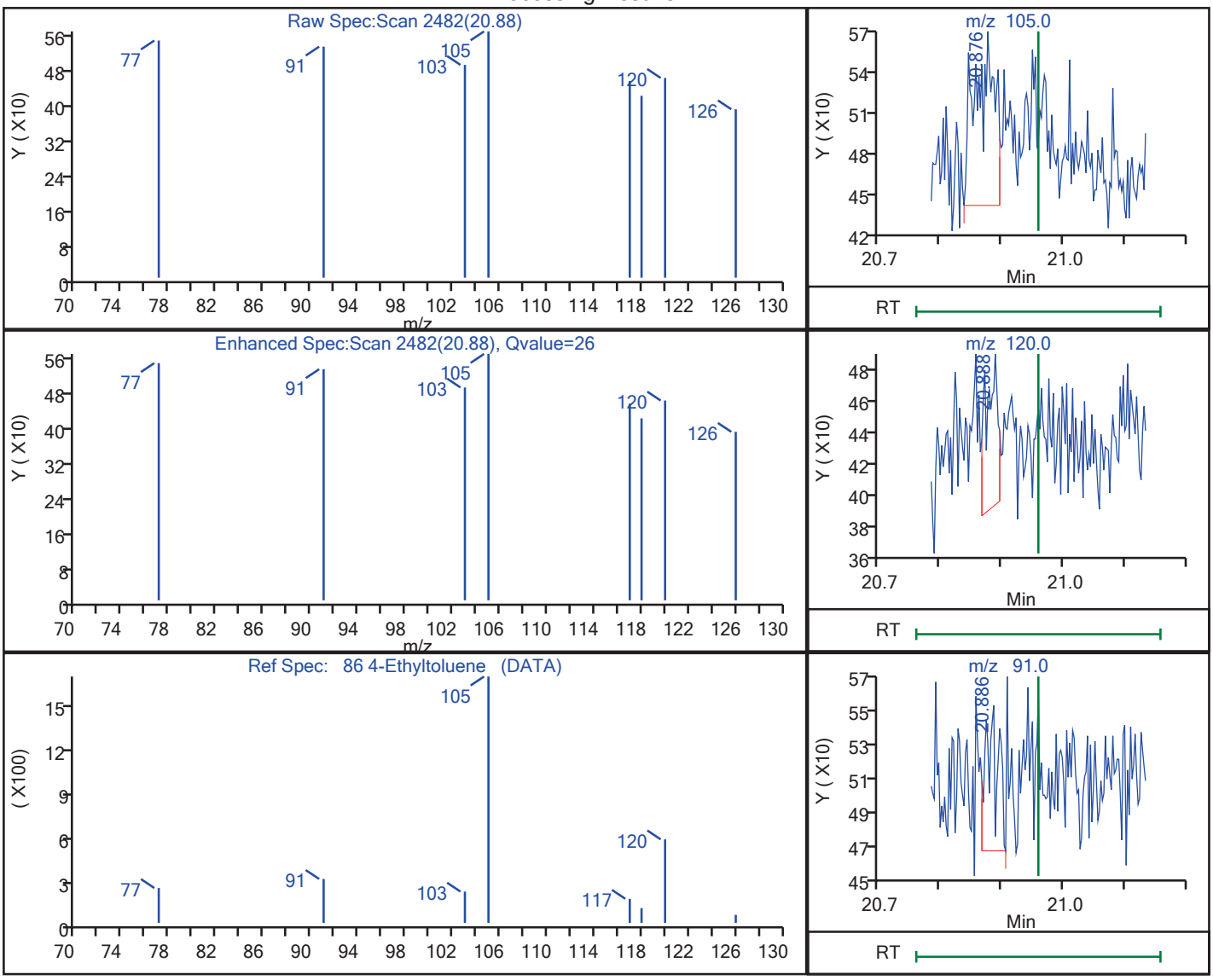
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 86 4-Ethyltoluene, CAS: 622-96-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 20.88 | 105.00 | 274 | 0.001072 |
| 20.89 | 120.00 | 123 | |
| 20.89 | 91.00 | 113 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

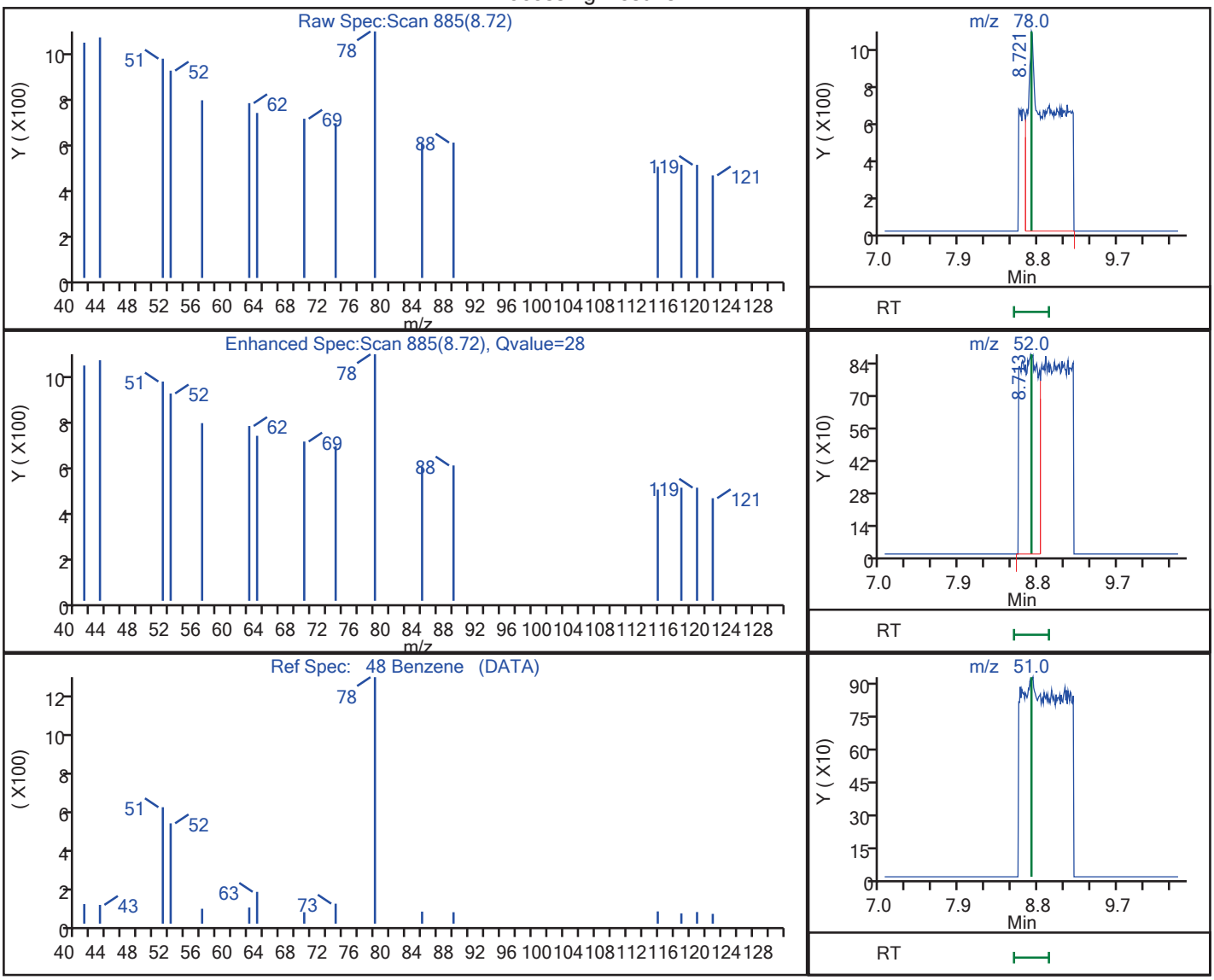
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 48 Benzene, CAS: 71-43-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.72 | 78.00 | 21367 | 0.068522 |
| 8.71 | 52.00 | 12755 | |
| 8.72 | 51.00 | 0 | |
| 8.72 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

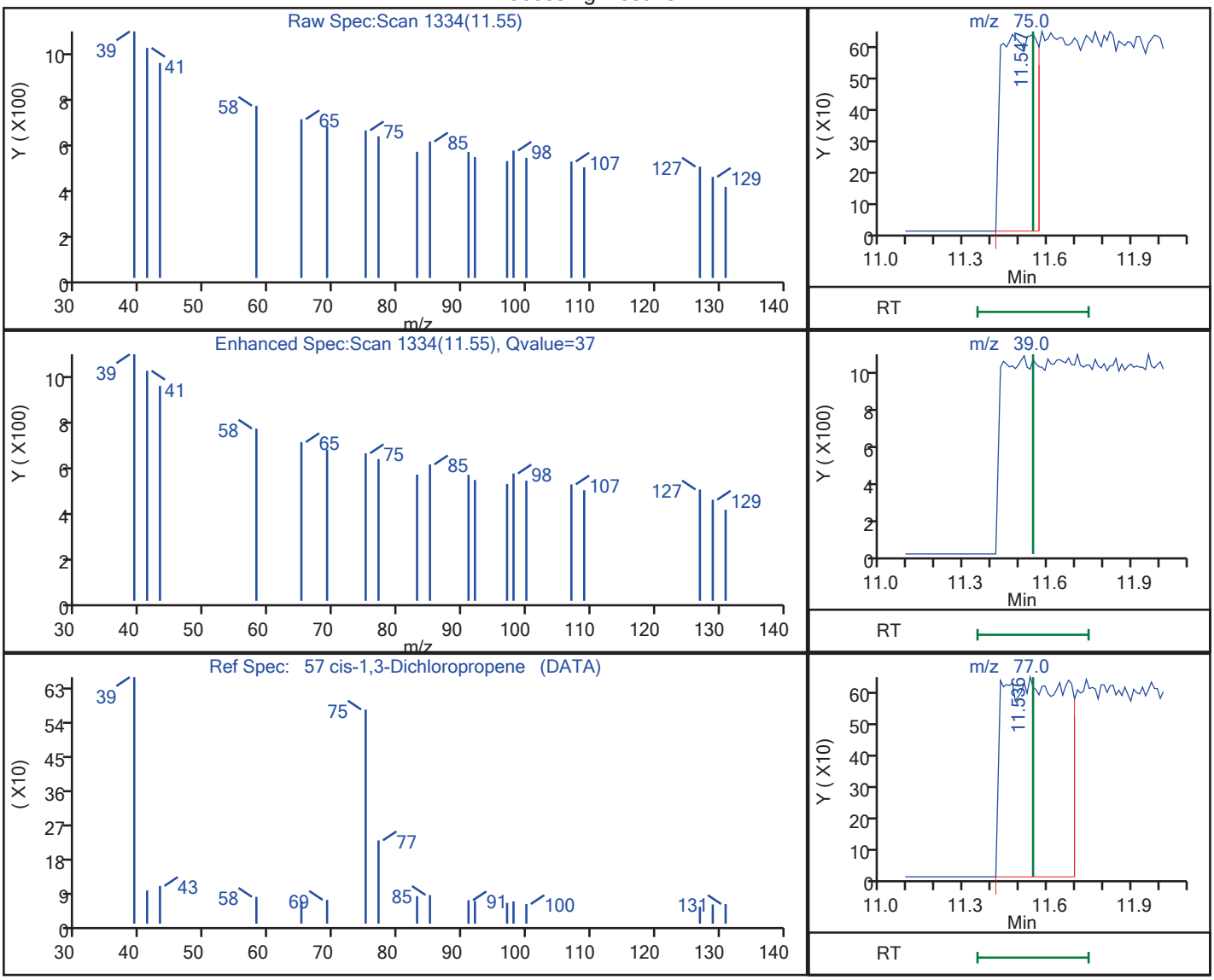
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 57 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 11.55 | 75.00 | 5709 | 0.036900 |
| 11.55 | 39.00 | 0 | |
| 11.54 | 77.00 | 10284 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
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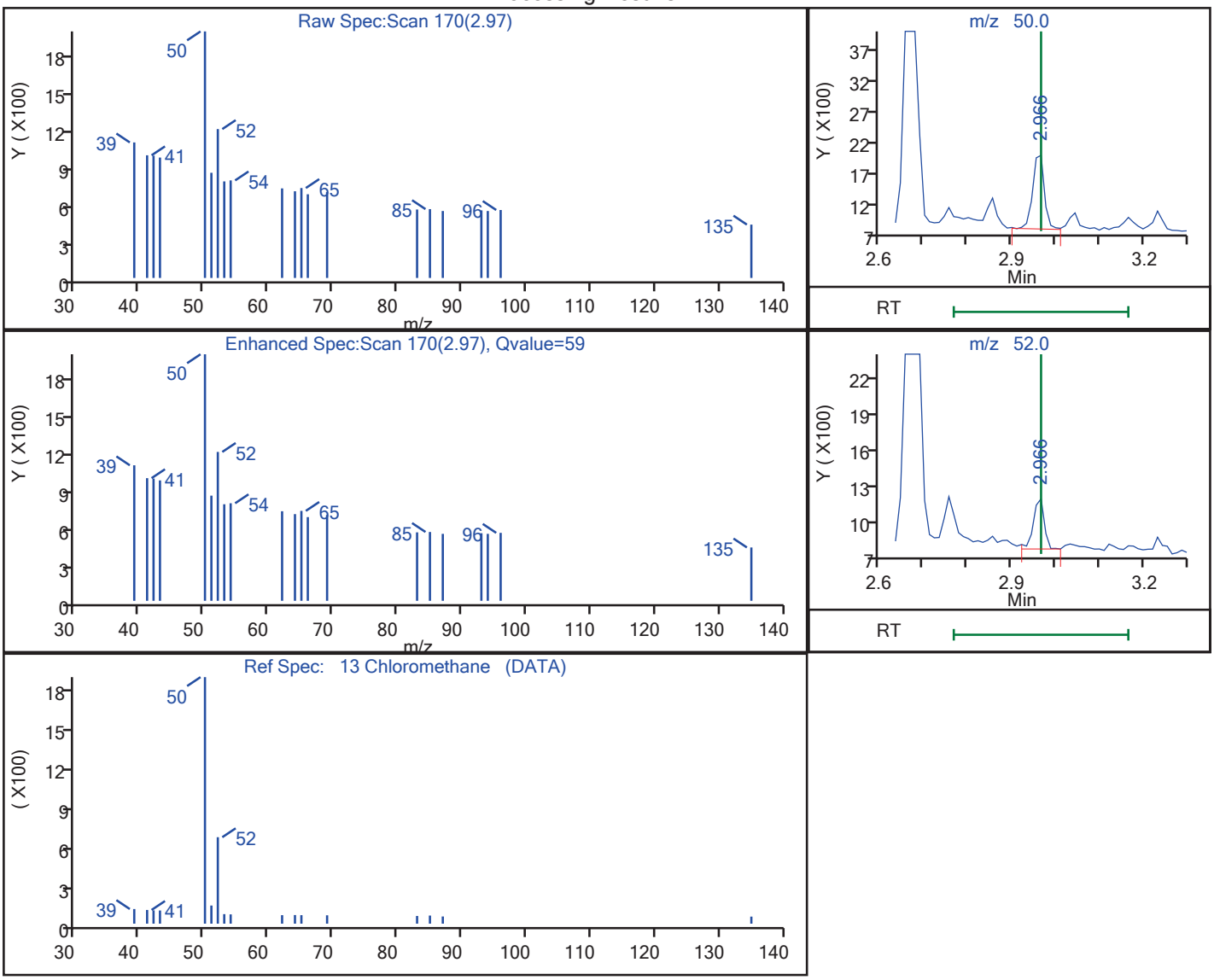
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 13 Chloromethane, CAS: 74-87-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.97 | 50.00 | 2212 | 0.010986 |
| 2.97 | 52.00 | 730 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

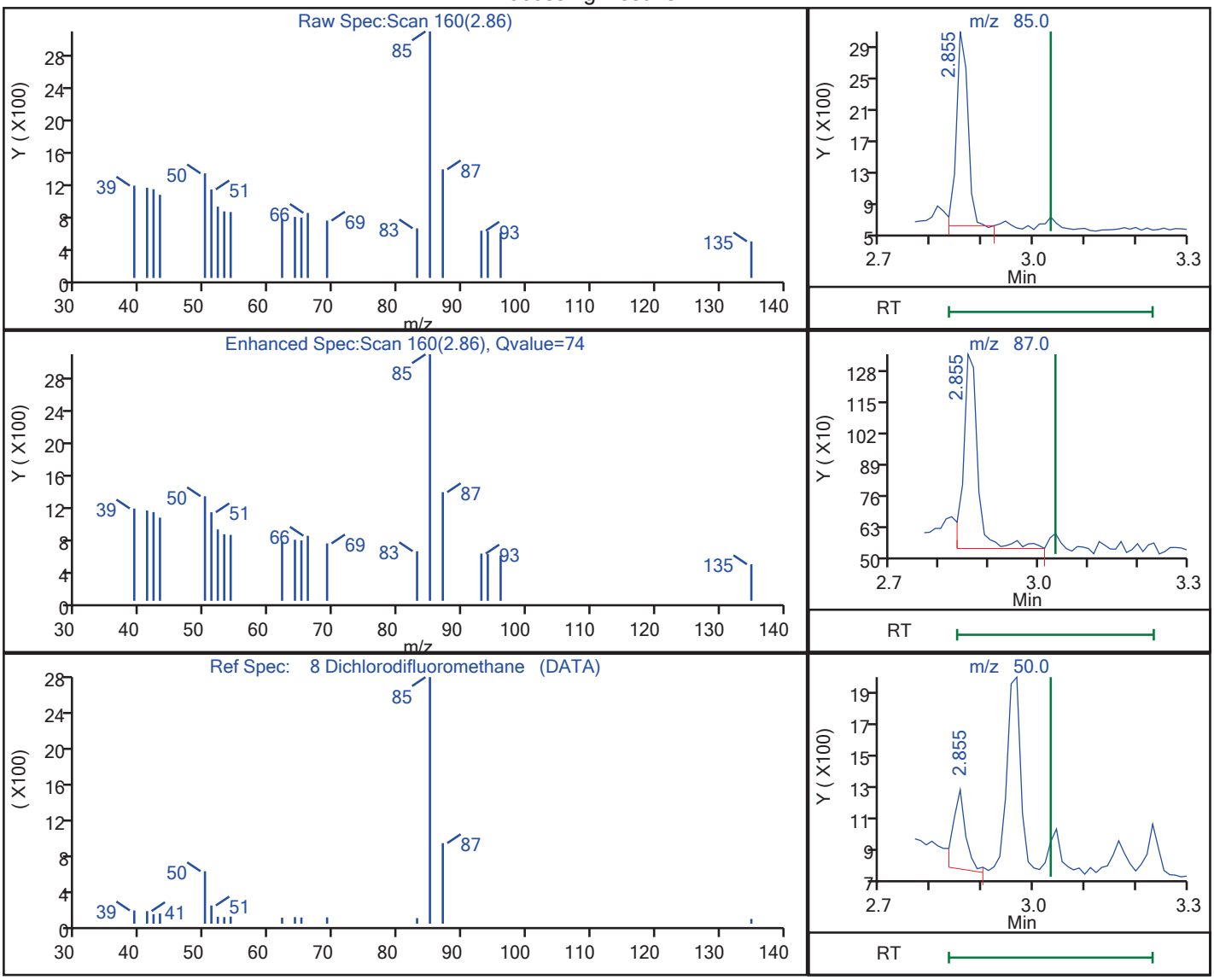
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 8 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.86 | 85.00 | 3793 | 0.006696 |
| 2.86 | 87.00 | 1626 | |
| 2.86 | 50.00 | 821 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

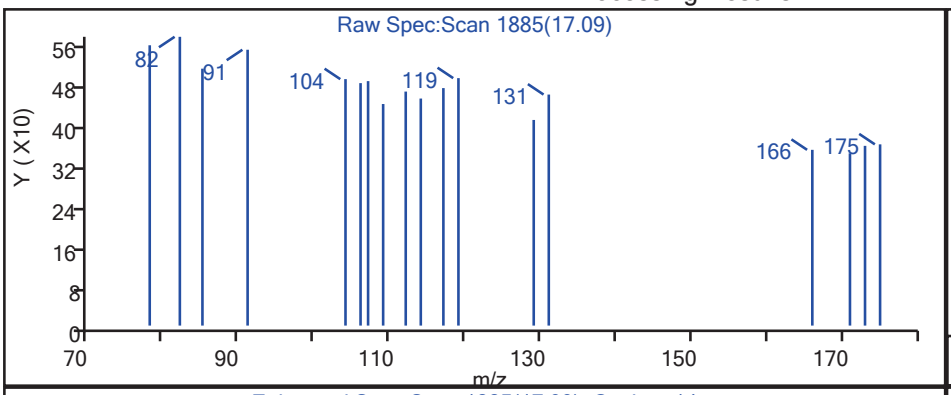
User Disabled Compound Report

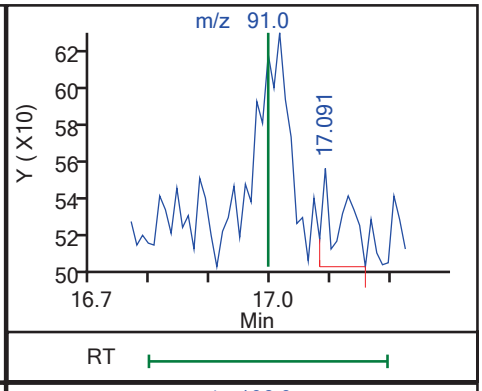
Eurofins Calscience LLC

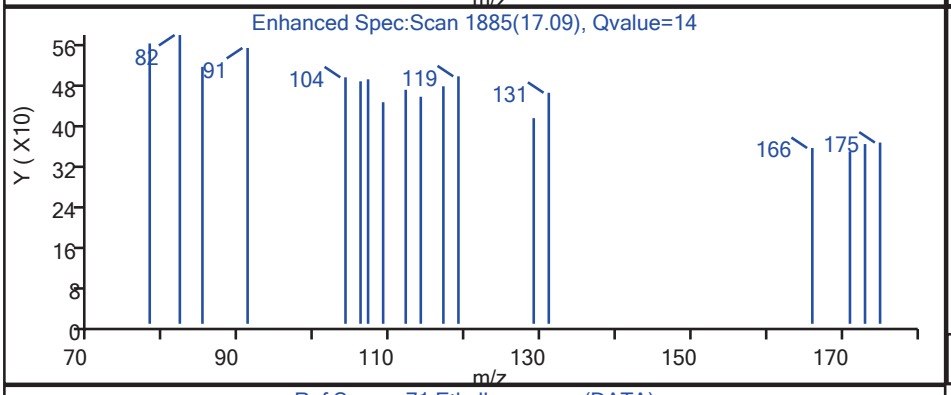
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

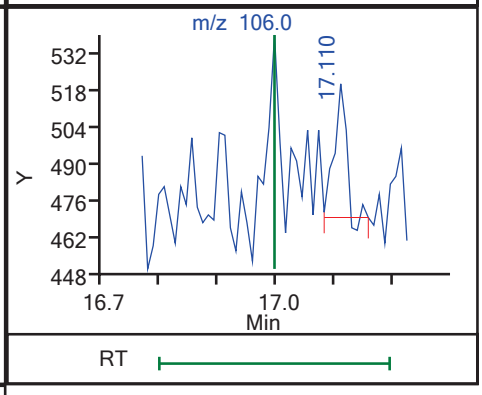
## 71 Ethylbenzene, CAS: 100-41-4

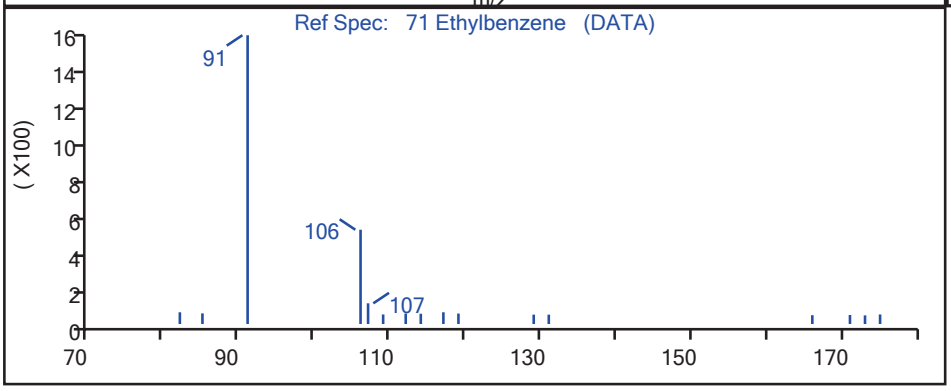
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 17.09 | 91.00 | 114 | 0.000424 |
| 17.11 | 106.00 | 74 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

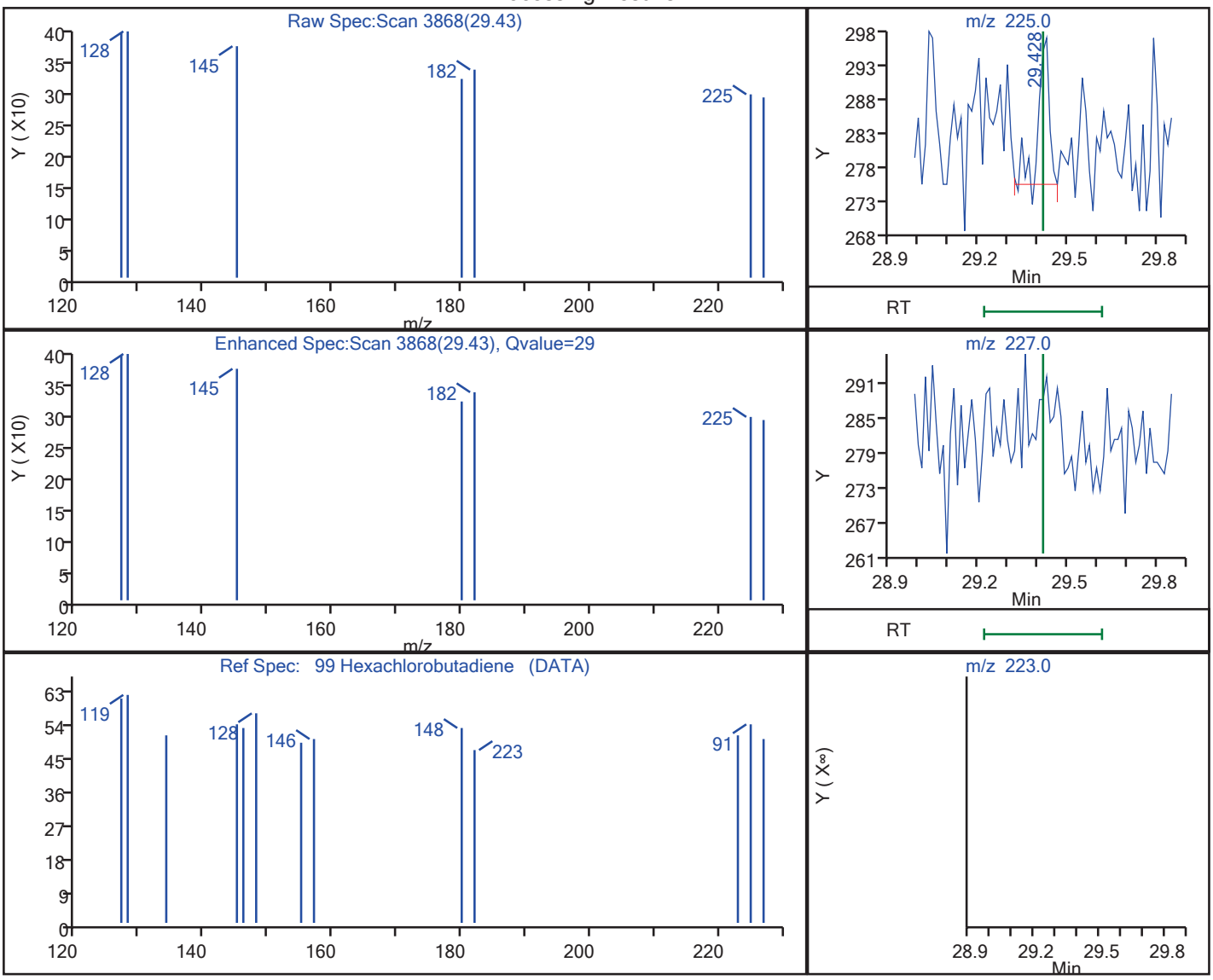
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 99 Hexachlorobutadiene, CAS: 87-68-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.43 | 225.00 | 56 | 0.000122 |
| 29.42 | 227.00 | 0 | |
| 29.42 | 223.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

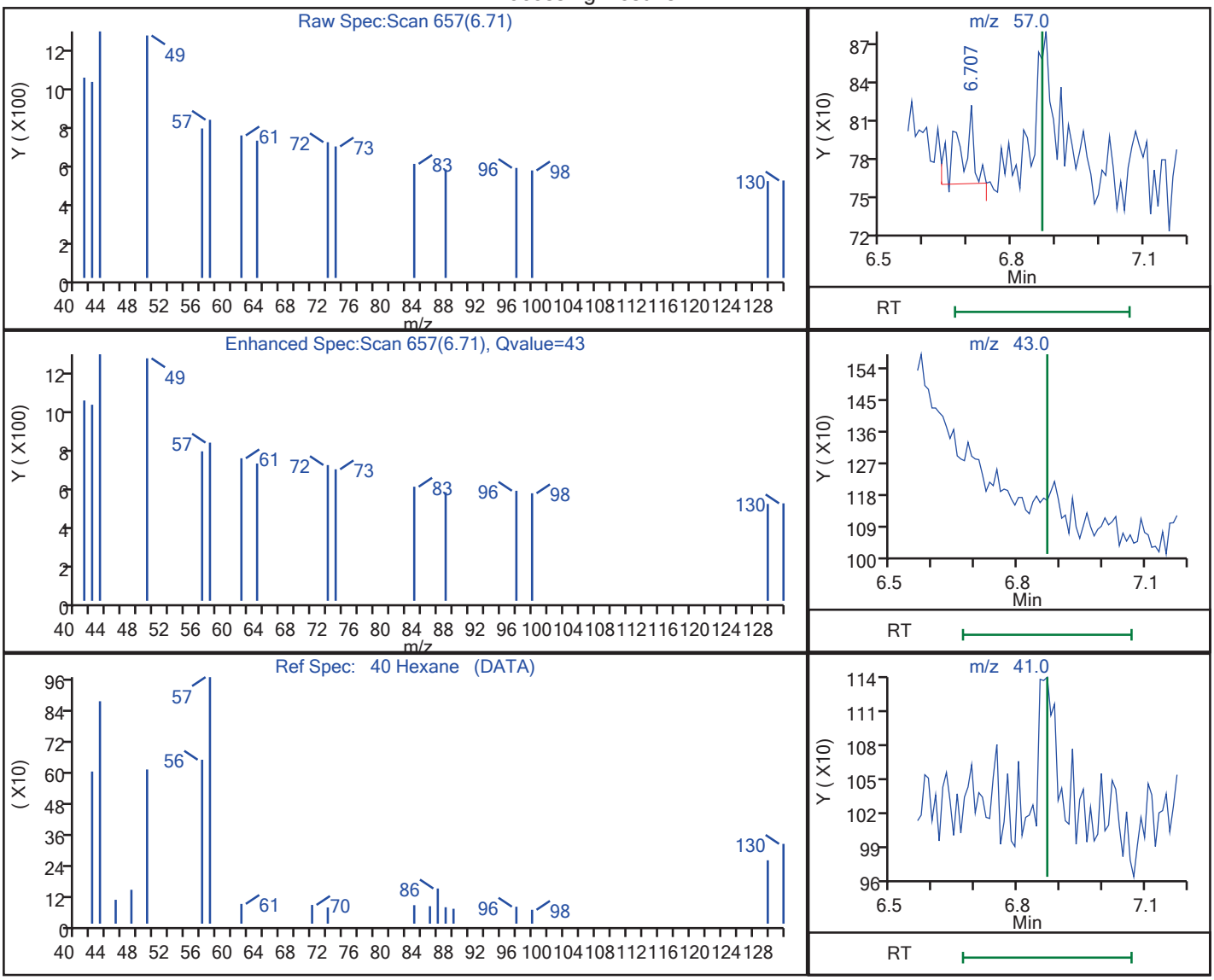
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 40 Hexane, CAS: 110-54-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.71 | 57.00 | 135 | 0.001101 |
| 6.87 | 43.00 | 0 | |
| 6.87 | 41.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

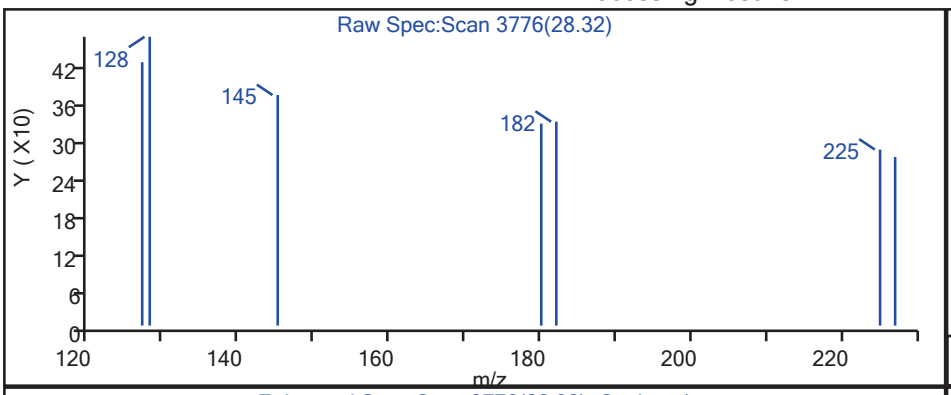
User Disabled Compound Report

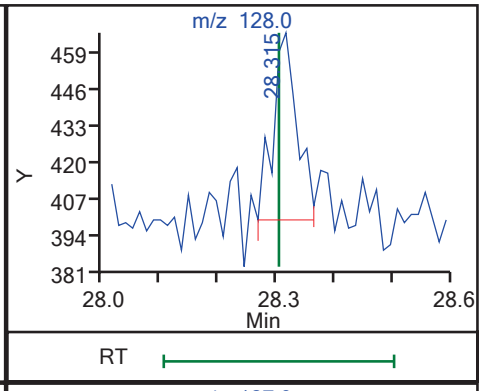
Eurofins Calscience LLC

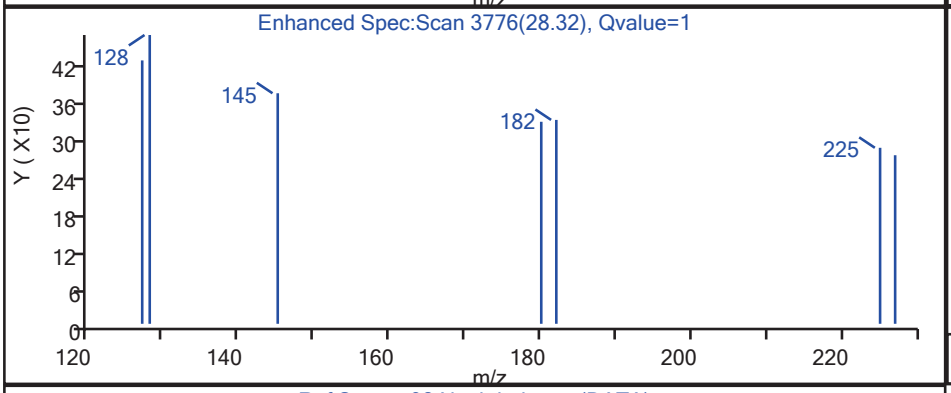
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

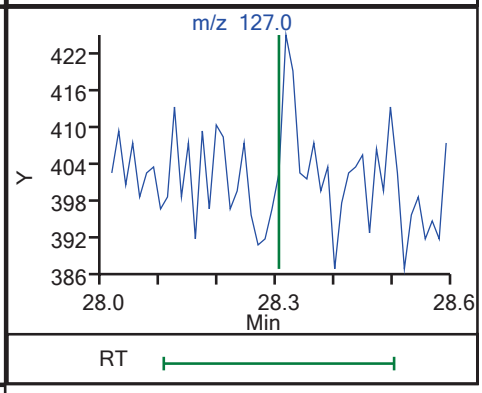
## 98 Naphthalene, CAS: 91-20-3

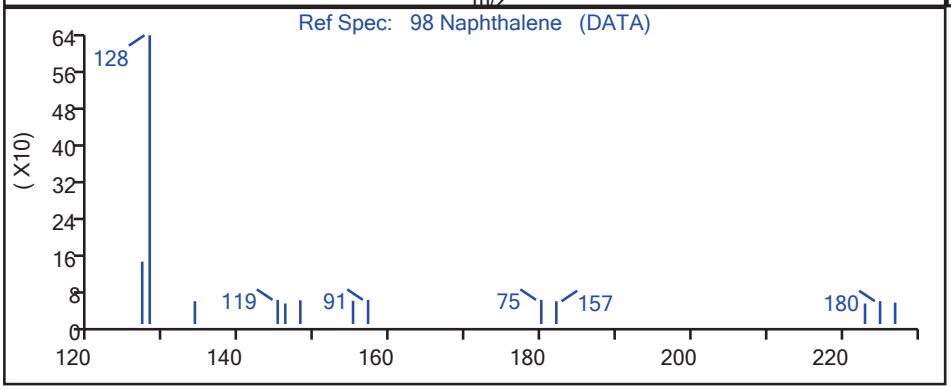
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 28.32 | 128.00 | 200 | 0.000556 |
| 28.30 | 127.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

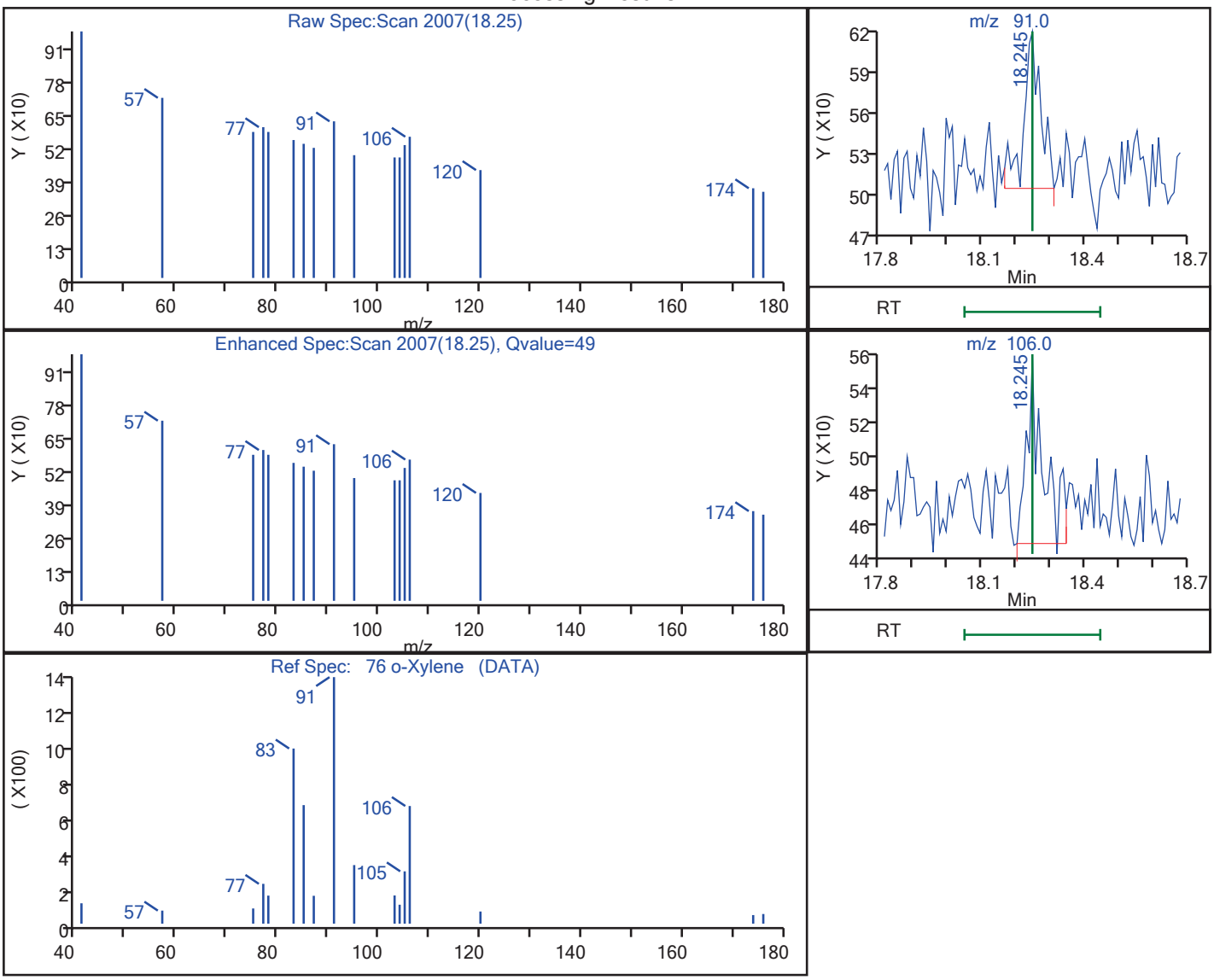
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 76 o-Xylene, CAS: 95-47-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.25 | 91.00 | 403 | 0.001832 |
| 18.25 | 106.00 | 366 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

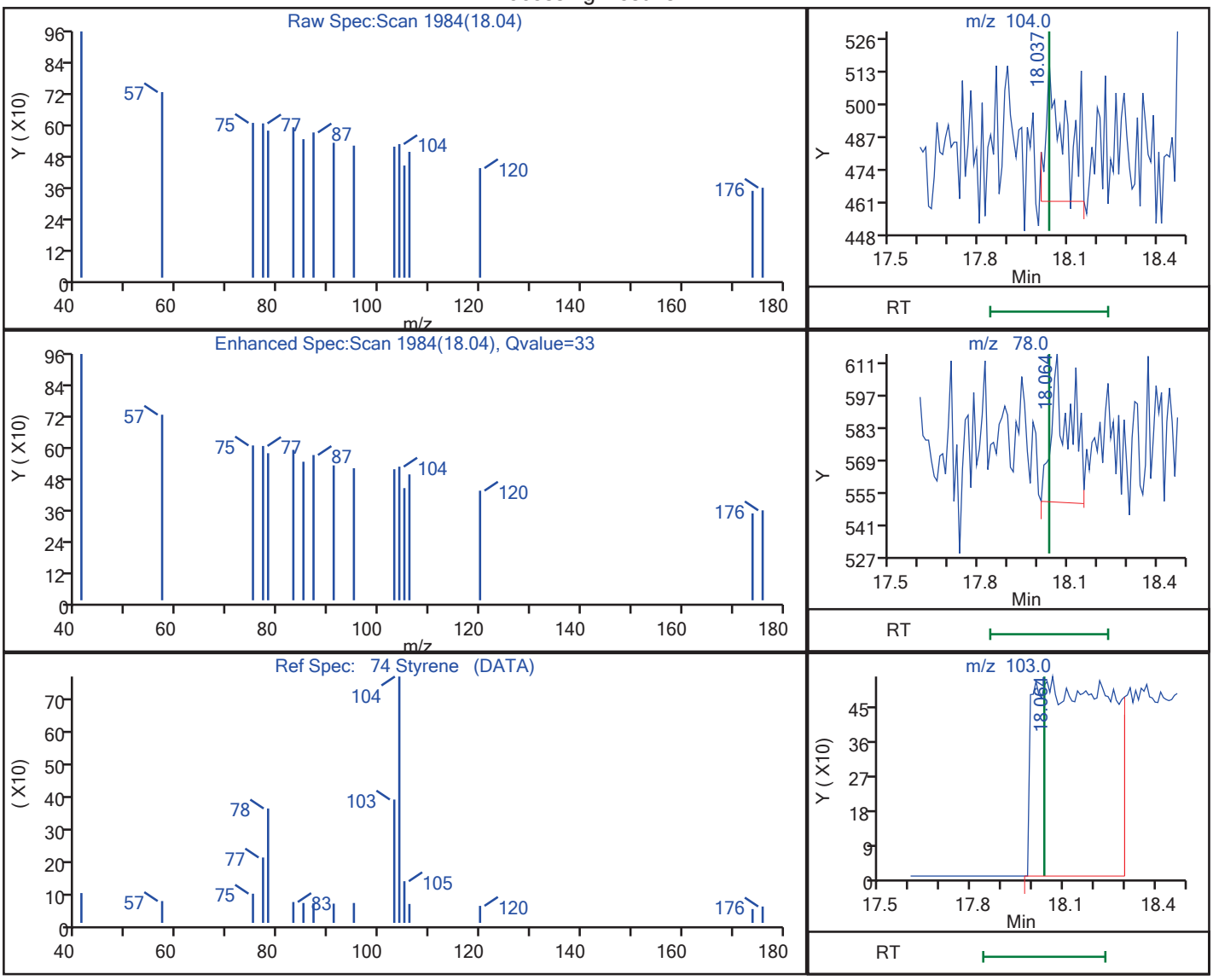
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 74 Styrene, CAS: 100-42-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.04 | 104.00 | 251 | 0.002071 |
| 18.06 | 78.00 | 282 | |
| 18.06 | 103.00 | 9231 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

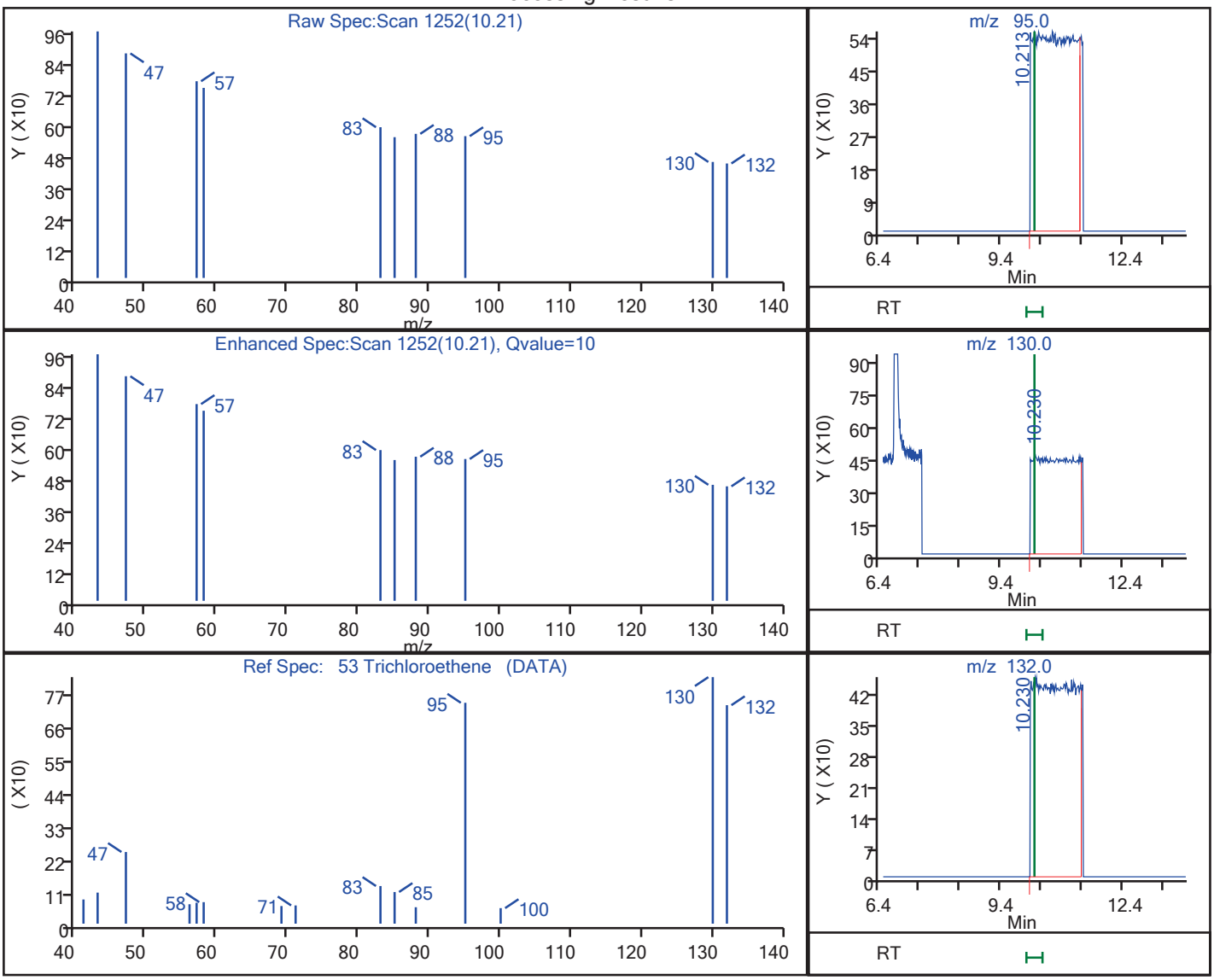
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 53 Trichloroethene, CAS: 79-01-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 10.21 | 95.00 | 39619 | 0.255189 |
| 10.23 | 130.00 | 33462 | |
| 10.23 | 132.00 | 33084 | |

Reviewer: rhoadesw, 16-Mar-2021 13:30:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

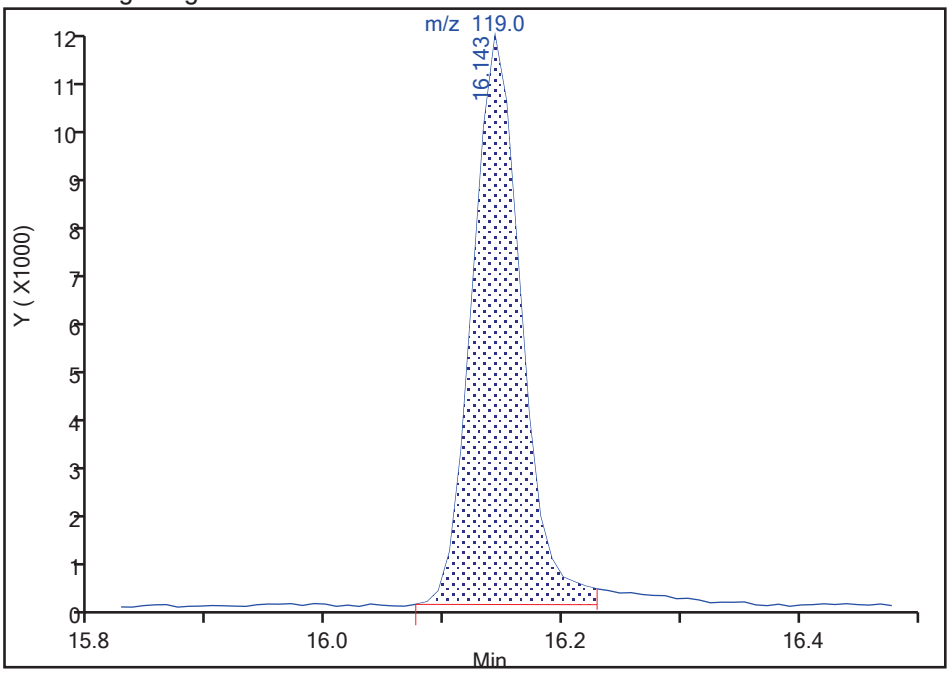
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## * 68 Chlorobenzene-d5, CAS: 3114-55-4

Signal: 2

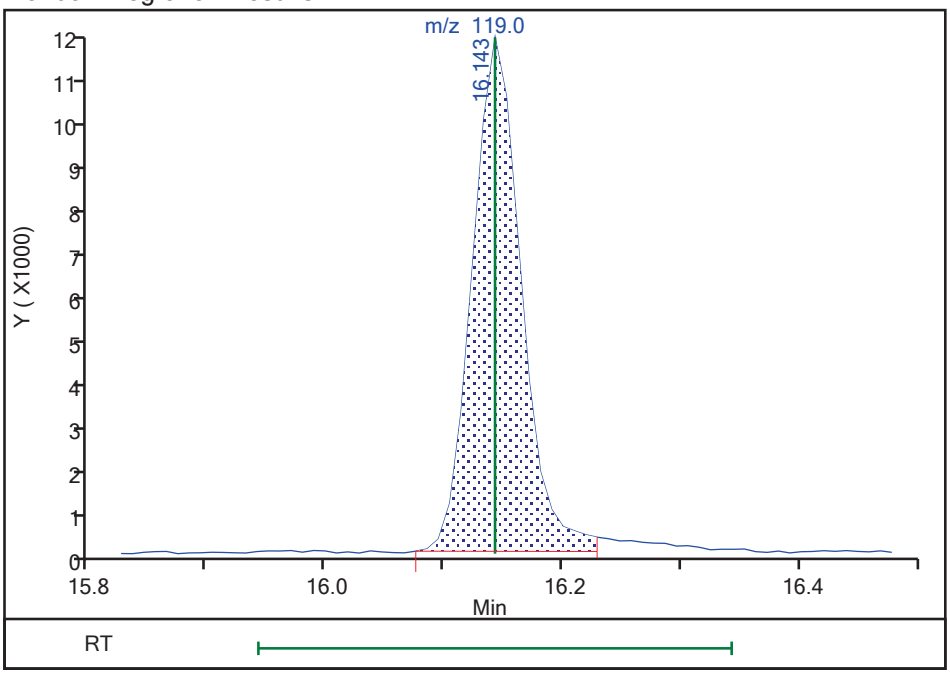
Processing Integration Results

RT: 16.14
Area: 31707
Amount: 0.500000
Amount Units: ppb v/v




Manual Integration Results

RT: 16.14
Area: 31707
Amount: 0.500000
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:30:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Calscience LLC

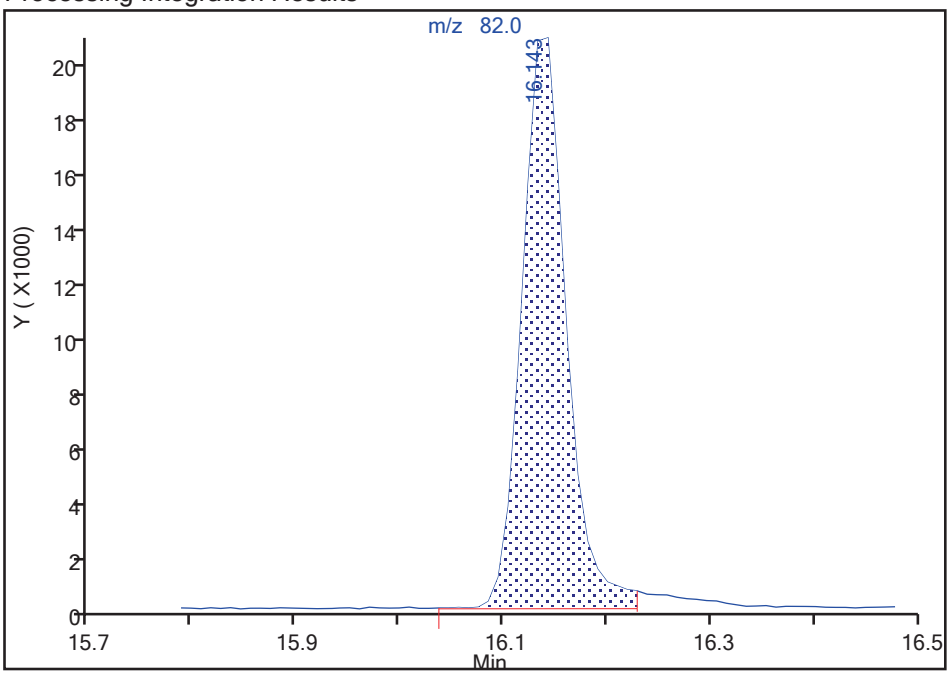
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR16.D | | | | |
| Injection Date: | 15-Mar-2021 22:37:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-4 | Lab Sample ID: | 570-53377-4 | | |
| Client ID: | D863 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 16 | Worklist Smp#: | 16 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## * 68 Chlorobenzene-d5, CAS: 3114-55-4

Signal: 3

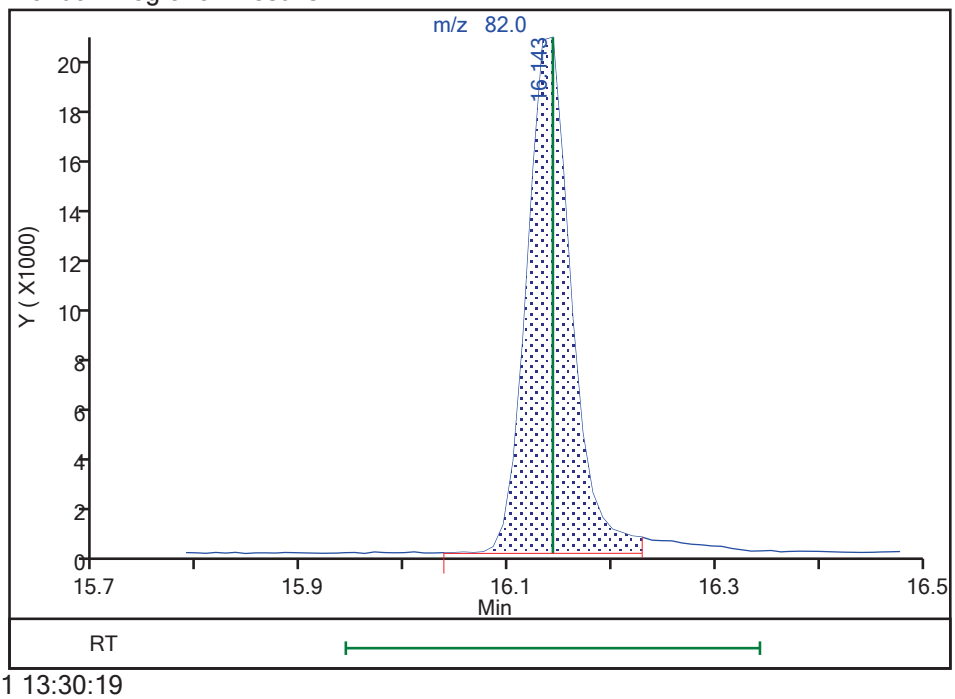
Processing Integration Results

RT: 16.14
Area: 60144
Amount: 0.500000
Amount Units: ppb v/v




Manual Integration Results

RT: 16.14
Area: 60144
Amount: 0.500000
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:30:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D690 | Lab Sample ID: 570-53377-5

Matrix: Air | Lab File ID: MMM15MAR15.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/15/2021 21:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.025 | 0.010 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 0.025 | 0.016 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.025 | 0.0091 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.025 | 0.015 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.025 | 0.012 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.025 | 0.013 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 0.25 | 0.11 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 0.050 | 0.042 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 0.050 | 0.0073 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 0.050 | 0.033 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 0.050 | 0.018 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.025 | 0.022 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.025 | 0.016 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.025 | 0.017 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.025 | 0.015 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.025 | 0.012 |
| 106-99-0 | 1,3-Butadiene | ND | | 0.025 | 0.013 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.025 | 0.014 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.025 | 0.013 |
| 123-91-1 | 1,4-Dioxane | ND | | 0.25 | 0.17 |
| 78-93-3 | 2-Butanone | ND | | 0.25 | 0.027 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.050 | 0.013 |
| 67-64-1 | Acetone | ND | | 0.50 | 0.41 |
| 71-43-2 | Benzene | ND | | 0.025 | 0.013 |
| 75-27-4 | Bromodichloromethane | ND | | 0.025 | 0.0098 |
| 74-83-9 | Bromomethane | ND | | 0.050 | 0.036 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.025 | 0.014 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.025 | 0.011 |
| 75-15-0 | Carbon disulfide | ND | | 0.25 | 0.16 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.050 | 0.040 |
| 108-90-7 | Chlorobenzene | ND | | 0.050 | 0.017 |
| 75-00-3 | Chloroethane | ND | | 0.025 | 0.020 |
| 67-66-3 | Chloroform | ND | | 0.025 | 0.012 |
| 74-87-3 | Chloromethane | ND | | 0.025 | 0.013 |
| 124-48-1 | Dibromochloromethane | ND | | 0.025 | 0.010 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D690 | Lab Sample ID: 570-53377-5

Matrix: Air | Lab File ID: MMM15MAR15.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/15/2021 21:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.025 | 0.010 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 0.025 | 0.0090 |
| 100-41-4 | Ethylbenzene | ND | | 0.025 | 0.012 |
| 87-68-3 | Hexachloro-1,3-butadiene | ND | | 0.10 | 0.050 |
| 110-54-3 | Hexane | ND | | 0.10 | 0.011 |
| 67-63-0 | Isopropanol | ND | | 0.25 | 0.13 |
| 75-09-2 | Methylene Chloride | ND | | 0.050 | 0.026 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 0.025 | 0.011 |
| 91-20-3 | Naphthalene | ND | | 0.050 | 0.033 |
| 95-47-6 | o-Xylene | ND | | 0.025 | 0.013 |
| 179601-23-1 | m,p-Xylene | ND | | 0.050 | 0.026 |
| 100-42-5 | Styrene | ND | | 0.025 | 0.0099 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.025 | 0.011 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 0.025 | 0.010 |
| 127-18-4 | Tetrachloroethene | ND | | 0.025 | 0.014 |
| 108-88-3 | Toluene | ND | | 0.050 | 0.015 |
| 1330-20-7 | Xylenes, Total | ND | | 0.075 | 0.039 |
| 79-01-6 | Trichloroethene | ND | | 0.025 | 0.018 |
| 75-69-4 | Trichlorofluoromethane | ND | | 0.025 | 0.0082 |
| 75-01-4 | Vinyl chloride | ND | | 0.050 | 0.023 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 101 | | 61-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 76 | | 59-130 |
| 2037-26-5 | Toluene-d8 (Surr) | 86 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D
Lims ID: 570-53377-A-5
Client ID: D690
Sample Type: Client
Inject. Date: 15-Mar-2021 21:48:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53377-a-5
Misc. Info.: A_SIMIS/SS_00005
Operator ID: 12GR Instrument ID: GCMSMMM

Method: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\AIRMS_GCMSMMM.m
Limit Group: MSV - TO15 SIM TO15 SIMLL
Last Update: 16-Mar-2021 13:38:16 Calib Date: 09-Feb-2021 18:41:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSMMM\20210210-38552.b\MMM09FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: rhoadesw Date: 16-Mar-2021 13:29:36

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 11 1,1-Difluoroethane | 51 | | 2.755 | | | | ND | U |
| 13 Chloromethane | 50 | | 2.966 | | | | ND | U |
| 8 Dichlorodifluoromethane | 85 | | 3.033 | | | | ND | U |
| 15 Vinyl chloride | 62 | | 3.111 | | | | ND | |
| 6 Butadiene | 54 | | 3.200 | | | | ND | |
| 14 Bromomethane | 94 | | 3.378 | | | | ND | |
| 18 Chloroethane | 64 | | 3.493 | | | | ND | |
| 23 Trichlorofluoromethane | 101 | 4.032 | 4.033 | -0.001 | 50 | 1406 | 0.002645 | |
| 20 Acetone | 43 | 4.062 | 4.052 | 0.010 | 25 | 17985 | 0.0455 | |
| 21 Isopropyl alcohol | 45 | 4.251 | 4.259 | -0.008 | 5 | 23321 | 0.0712 | M |
| 24 1,1-Dichloroethene | 61 | | 4.522 | | | | ND | |
| 25 Methylene Chloride | 84 | 4.612 | 4.612 | 0.000 | 36 | 4468 | 0.0201 | |
| 31 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 4.867 | | | | ND | U |
| 29 1,2-Dichloro-1,1,2,2-tetrafluoro | 151 | | 4.867 | | | | ND | |
| 30 Carbon disulfide | 76 | | 4.872 | | | | ND | |
| 26 trans-1,2-Dichloroethene | 96 | | 5.483 | | | | ND | |
| 32 1,1-Dichloroethane | 63 | | 5.684 | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 5.900 | | | | ND | |
| 34 2-Butanone (MEK) | 43 | | 6.484 | | | | ND | U |
| 35 cis-1,2-Dichloroethene | 96 | | 6.587 | | | | ND | |
| * 36 Chlorobromomethane (IS) | 130 | 6.758 | 6.758 | 0.000 | 78 | 37972 | 0.5000 | |
| 40 Hexane | 57 | | 6.869 | | | | ND | U |
| 39 Chloroform | 83 | | 6.920 | | | | ND | |
| $ 42 1,2-Dichloroethane-d4 (Surr) | 65 | 7.670 | 7.670 | 0.000 | 95 | 85613 | 0.5039 | |
| 38 1,2-Dichloroethane | 62 | | 7.806 | | | | ND | U |
| 45 1,1,1-Trichloroethane | 97 | | 8.132 | | | | ND | |
| 48 Benzene | 78 | | 8.721 | | | | ND | U |
| 49 Carbon tetrachloride | 117 | | 8.927 | | | | ND | |
| * 50 1,4-Difluorobenzene | 114 | 9.267 | 9.267 | 0.000 | 63 | 128140 | 0.5000 | |
| 41 1,2-Dichloropropane | 63 | | 9.860 | | | | ND | |
| 52 Dichlorobromomethane | 83 | | 10.127 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 53 Trichloroethene | 95 | | 10.213 | | | | ND | |
| 54 1,4-Dioxane | 57 | | 10.761 | | | | ND | |
| 57 cis-1,3-Dichloropropene | 75 | | 11.547 | | | | ND | U |
| 60 trans-1,3-Dichloropropene | 75 | | 12.399 | | | | ND | |
| 61 1,1,2-Trichloroethane | 83 | | 12.623 | | | | ND | |
| $ 63 Toluene-d8 (Surr) | 98 | 12.932 | 12.932 | 0.000 | 98 | 103288 | 0.4297 | |
| 64 Toluene | 91 | | 13.092 | | | | ND | U |
| 66 Chlorodibromomethane | 129 | | 13.731 | | | | ND | U |
| 59 Ethylene Dibromide | 107 | | 14.136 | | | | ND | U |
| 67 Tetrachloroethene | 166 | | 15.012 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 16.143 | 16.143 | 0.000 | 95 | 99423 | 0.5000 | |
| 69 Chlorobenzene | 112 | | 16.219 | | | | ND | U |
| 71 Ethylbenzene | 91 | | 16.995 | | | | ND | U |
| 72 m-Xylene & p-Xylene | 91 | | 17.330 | | | | ND | |
| 74 Styrene | 104 | | 18.037 | | | | ND | U |
| 75 1,1,2,2-Tetrachloroethane | 83 | | 18.209 | | | | ND | U |
| 76 o-Xylene | 91 | | 18.245 | | | | ND | U |
| 77 1,2,3-Trichloropropane | 75 | | 18.472 | | | | ND | |
| $ 79 4-Bromofluorobenzene (Surr) | 95 | 19.143 | 19.143 | 0.000 | 99 | 55792 | 0.3817 | |
| 86 4-Ethyltoluene | 105 | | 20.959 | | | | ND | U |
| 81 1,3,5-Trimethylbenzene | 105 | | 21.154 | | | | ND | U |
| 85 1,2,4-Trimethylbenzene | 105 | | 22.073 | | | | ND | |
| 92 1,3-Dichlorobenzene | 146 | | 22.305 | | | | ND | |
| 93 1,4-Dichlorobenzene | 146 | | 22.487 | | | | ND | |
| 89 1,2-Dichlorobenzene | 146 | | 23.286 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 28.061 | | | | ND | |
| 98 Naphthalene | 128 | | 28.303 | | | | ND | U |
| 97 1,2,3-Trichlorobenzene | 180 | | 29.029 | | | | ND | U |
| 99 Hexachlorobutadiene | 225 | | 29.416 | | | | ND | U |
| 102 Xylenes, Total | 1 | | 0.000 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

## Reagents:

A_Sim IS/SS_00005 Amount Added: 100.00 Units: mL Run Reagent

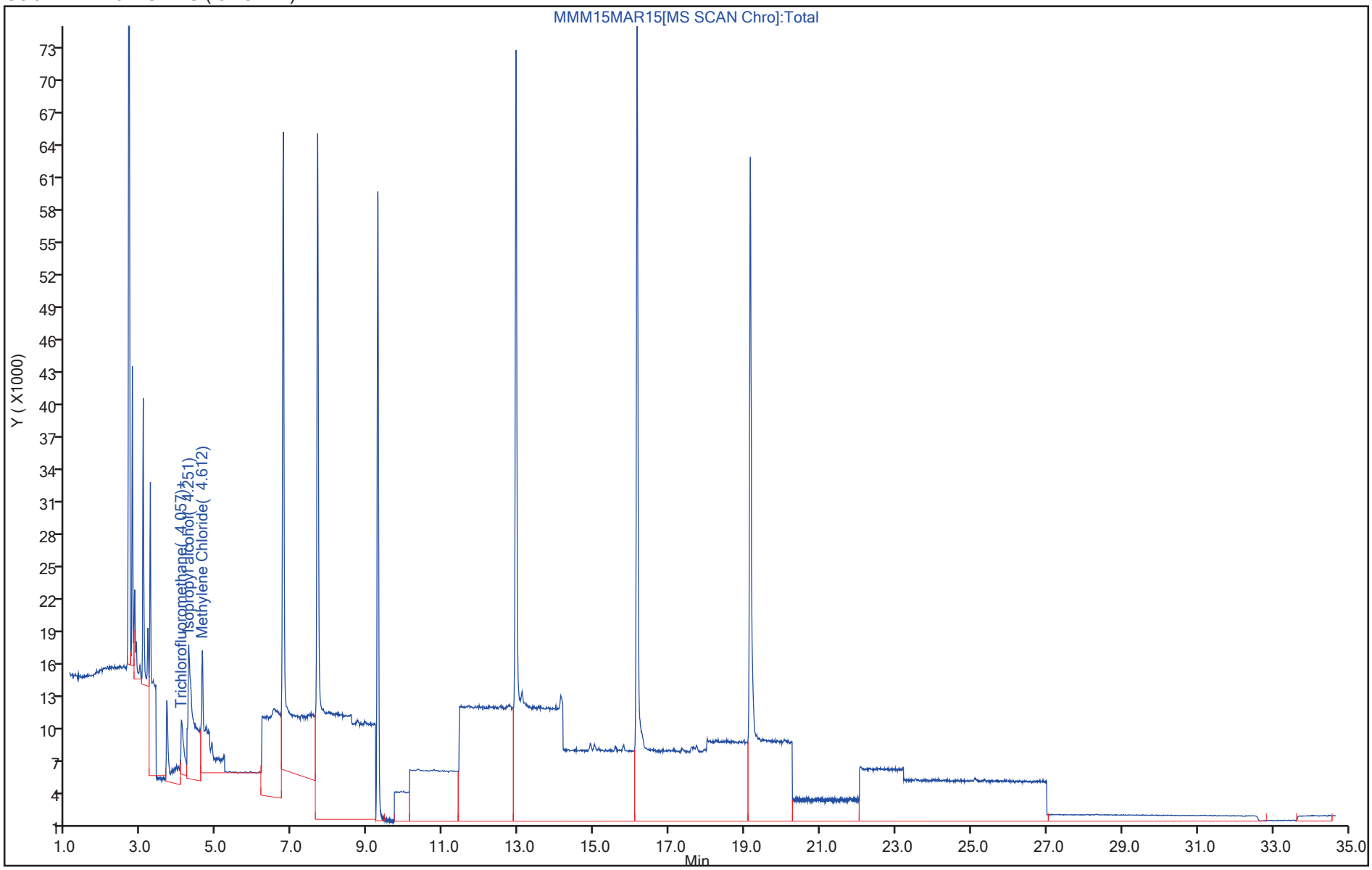
Report Date: 16-Mar-2021 13:38:43 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | Operator ID: | 12GR |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | Worklist Smp#: | 15 |
| Client ID: | D690 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 15 |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |

Column: Rxi-624Sil MS ( 0.18 mm)



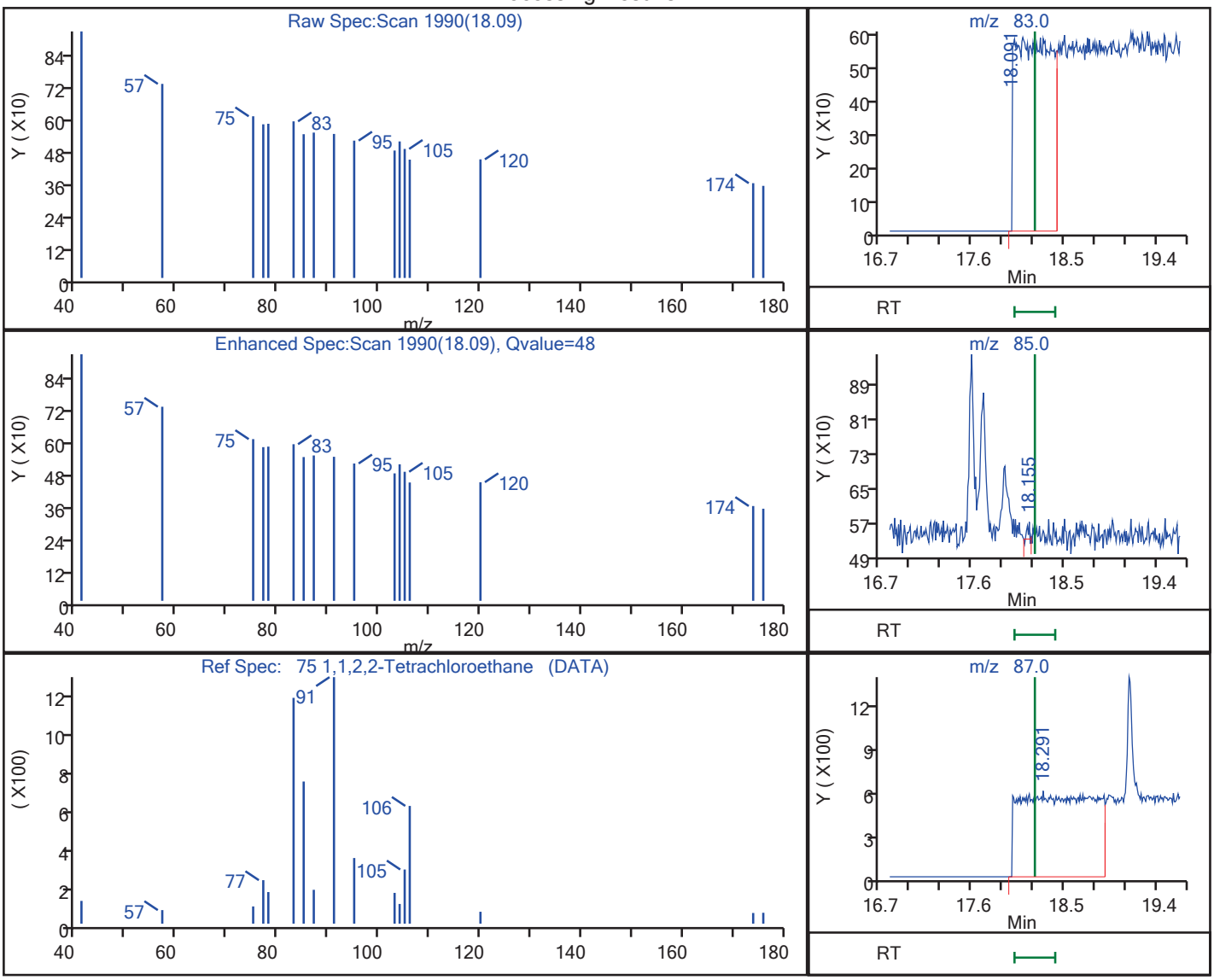
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 75 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.09 | 83.00 | 14812 | 0.031907 |
| 18.15 | 85.00 | 48 | |
| 18.29 | 87.00 | 29336 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

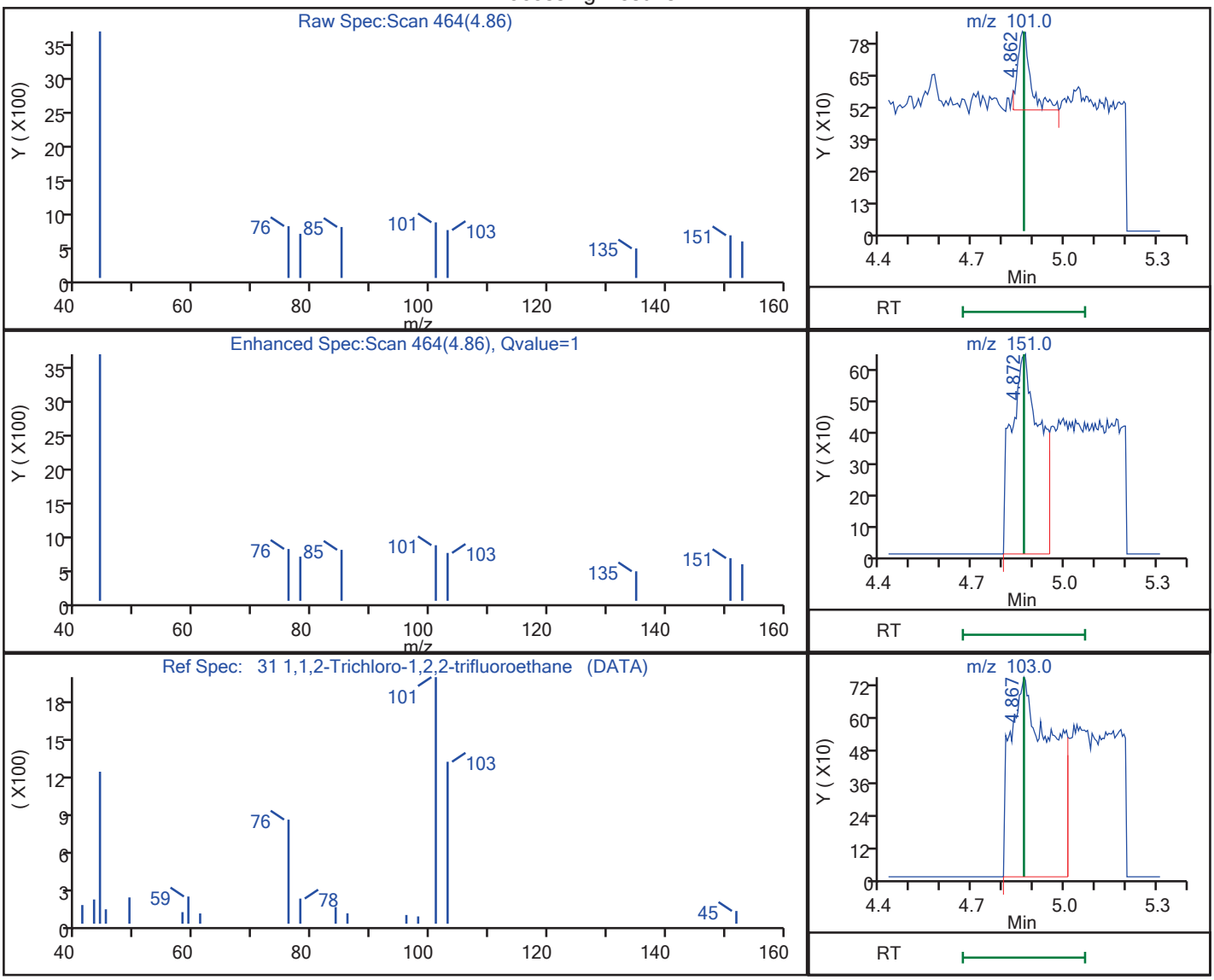
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 31 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.86 | 101.00 | 969 | 0.002180 |
| 4.87 | 151.00 | 4255 | |
| 4.87 | 103.00 | 7161 | |
| 4.87 | 153.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
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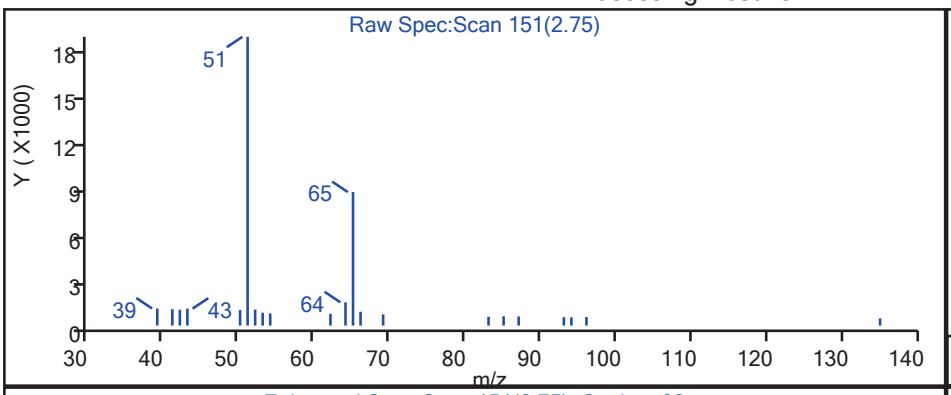
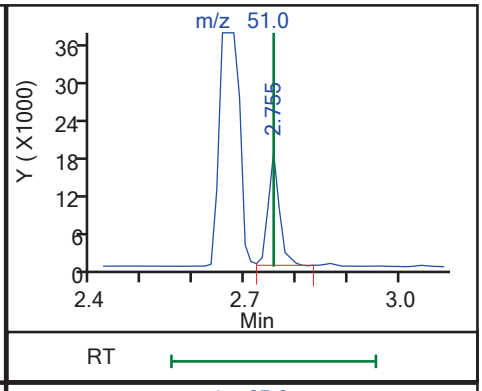
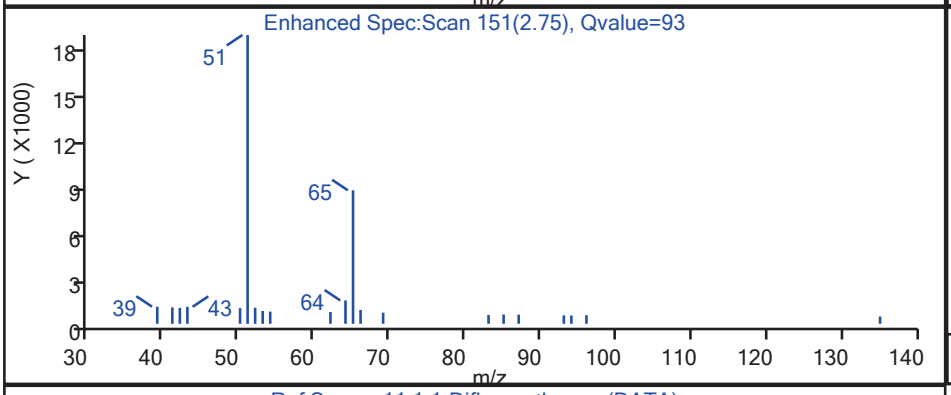
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

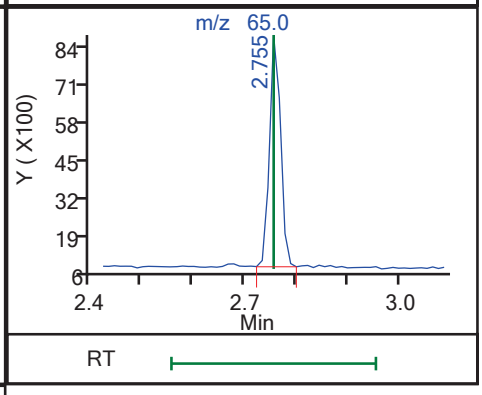
## 11 1,1-Difluoroethane, CAS: 75-37-6

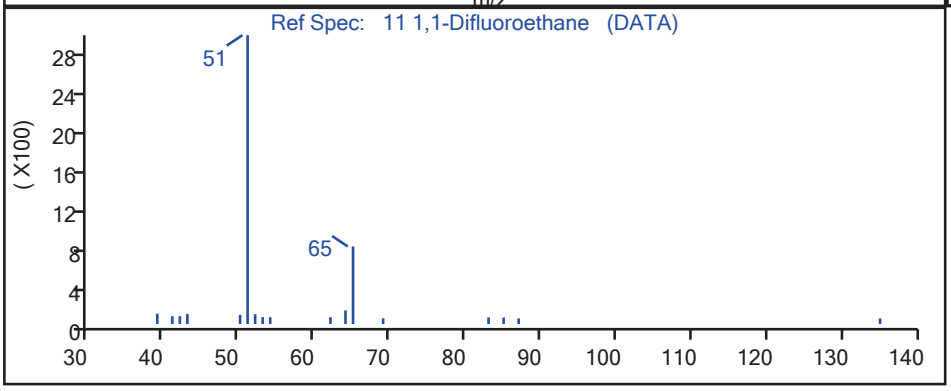
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.75 | 51.00 | 27273 | 0.103947 |
| 2.75 | 65.00 | 12081 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

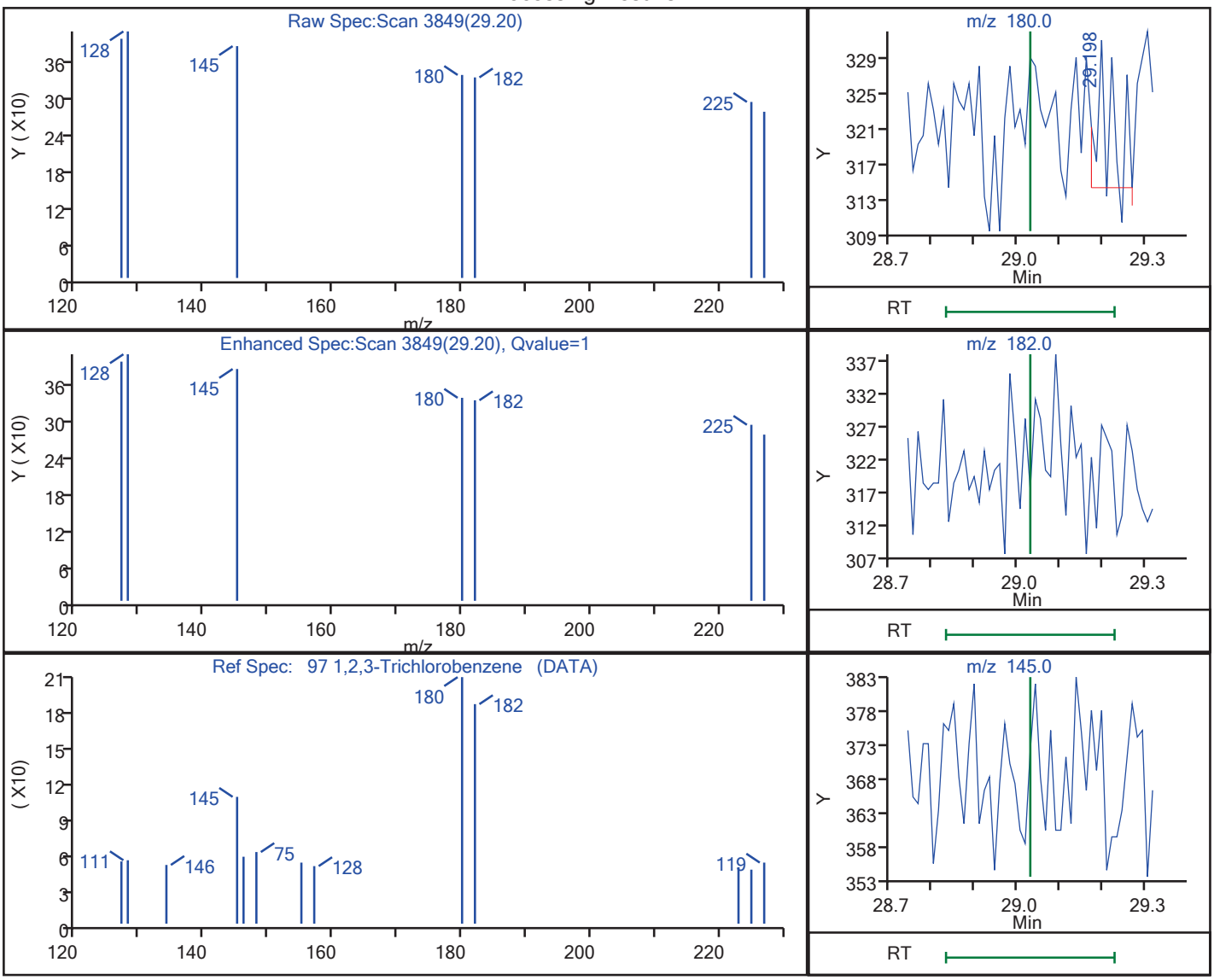
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 97 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.20 | 180.00 | 38 | 0.000173 |
| 29.03 | 182.00 | 0 | |
| 29.03 | 145.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

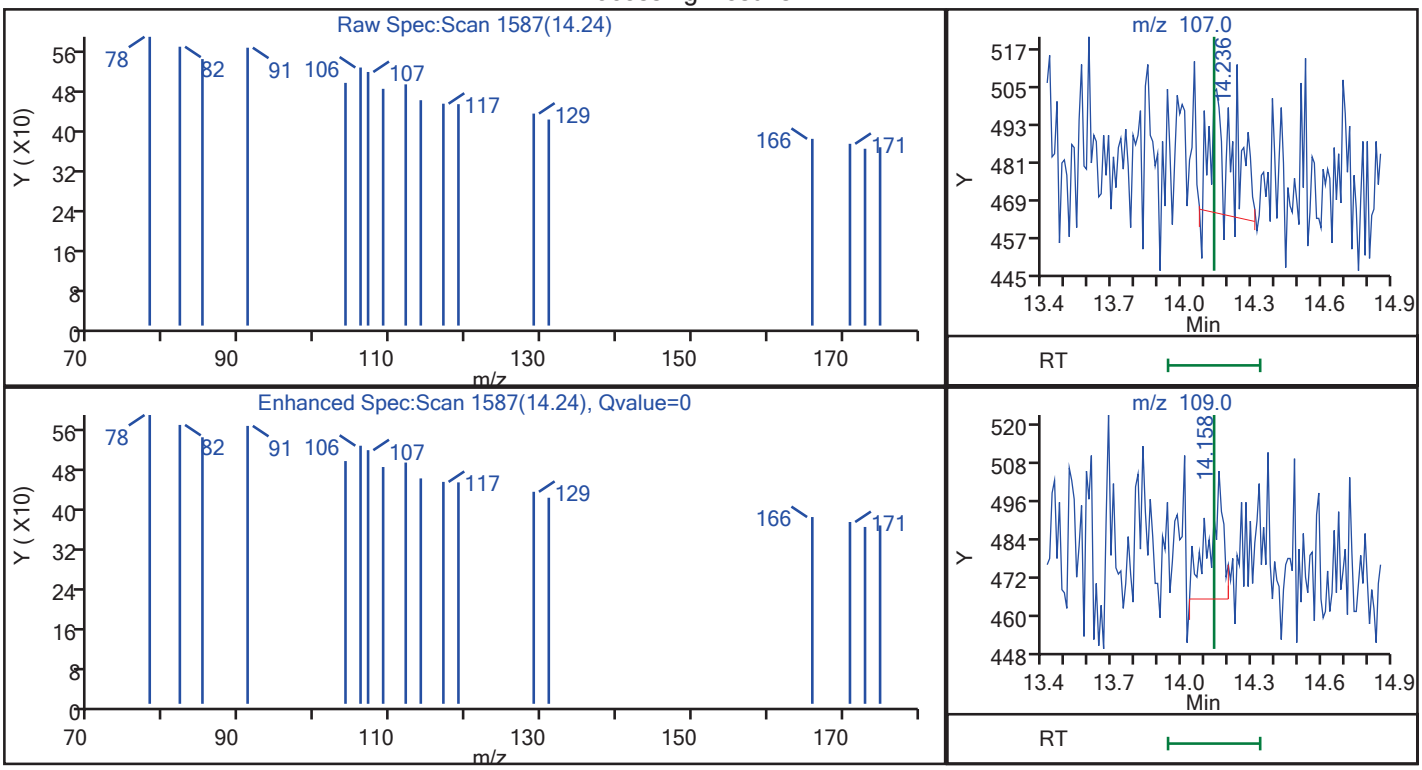
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 59 Ethylene Dibromide, CAS: 106-93-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 14.24 | 107.00 | 273 | 0.001226 |
| 14.16 | 109.00 | 176 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
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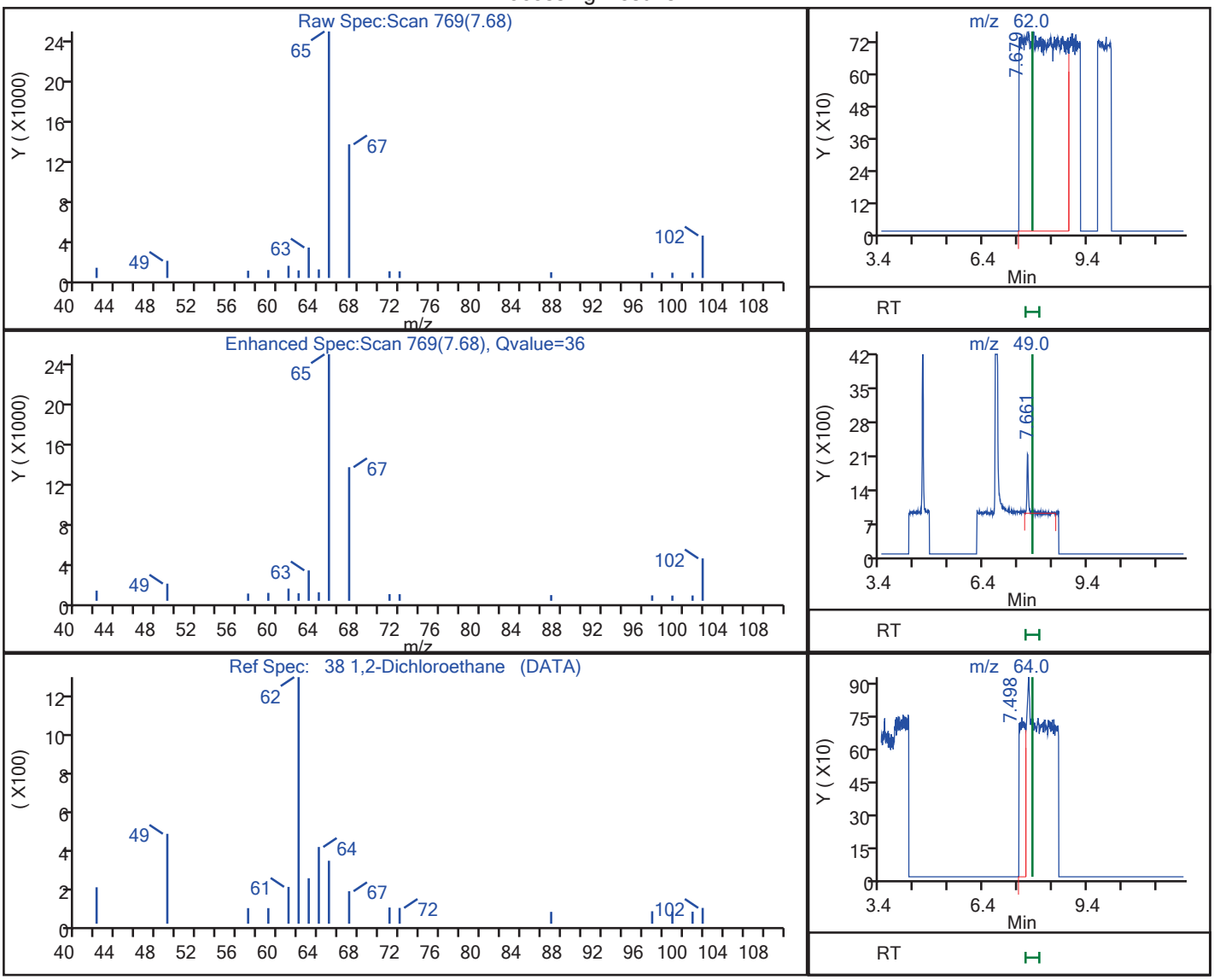
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 38 1,2-Dichloroethane, CAS: 107-06-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.68 | 62.00 | 62349 | 0.225328 |
| 7.66 | 49.00 | 3651 | |
| 7.50 | 64.00 | 8711 | |
| 7.67 | 63.00 | 8185 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
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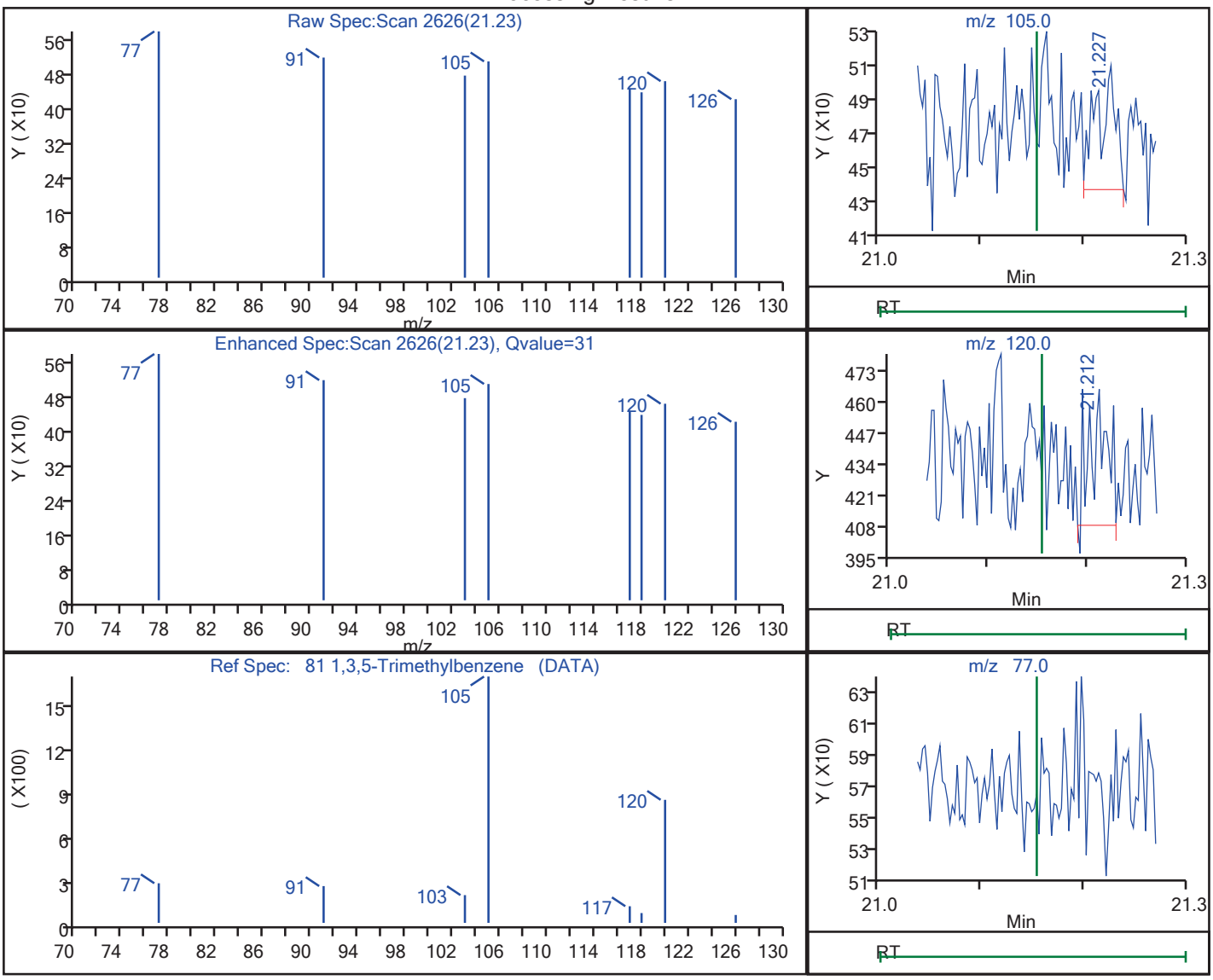
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 81 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 21.23 | 105.00 | 89 | 0.000387 |
| 21.21 | 120.00 | 69 | |
| 21.15 | 77.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

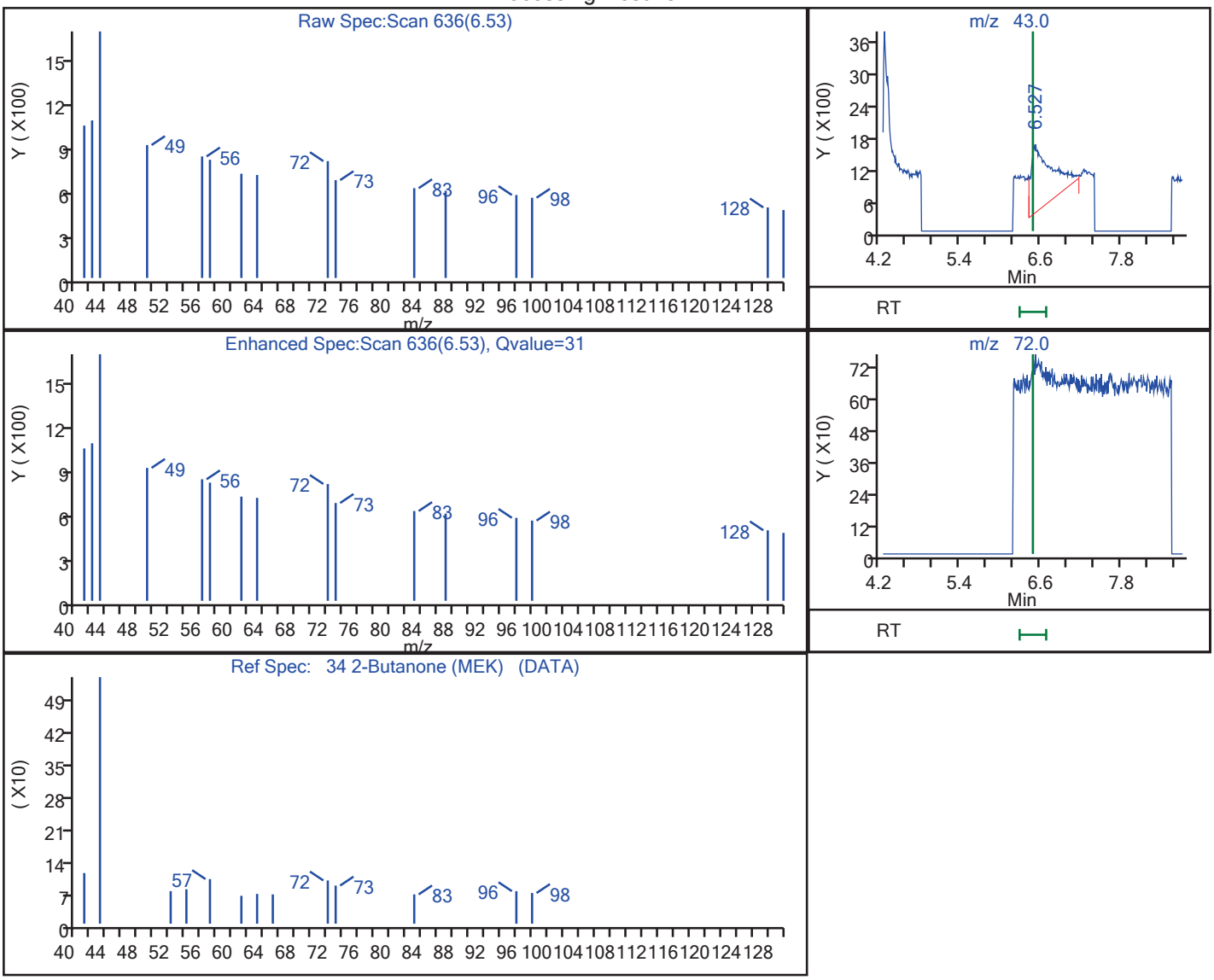
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 34 2-Butanone (MEK), CAS: 78-93-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.53 | 43.00 | 25846 | 0.095489 |
| 6.48 | 72.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

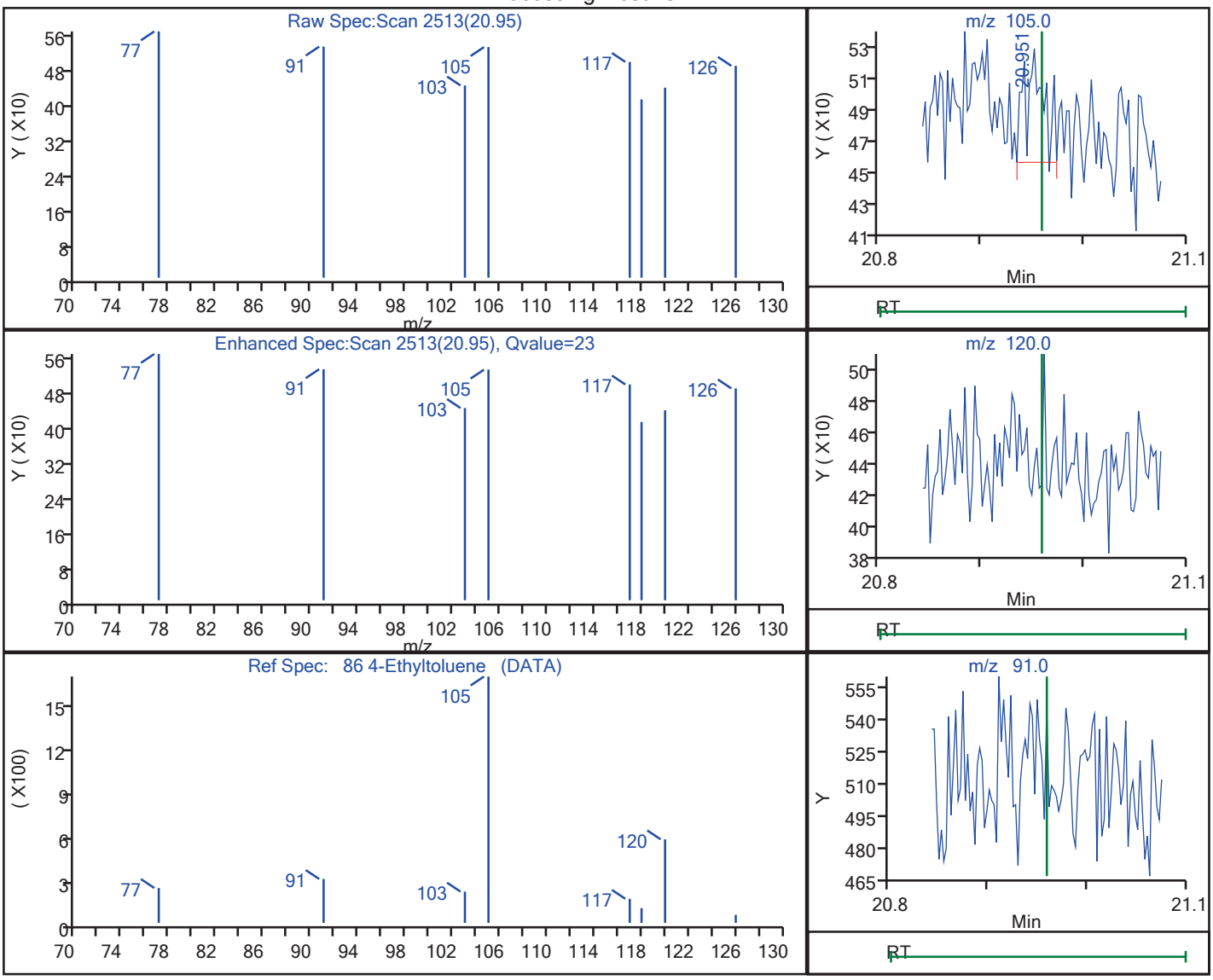
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 86 4-Ethyltoluene, CAS: 622-96-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 20.95 | 105.00 | 93 | 0.000366 |
| 20.96 | 120.00 | 0 | |
| 20.96 | 91.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

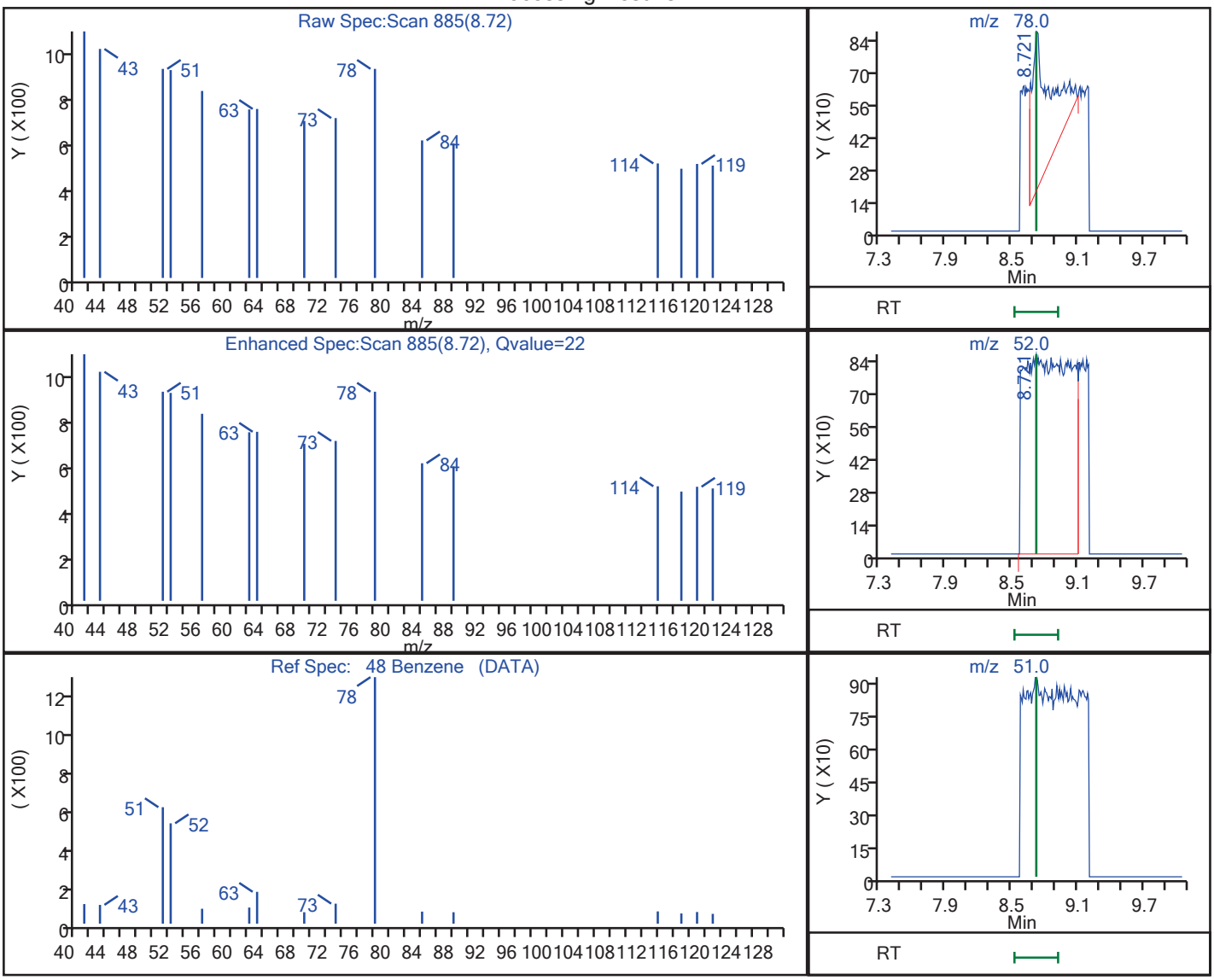
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 48 Benzene, CAS: 71-43-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.72 | 78.00 | 7844 | 0.021937 |
| 8.72 | 52.00 | 26351 | |
| 8.72 | 51.00 | 0 | |
| 8.72 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
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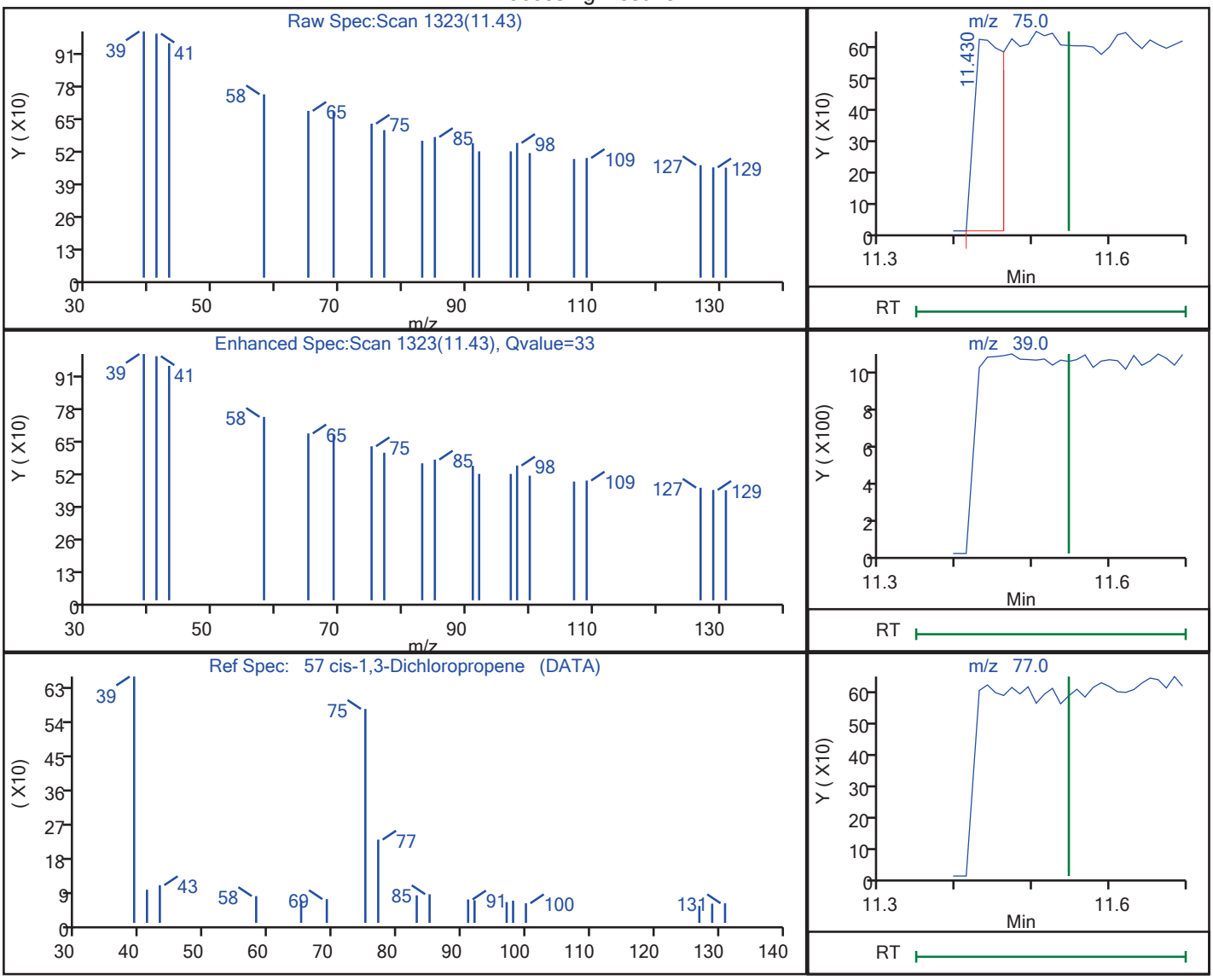
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 57 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 11.43 | 75.00 | 1786 | 0.010067 |
| 11.55 | 39.00 | 0 | |
| 11.55 | 77.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

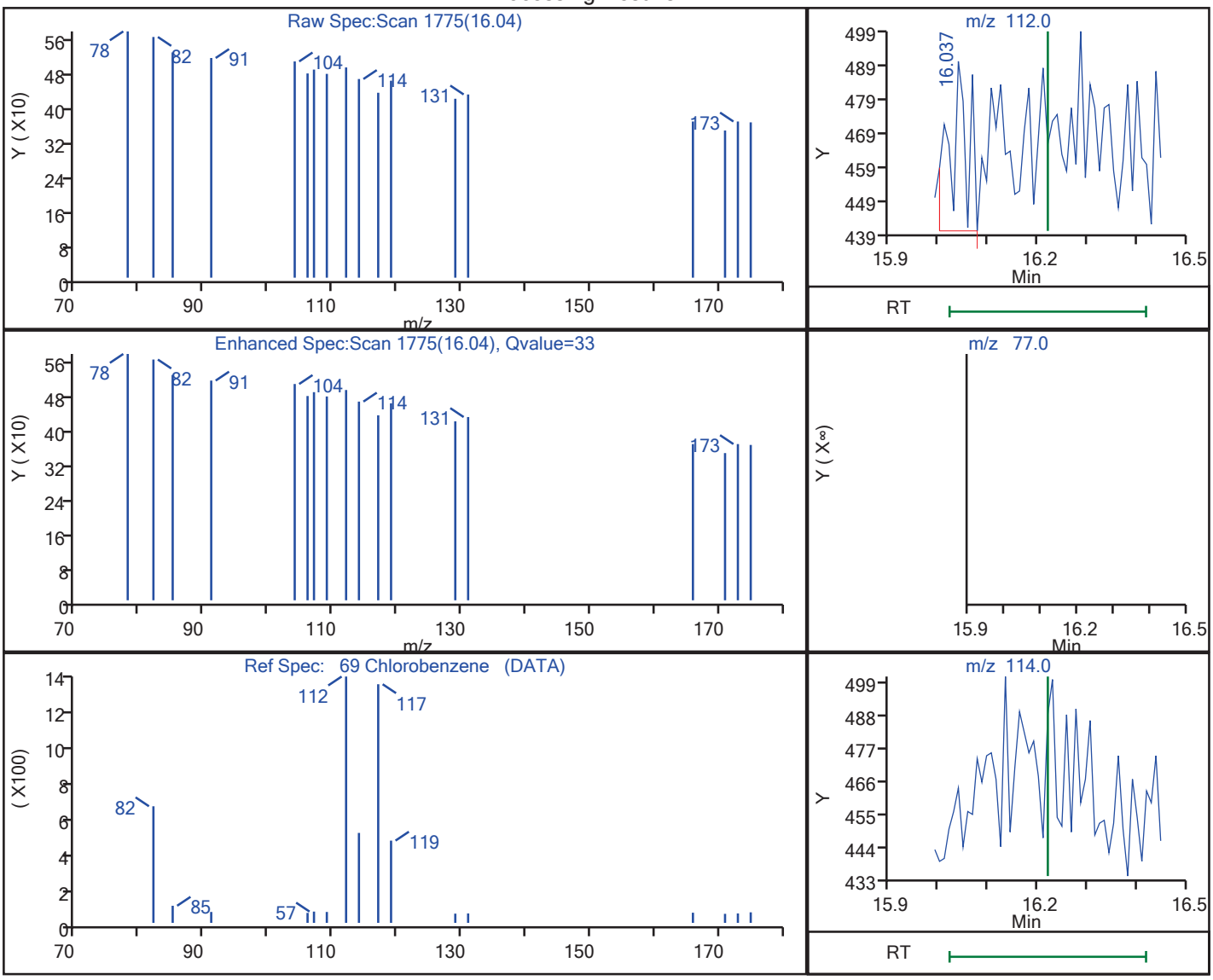
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 69 Chlorobenzene, CAS: 108-90-7

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 16.04 | 112.00 | 127 | 0.000504 |
| 16.22 | 77.00 | 0 | |
| 16.22 | 114.00 | 0 | |
| 16.22 | 51.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:07

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

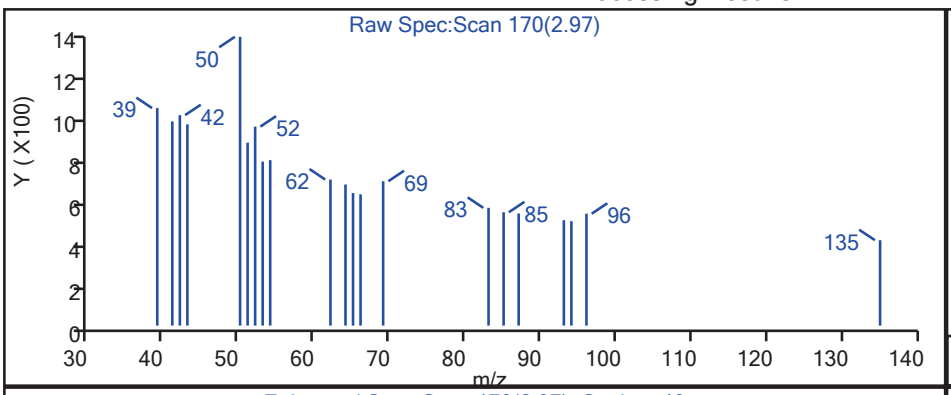
User Disabled Compound Report

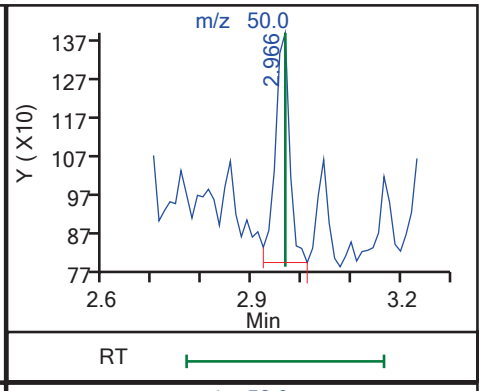
Eurofins Calscience LLC

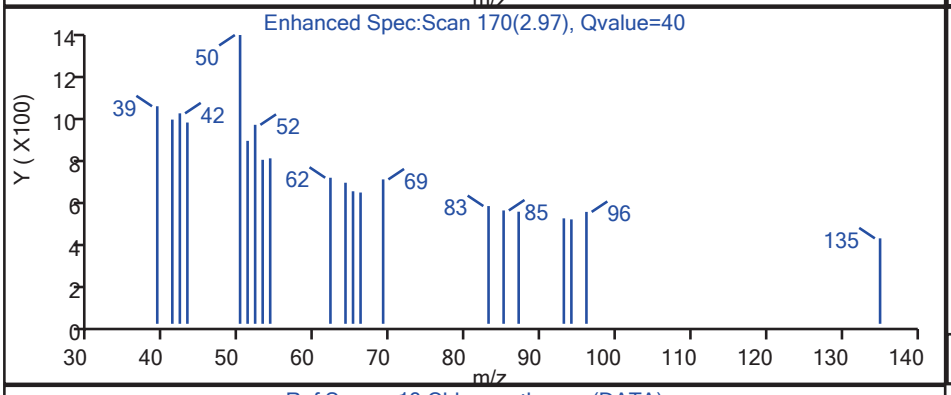
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

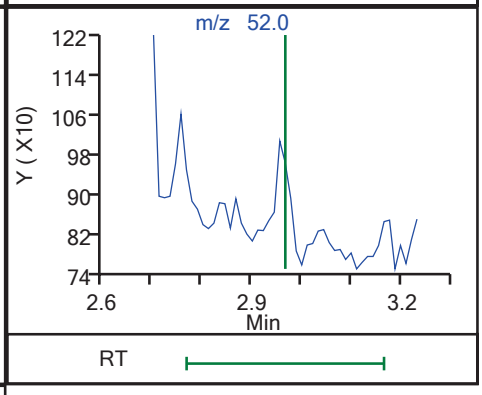
## 13 Chloromethane, CAS: 74-87-3

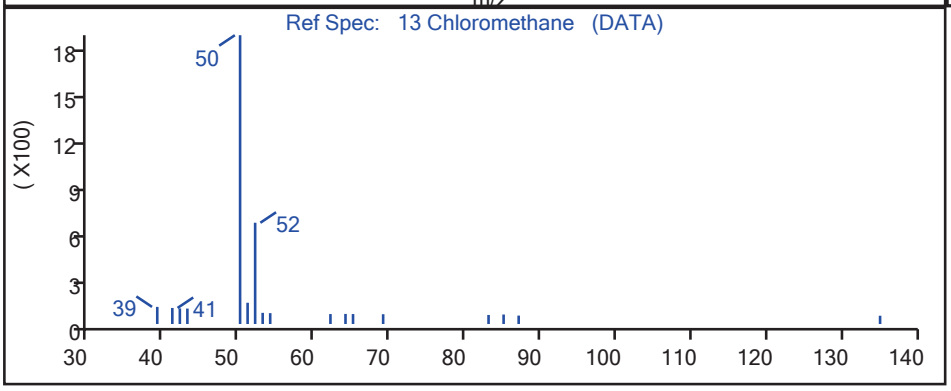
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.97 | 50.00 | 1220 | 0.005989 |
| 2.97 | 52.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

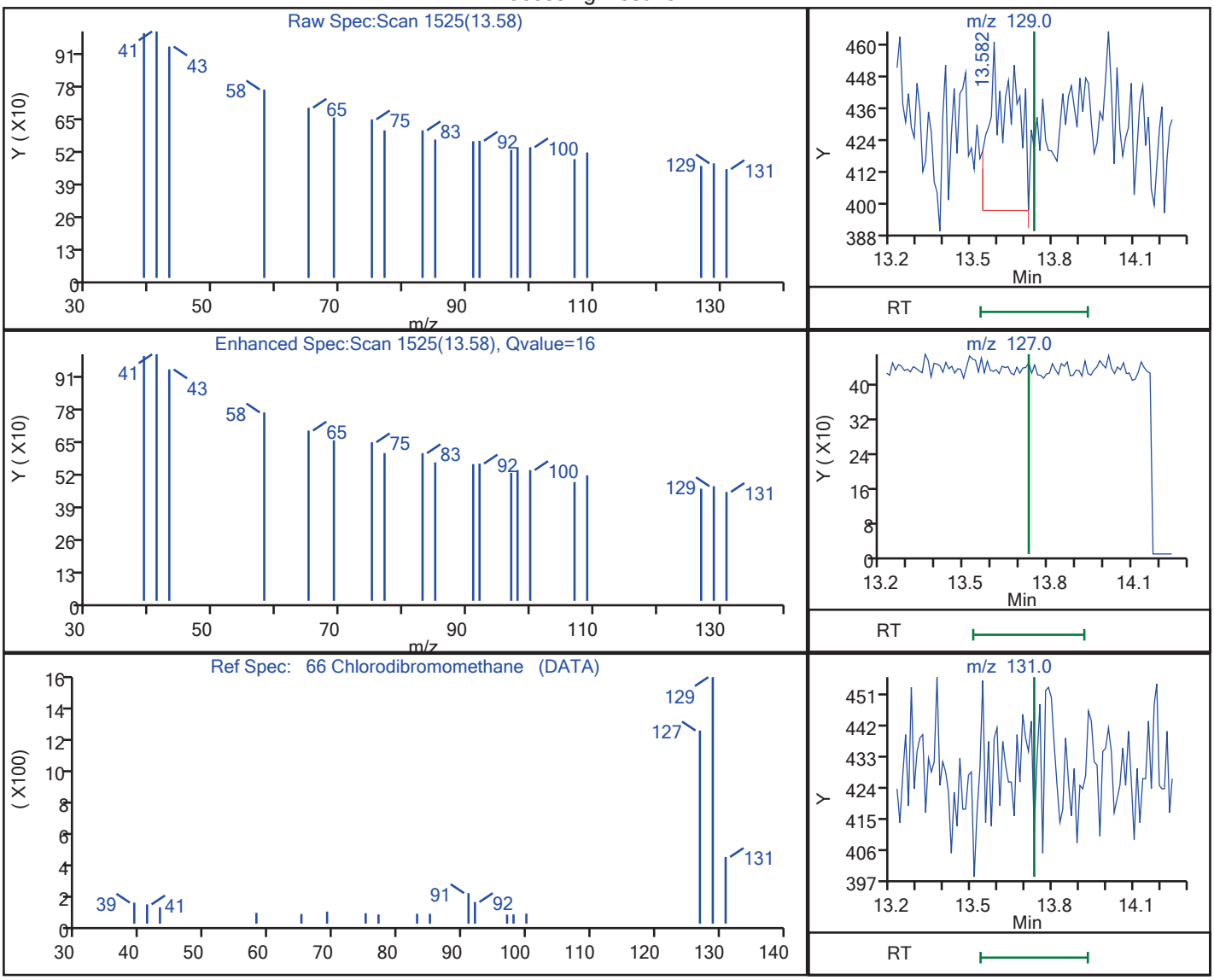
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 66 Chlorodibromomethane, CAS: 124-48-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.58 | 129.00 | 400 | 0.001311 |
| 13.73 | 127.00 | 0 | |
| 13.73 | 131.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

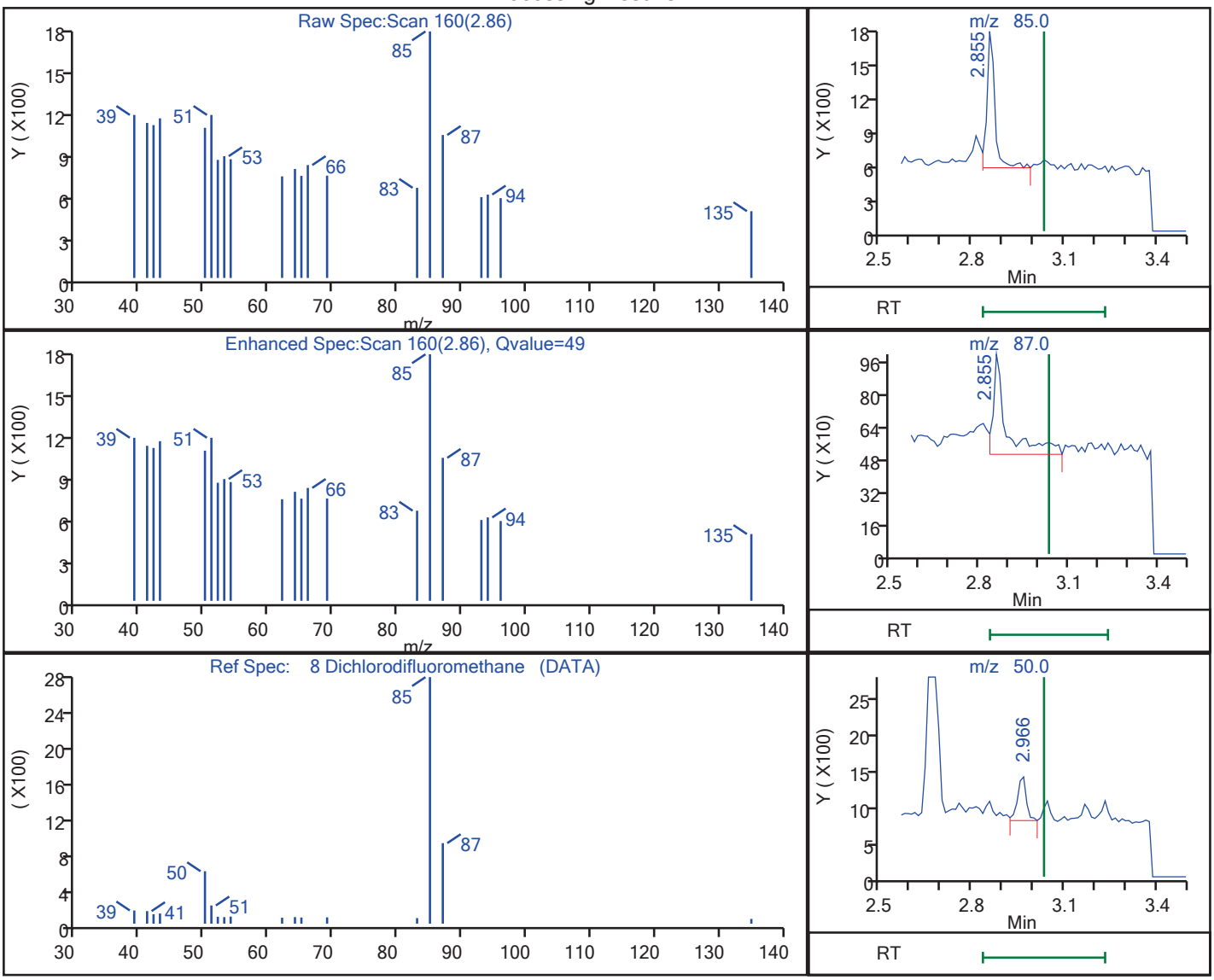
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 8 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.86 | 85.00 | 2106 | 0.003675 |
| 2.86 | 87.00 | 1555 | |
| 2.97 | 50.00 | 1220 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

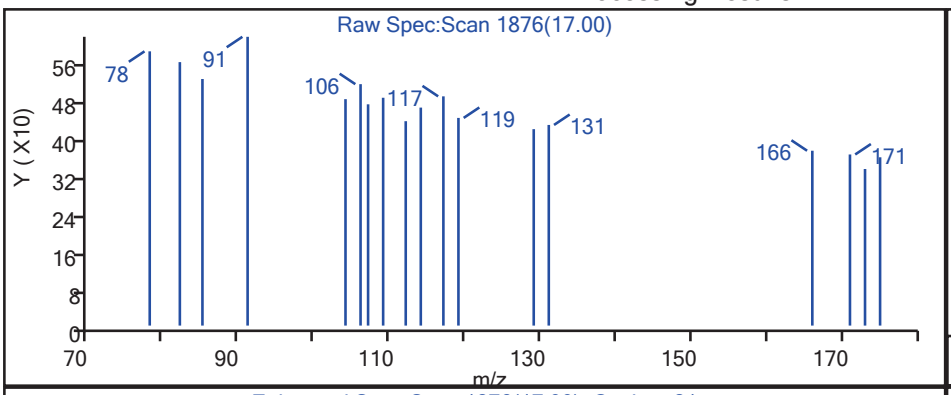
User Disabled Compound Report

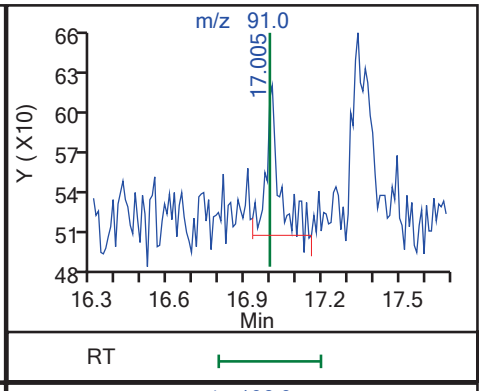
Eurofins Calscience LLC

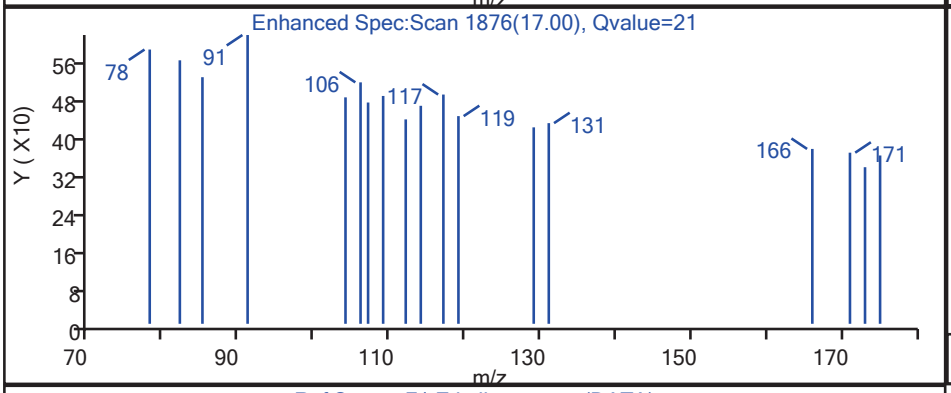
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

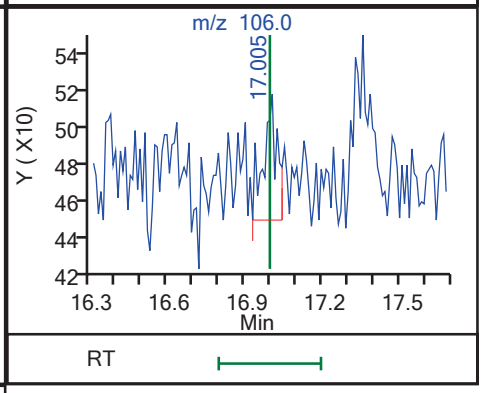
## 71 Ethylbenzene, CAS: 100-41-4

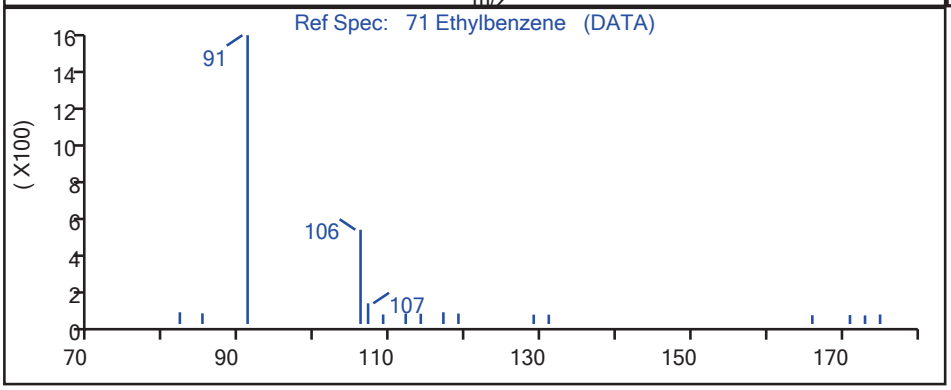
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 17.00 | 91.00 | 364 | 0.001362 |
| 17.00 | 106.00 | 228 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

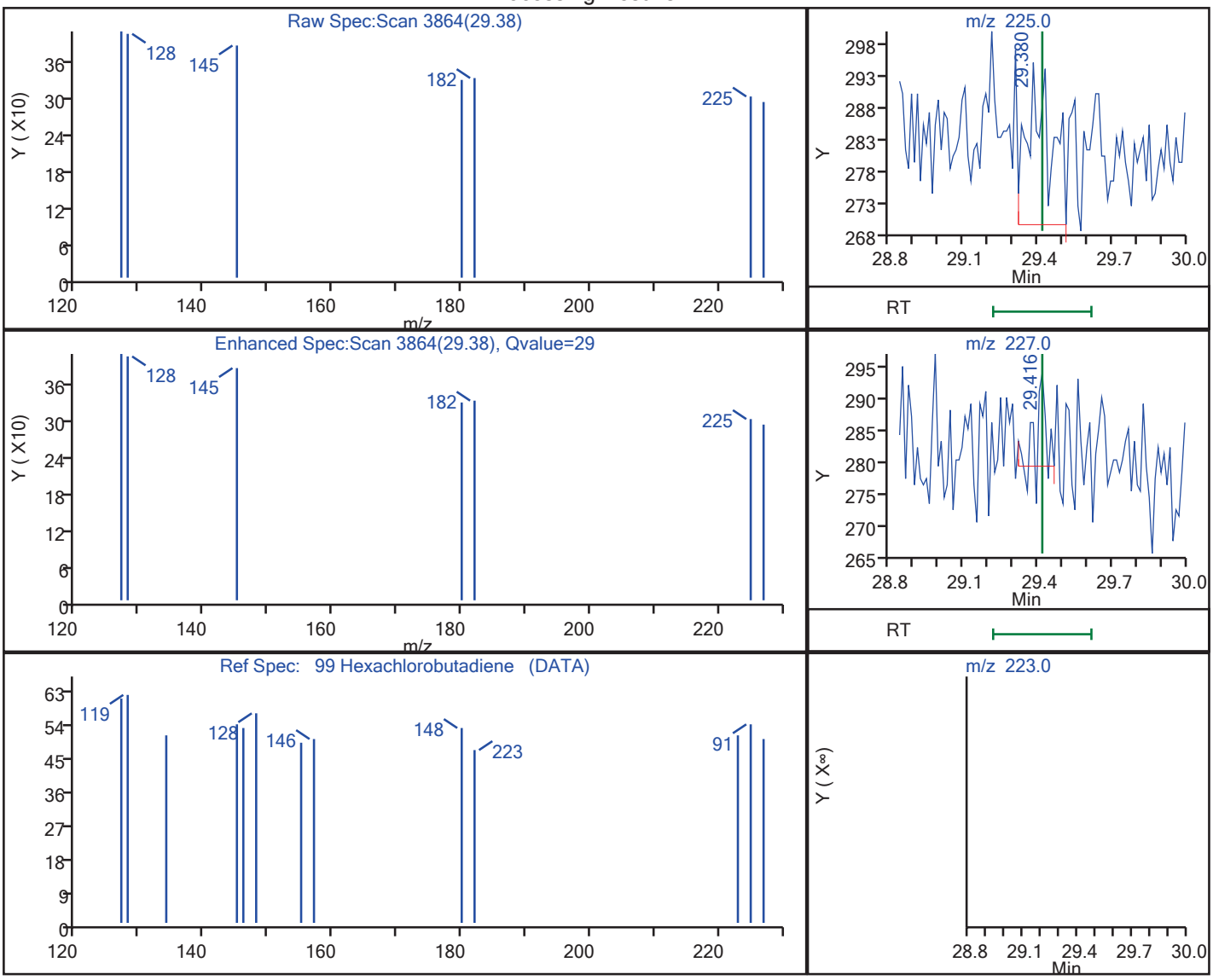
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 99 Hexachlorobutadiene, CAS: 87-68-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.38 | 225.00 | 166 | 0.000363 |
| 29.42 | 227.00 | 35 | |
| 29.42 | 223.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

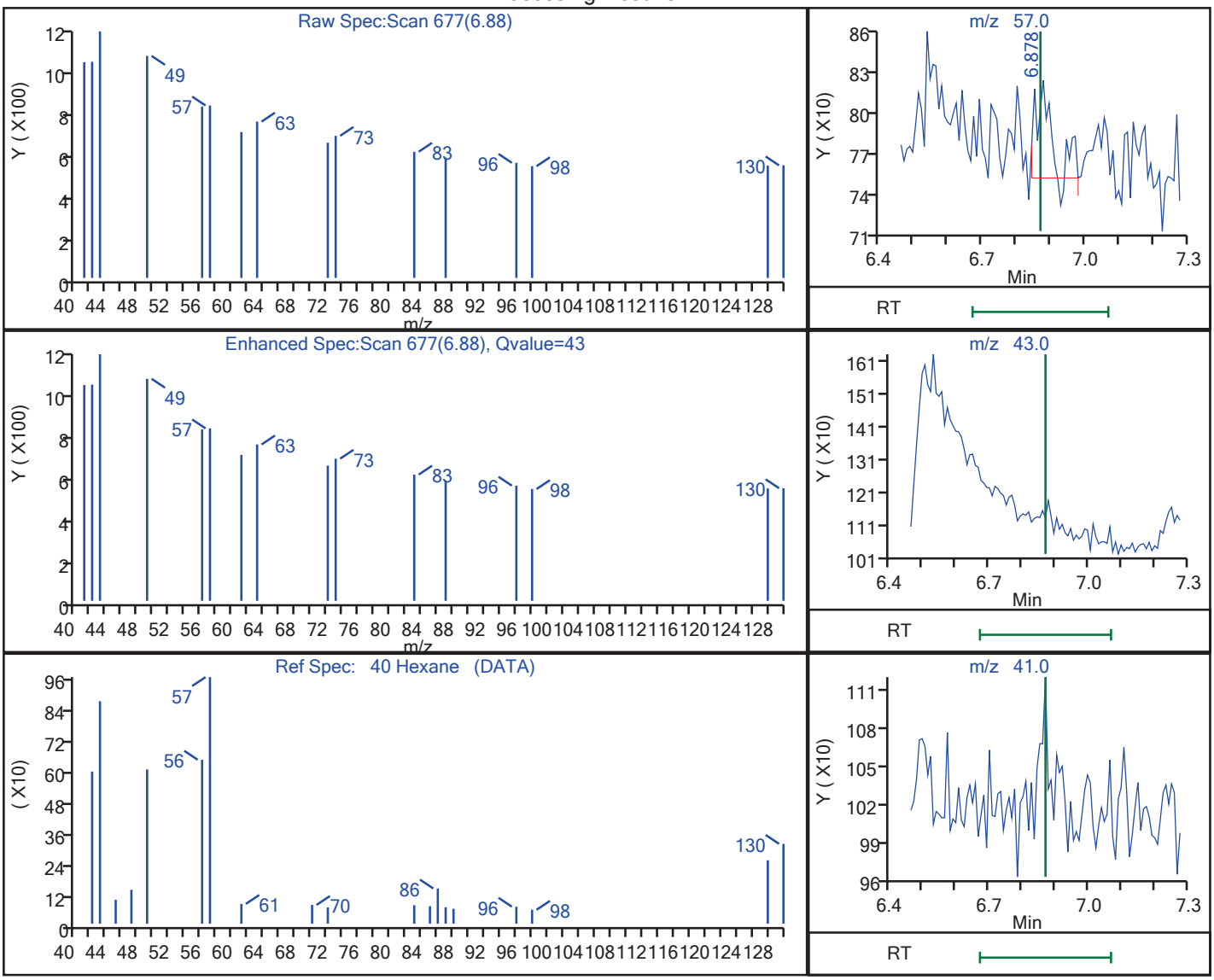
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 40 Hexane, CAS: 110-54-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.88 | 57.00 | 219 | 0.001765 |
| 6.87 | 43.00 | 0 | |
| 6.87 | 41.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:28:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

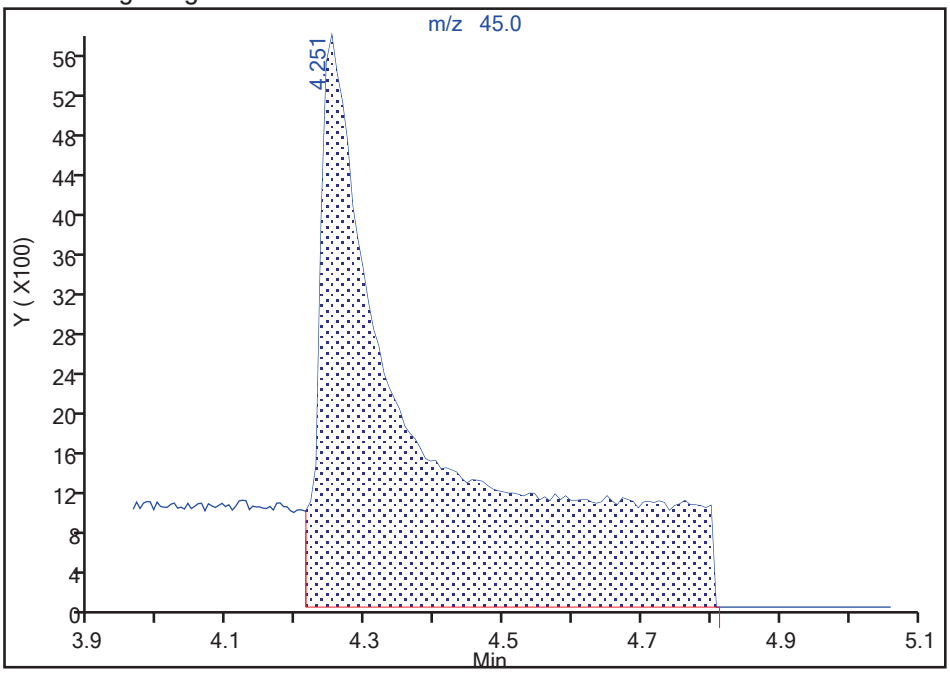
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 21 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

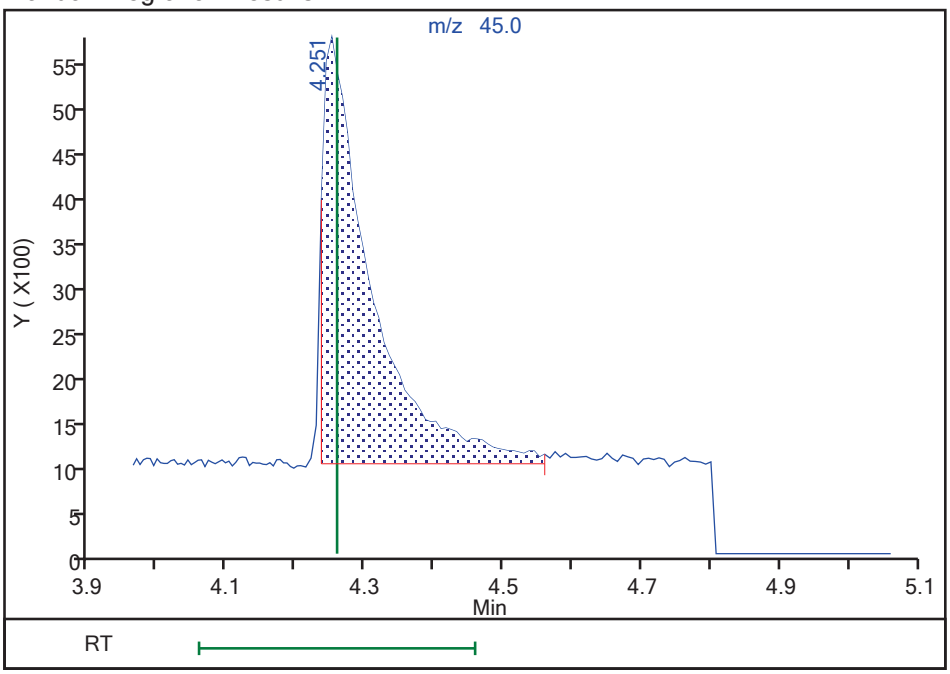
Processing Integration Results

RT: 4.25
Area: 59900
Amount: 0.182873
Amount Units: ppb v/v




Manual Integration Results

RT: 4.25
Area: 23321
Amount: 0.071198
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:28:42
Audit Action: Manually Integrated Audit Reason: Baseline

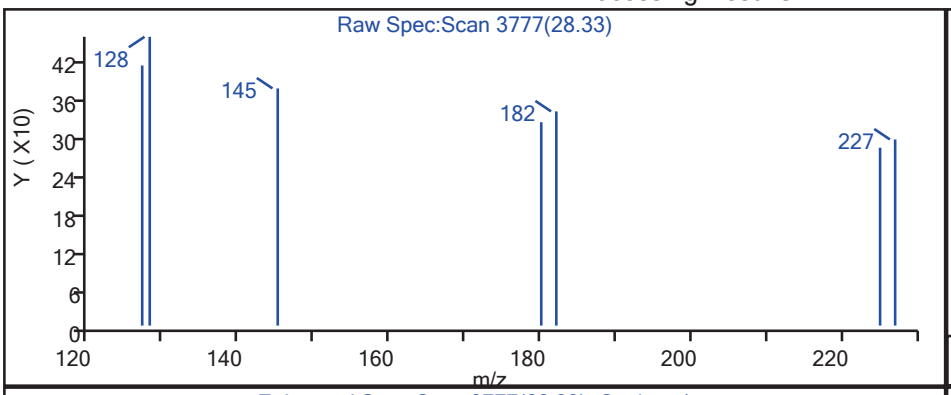
User Disabled Compound Report

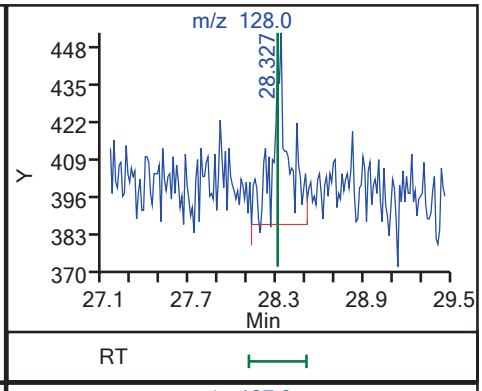
Eurofins Calscience LLC

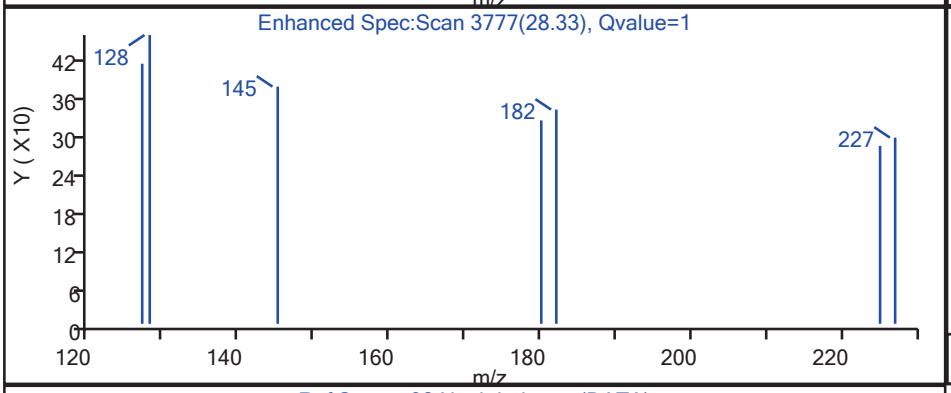
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

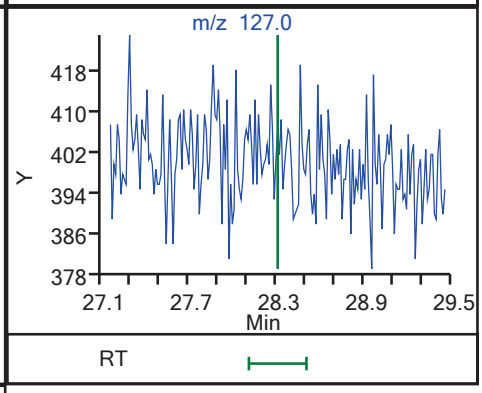
## 98 Naphthalene, CAS: 91-20-3

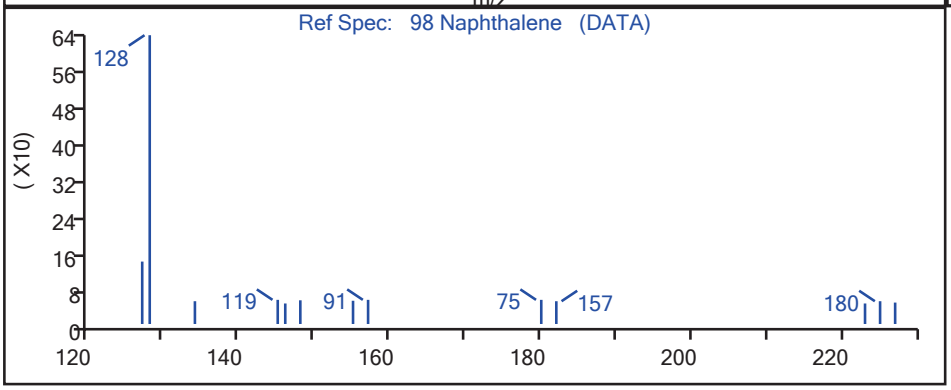
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 28.33 | 128.00 | 488 | 0.001363 |
| 28.30 | 127.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

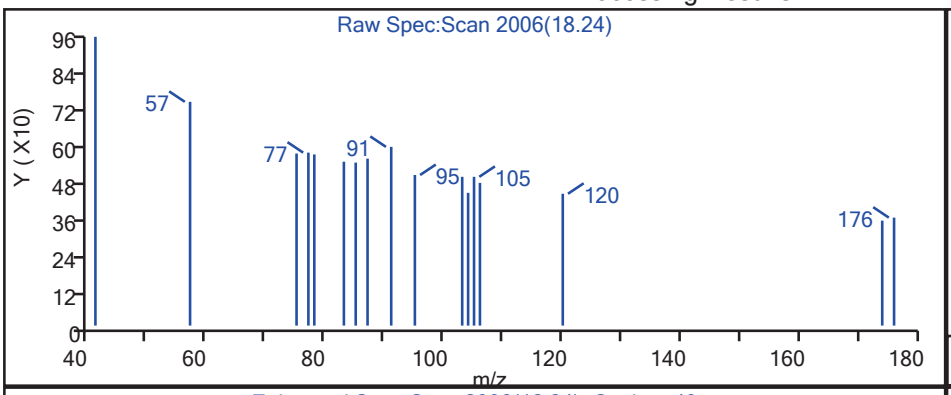
User Disabled Compound Report

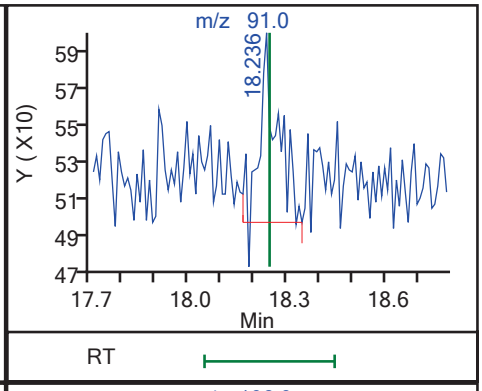
Eurofins Calscience LLC

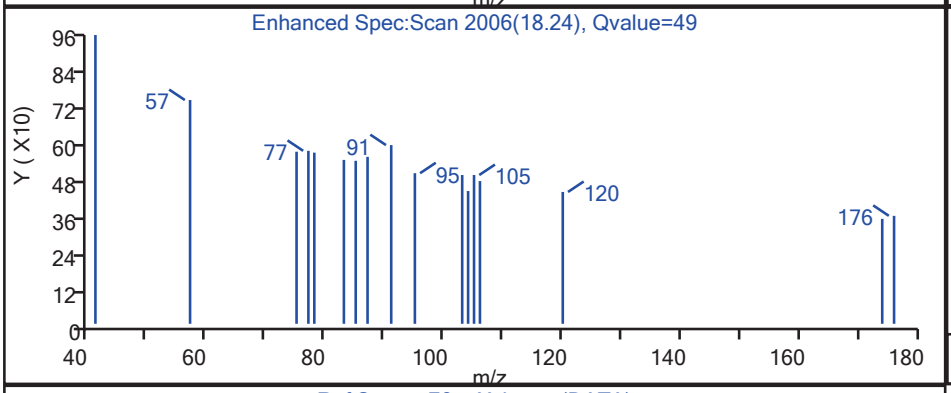
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

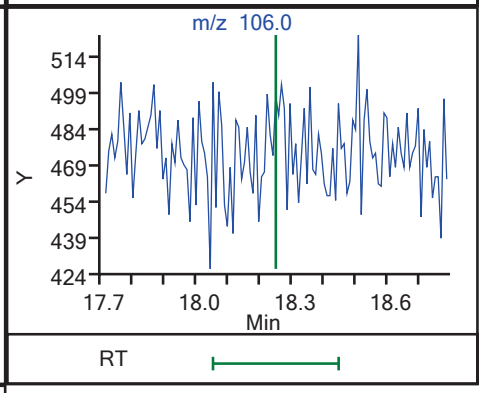
## 76 o-Xylene, CAS: 95-47-6

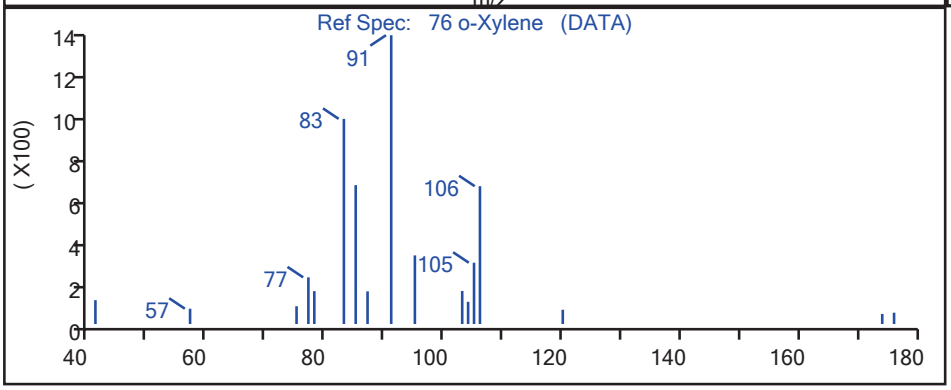
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.24 | 91.00 | 360 | 0.001645 |
| 18.25 | 106.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

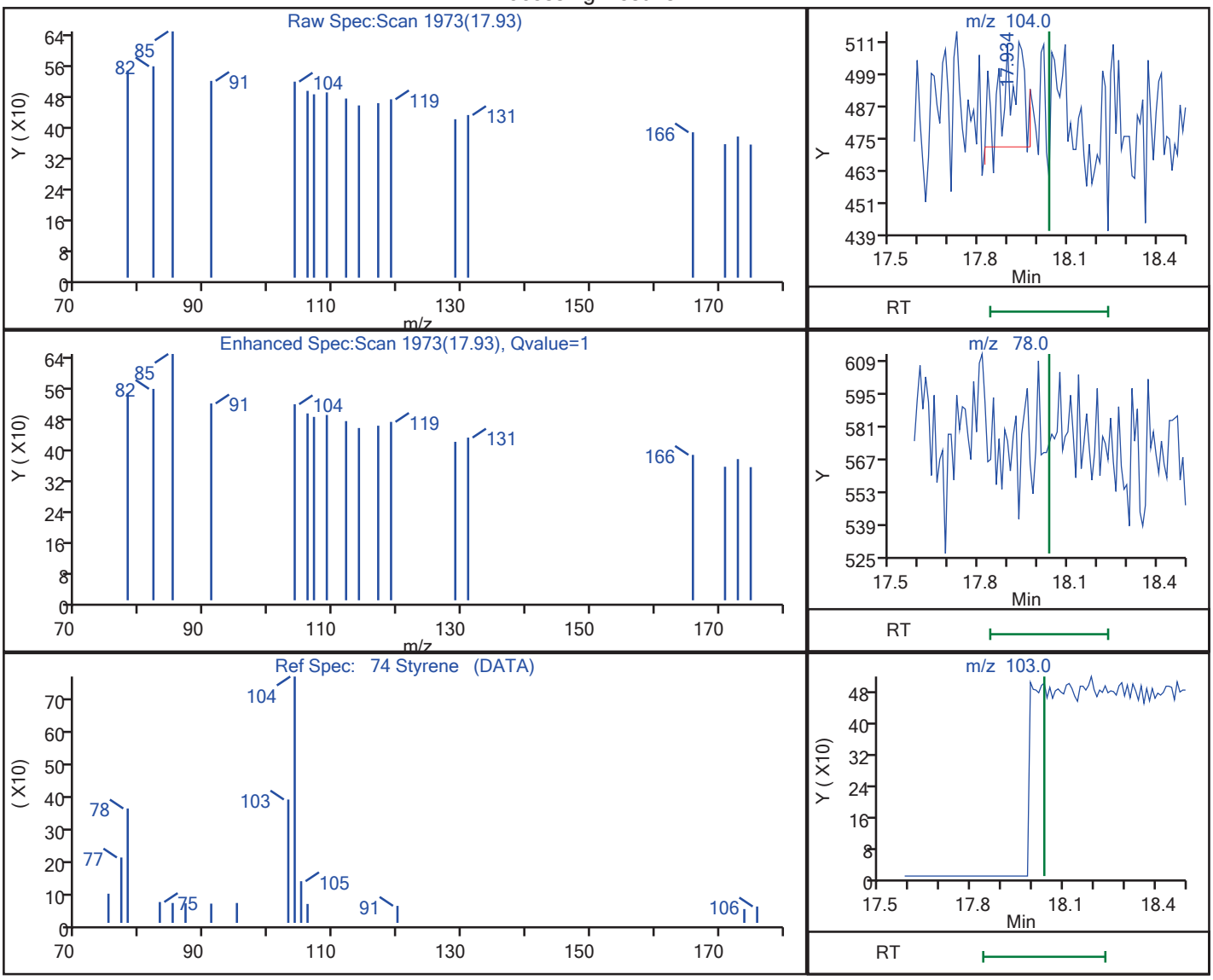
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 74 Styrene, CAS: 100-42-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 17.93 | 104.00 | 183 | 0.001518 |
| 18.04 | 78.00 | 0 | |
| 18.04 | 103.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

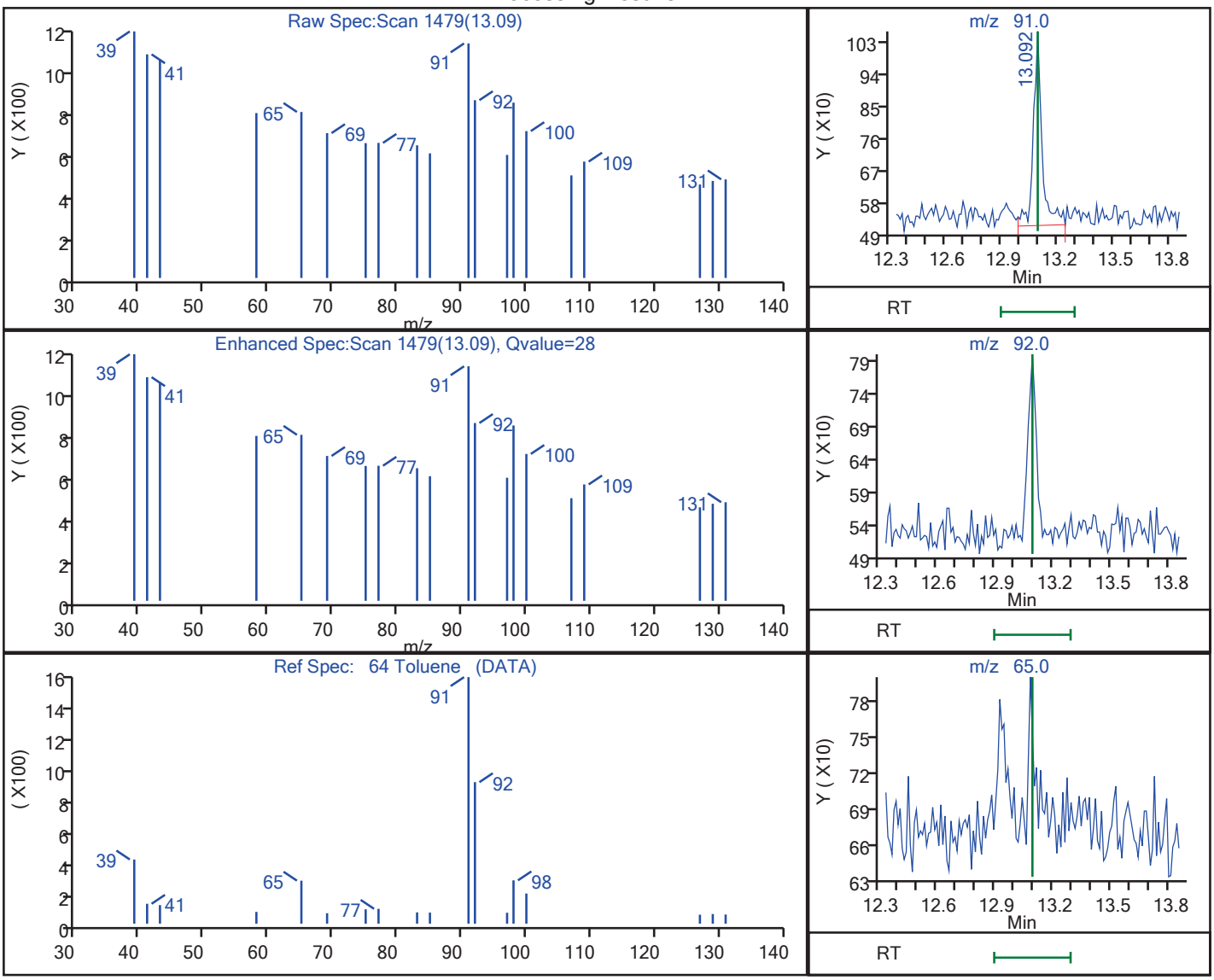
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 64 Toluene, CAS: 108-88-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.09 | 91.00 | 1807 | 0.006151 |
| 13.09 | 92.00 | 0 | |
| 13.09 | 65.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:29:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

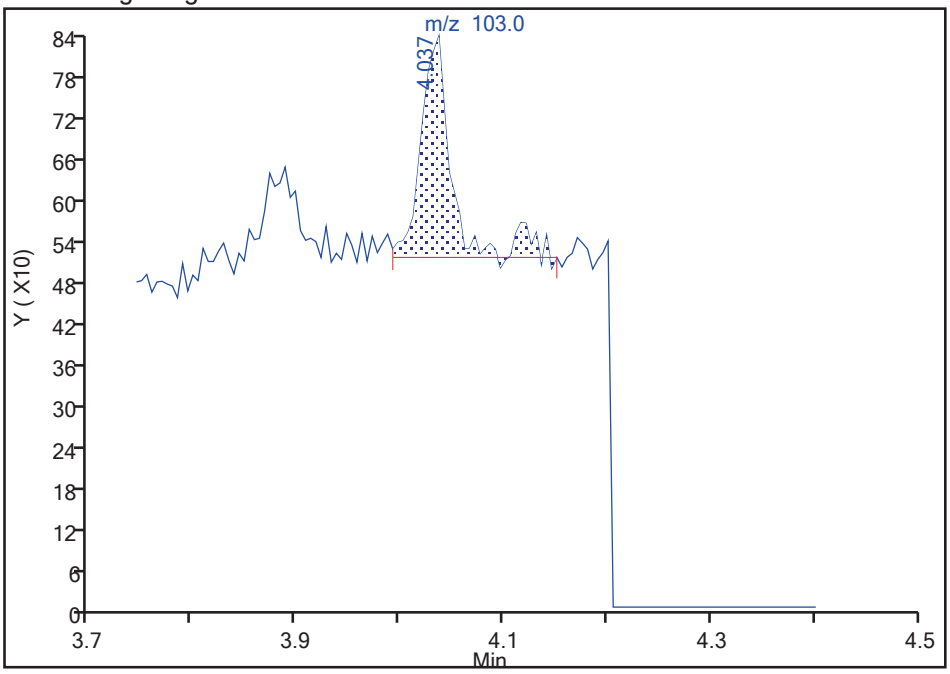
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 23 Trichlorofluoromethane, CAS: 75-69-4

Signal: 2

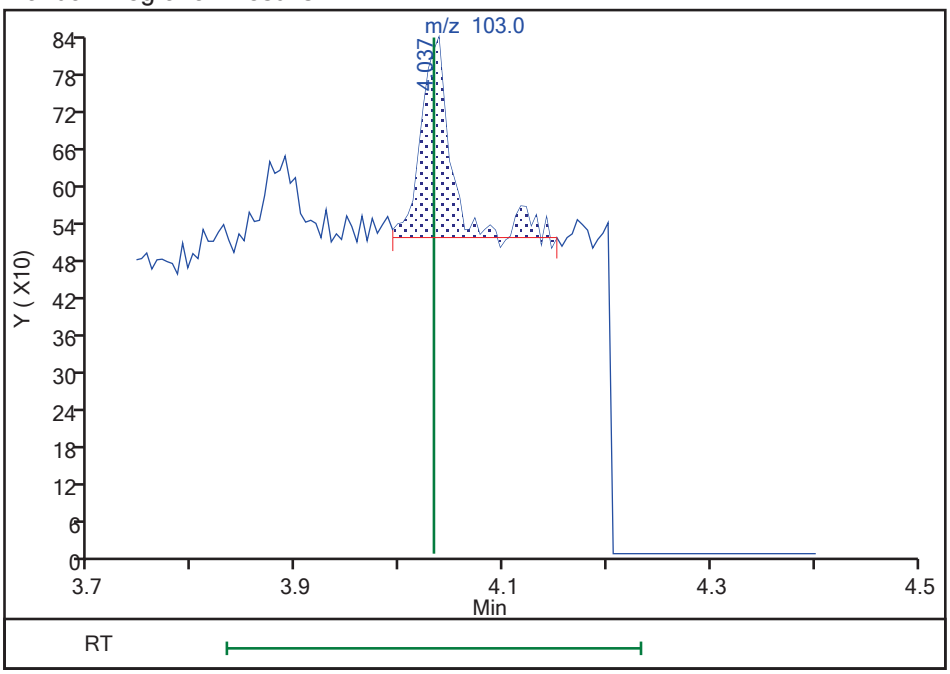
Processing Integration Results

RT: 4.04
Area: 652
Amount: 0.002645
Amount Units: ppb v/v




Manual Integration Results

RT: 4.04
Area: 652
Amount: 0.002645
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:28:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

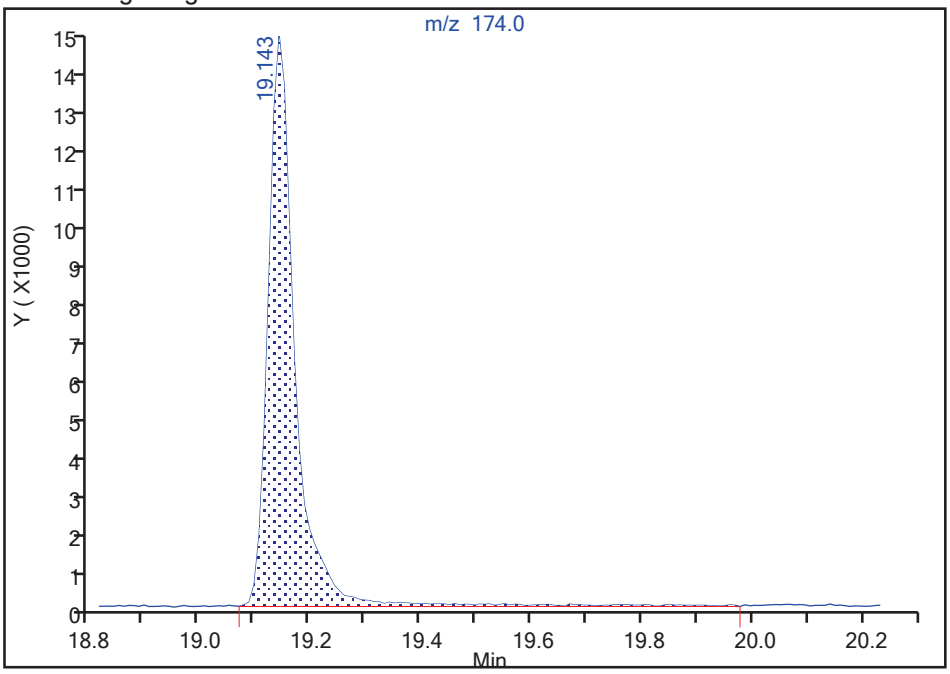
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## $ 79 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Signal: 2

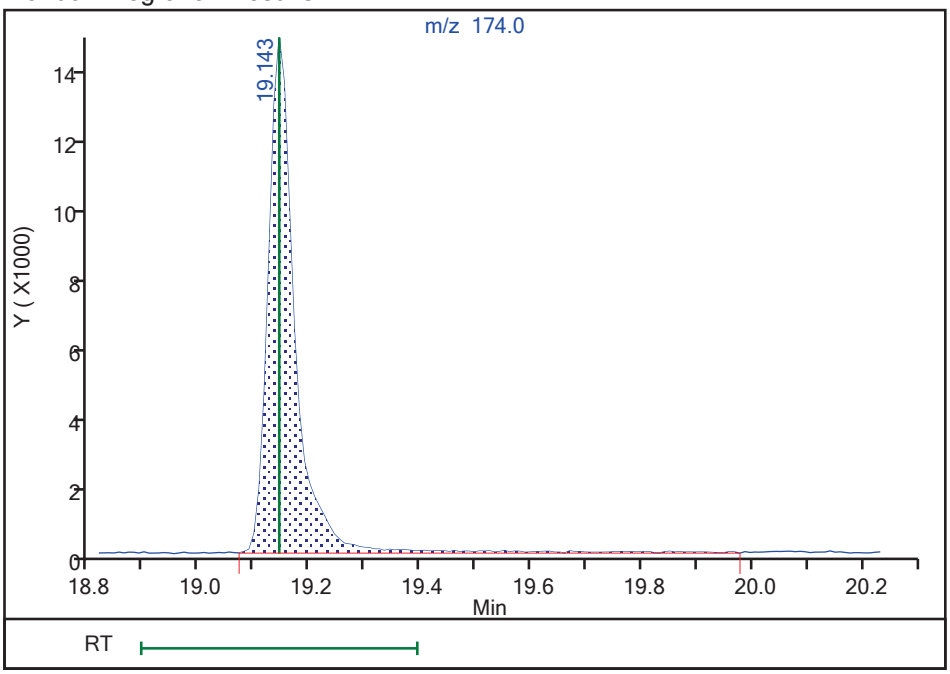
Processing Integration Results

RT: 19.14
Area: 47805
Amount: 0.381743
Amount Units: ppb v/v




Manual Integration Results

RT: 19.14
Area: 47805
Amount: 0.381743
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:29:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

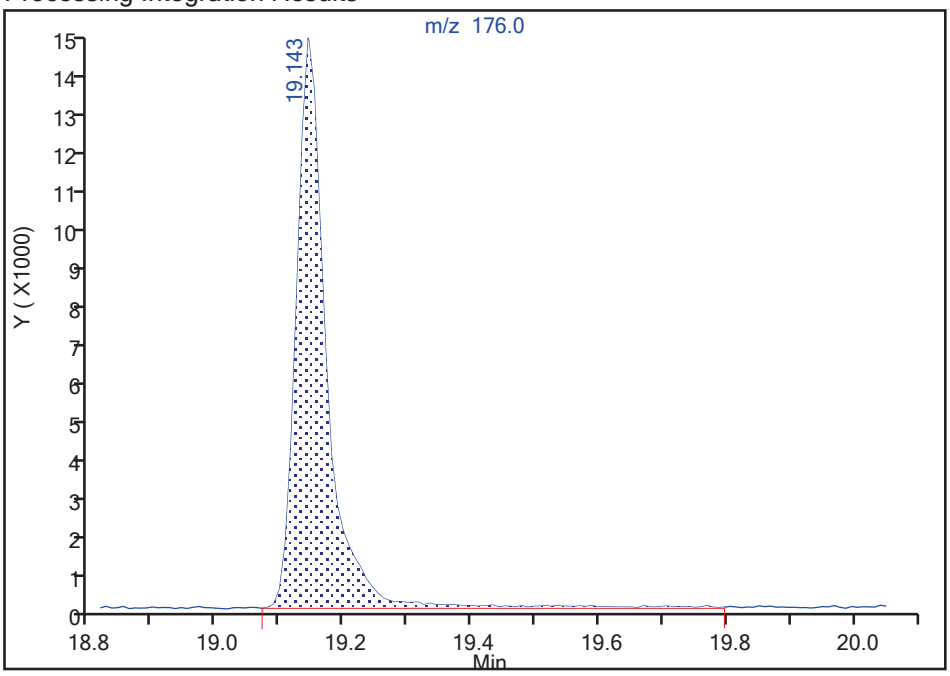
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR15.D | | | | |
| Injection Date: | 15-Mar-2021 21:48:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-5 | Lab Sample ID: | 570-53377-5 | | |
| Client ID: | D690 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 15 | Worklist Smp#: | 15 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## $ 79 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Signal: 3

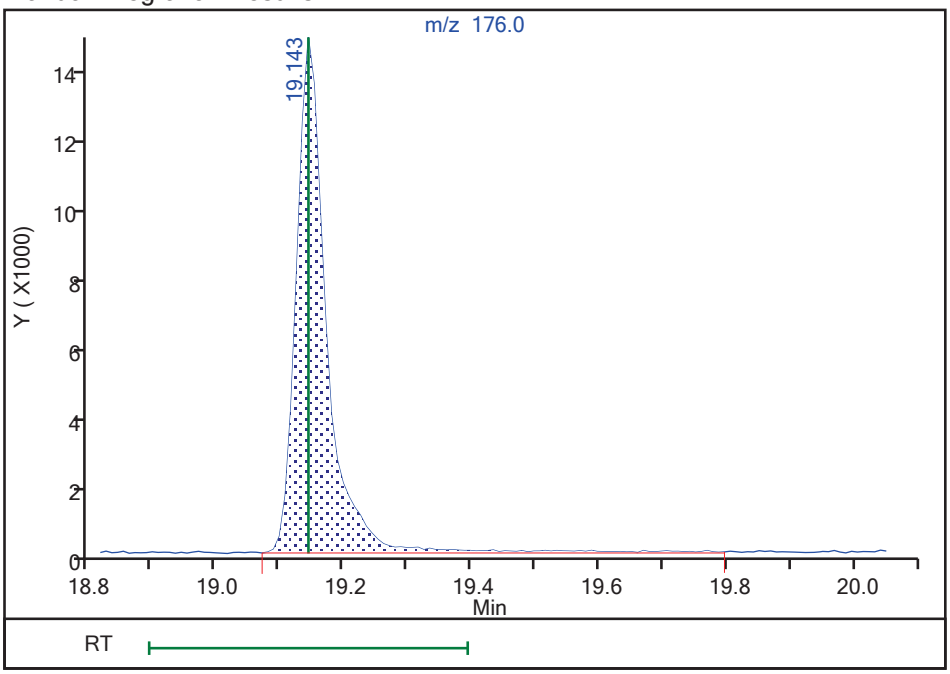
Processing Integration Results

RT: 19.14
Area: 46451
Amount: 0.381743
Amount Units: ppb v/v




Manual Integration Results

RT: 19.14
Area: 46451
Amount: 0.381743
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:29:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D388 | Lab Sample ID: 570-53377-6

Matrix: Air | Lab File ID: MMM15MAR18.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 00:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.025 | 0.010 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 0.025 | 0.016 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.025 | 0.0091 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.025 | 0.015 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.025 | 0.012 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.025 | 0.013 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 0.25 | 0.11 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 0.050 | 0.042 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 0.050 | 0.0073 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 0.050 | 0.033 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 0.050 | 0.018 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.025 | 0.022 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.025 | 0.016 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.025 | 0.017 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.025 | 0.015 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.025 | 0.012 |
| 106-99-0 | 1,3-Butadiene | ND | | 0.025 | 0.013 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.025 | 0.014 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.025 | 0.013 |
| 123-91-1 | 1,4-Dioxane | ND | | 0.25 | 0.17 |
| 78-93-3 | 2-Butanone | ND | | 0.25 | 0.027 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.050 | 0.013 |
| 67-64-1 | Acetone | ND | | 0.50 | 0.41 |
| 71-43-2 | Benzene | ND | | 0.025 | 0.013 |
| 75-27-4 | Bromodichloromethane | ND | | 0.025 | 0.0098 |
| 74-83-9 | Bromomethane | ND | | 0.050 | 0.036 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.025 | 0.014 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.025 | 0.011 |
| 75-15-0 | Carbon disulfide | ND | | 0.25 | 0.16 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.050 | 0.040 |
| 108-90-7 | Chlorobenzene | ND | | 0.050 | 0.017 |
| 75-00-3 | Chloroethane | ND | | 0.025 | 0.020 |
| 67-66-3 | Chloroform | ND | | 0.025 | 0.012 |
| 74-87-3 | Chloromethane | ND | | 0.025 | 0.013 |
| 124-48-1 | Dibromochloromethane | ND | | 0.025 | 0.010 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D388 | Lab Sample ID: 570-53377-6

Matrix: Air | Lab File ID: MMM15MAR18.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 00:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.025 | 0.010 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 0.025 | 0.0090 |
| 100-41-4 | Ethylbenzene | ND | | 0.025 | 0.012 |
| 87-68-3 | Hexachloro-1,3-butadiene | ND | | 0.10 | 0.050 |
| 110-54-3 | Hexane | ND | | 0.10 | 0.011 |
| 67-63-0 | Isopropanol | ND | | 0.25 | 0.13 |
| 75-09-2 | Methylene Chloride | ND | | 0.050 | 0.026 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 0.025 | 0.011 |
| 91-20-3 | Naphthalene | ND | | 0.050 | 0.033 |
| 95-47-6 | o-Xylene | ND | | 0.025 | 0.013 |
| 179601-23-1 | m,p-Xylene | ND | | 0.050 | 0.026 |
| 100-42-5 | Styrene | ND | | 0.025 | 0.0099 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.025 | 0.011 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 0.025 | 0.010 |
| 127-18-4 | Tetrachloroethene | ND | | 0.025 | 0.014 |
| 108-88-3 | Toluene | ND | | 0.050 | 0.015 |
| 1330-20-7 | Xylenes, Total | ND | | 0.075 | 0.039 |
| 79-01-6 | Trichloroethene | ND | | 0.025 | 0.018 |
| 75-69-4 | Trichlorofluoromethane | ND | | 0.025 | 0.0082 |
| 75-01-4 | Vinyl chloride | ND | | 0.050 | 0.023 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 95 | | 61-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 78 | | 59-130 |
| 2037-26-5 | Toluene-d8 (Surr) | 98 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D
Lims ID: 570-53377-A-6
Client ID: D388
Sample Type: Client
Inject. Date: 16-Mar-2021 00:15:30 ALS Bottle#: 3 Worklist Smp#: 18
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53377-a-6
Misc. Info.: A_SIMIS/SS_00005
Operator ID: 12GR Instrument ID: GCMSMMM

Method: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\AIRMS_GCMSMMM.m
Limit Group: MSV - TO15 SIM TO15 SIMLL
Last Update: 16-Mar-2021 13:38:16 Calib Date: 09-Feb-2021 18:41:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\CalScience\ChromData\GCMSMMM\20210210-38552.b\MMM09FEB11.D

Column 1 : Rxi-624Sil MS ( 0.18 mm) Det: MS SCAN
Process Host: CTX1645

First Level Reviewer: rhoadesw Date: 16-Mar-2021 13:33:14

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 11 1,1-Difluoroethane | 51 | | 2.755 | | | | ND | U |
| 13 Chloromethane | 50 | | 2.966 | | | | ND | U |
| 8 Dichlorodifluoromethane | 85 | | 3.033 | | | | ND | U |
| 15 Vinyl chloride | 62 | | 3.111 | | | | ND | |
| 6 Butadiene | 54 | | 3.200 | | | | ND | |
| 14 Bromomethane | 94 | | 3.378 | | | | ND | |
| 18 Chloroethane | 64 | | 3.493 | | | | ND | |
| 23 Trichlorofluoromethane | 101 | | 4.033 | | | | ND | U |
| 20 Acetone | 43 | 4.057 | 4.052 | 0.005 | 26 | 19251 | 0.0509 | |
| 21 Isopropyl alcohol | 45 | 4.243 | 4.259 | -0.016 | 6 | 32304 | 0.1030 | |
| 24 1,1-Dichloroethene | 61 | | 4.522 | | | | ND | |
| 25 Methylene Chloride | 84 | 4.612 | 4.612 | 0.000 | 35 | 5350 | 0.0251 | |
| 31 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 4.867 | | | | ND | U |
| 29 1,2-Dichloro-1,1,2,2-tetrafluoro | 151 | | 4.867 | | | | ND | |
| 30 Carbon disulfide | 76 | | 4.872 | | | | ND | |
| 26 trans-1,2-Dichloroethene | 96 | | 5.483 | | | | ND | |
| 32 1,1-Dichloroethane | 63 | | 5.684 | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 5.900 | | | | ND | U |
| 34 2-Butanone (MEK) | 43 | | 6.484 | | | | ND | U |
| 35 cis-1,2-Dichloroethene | 96 | | 6.587 | | | | ND | |
| * 36 Chlorobromomethane (IS) | 130 | 6.758 | 6.758 | 0.000 | 79 | 36372 | 0.5000 | |
| 40 Hexane | 57 | | 6.869 | | | | ND | |
| 39 Chloroform | 83 | | 6.920 | | | | ND | |
| $ 42 1,2-Dichloroethane-d4 (Surr) | 65 | 7.670 | 7.670 | 0.000 | 95 | 77589 | 0.4767 | |
| 38 1,2-Dichloroethane | 62 | | 7.806 | | | | ND | |
| 45 1,1,1-Trichloroethane | 97 | | 8.132 | | | | ND | |
| 48 Benzene | 78 | | 8.721 | | | | ND | U |
| 49 Carbon tetrachloride | 117 | | 8.927 | | | | ND | U |
| * 50 1,4-Difluorobenzene | 114 | 9.267 | 9.267 | 0.000 | 63 | 109981 | 0.5000 | |
| 41 1,2-Dichloropropane | 63 | | 9.860 | | | | ND | |
| 52 Dichlorobromomethane | 83 | | 10.127 | | | | ND | U |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 53 Trichloroethene | 95 | | 10.213 | | | | ND | U |
| 54 1,4-Dioxane | 57 | | 10.761 | | | | ND | |
| 57 cis-1,3-Dichloropropene | 75 | | 11.547 | | | | ND | U |
| 60 trans-1,3-Dichloropropene | 75 | | 12.399 | | | | ND | |
| 61 1,1,2-Trichloroethane | 83 | | 12.623 | | | | ND | |
| $ 63 Toluene-d8 (Surr) | 98 | 12.933 | 12.932 | 0.001 | 97 | 101338 | 0.4912 | |
| 64 Toluene | 91 | | 13.092 | | | | ND | U |
| 66 Chlorodibromomethane | 129 | | 13.731 | | | | ND | U |
| 59 Ethylene Dibromide | 107 | | 14.136 | | | | ND | U |
| 67 Tetrachloroethene | 166 | | 15.012 | | | | ND | |
| * 68 Chlorobenzene-d5 | 117 | 16.143 | 16.143 | 0.000 | 95 | 95967 | 0.5000 | |
| 69 Chlorobenzene | 112 | | 16.219 | | | | ND | U |
| 71 Ethylbenzene | 91 | | 16.995 | | | | ND | U |
| 72 m-Xylene & p-Xylene | 91 | | 17.330 | | | | ND | |
| 74 Styrene | 104 | | 18.037 | | | | ND | U |
| 75 1,1,2,2-Tetrachloroethane | 83 | | 18.209 | | | | ND | U |
| 76 o-Xylene | 91 | | 18.245 | | | | ND | U |
| 77 1,2,3-Trichloropropane | 75 | | 18.472 | | | | ND | |
| $ 79 4-Bromofluorobenzene (Surr) | 95 | 19.144 | 19.143 | 0.001 | 99 | 54746 | 0.3881 | |
| 86 4-Ethyltoluene | 105 | | 20.959 | | | | ND | U |
| 81 1,3,5-Trimethylbenzene | 105 | | 21.154 | | | | ND | U |
| 85 1,2,4-Trimethylbenzene | 105 | | 22.073 | | | | ND | |
| 92 1,3-Dichlorobenzene | 146 | | 22.305 | | | | ND | |
| 93 1,4-Dichlorobenzene | 146 | | 22.487 | | | | ND | |
| 89 1,2-Dichlorobenzene | 146 | | 23.286 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 28.061 | | | | ND | |
| 98 Naphthalene | 128 | | 28.303 | | | | ND | |
| 97 1,2,3-Trichlorobenzene | 180 | | 29.029 | | | | ND | U |
| 99 Hexachlorobutadiene | 225 | | 29.416 | | | | ND | |
| 102 Xylenes, Total | 1 | | 0.000 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

## Reagents:

A_Sim IS/SS_00005 Amount Added: 100.00 Units: mL Run Reagent

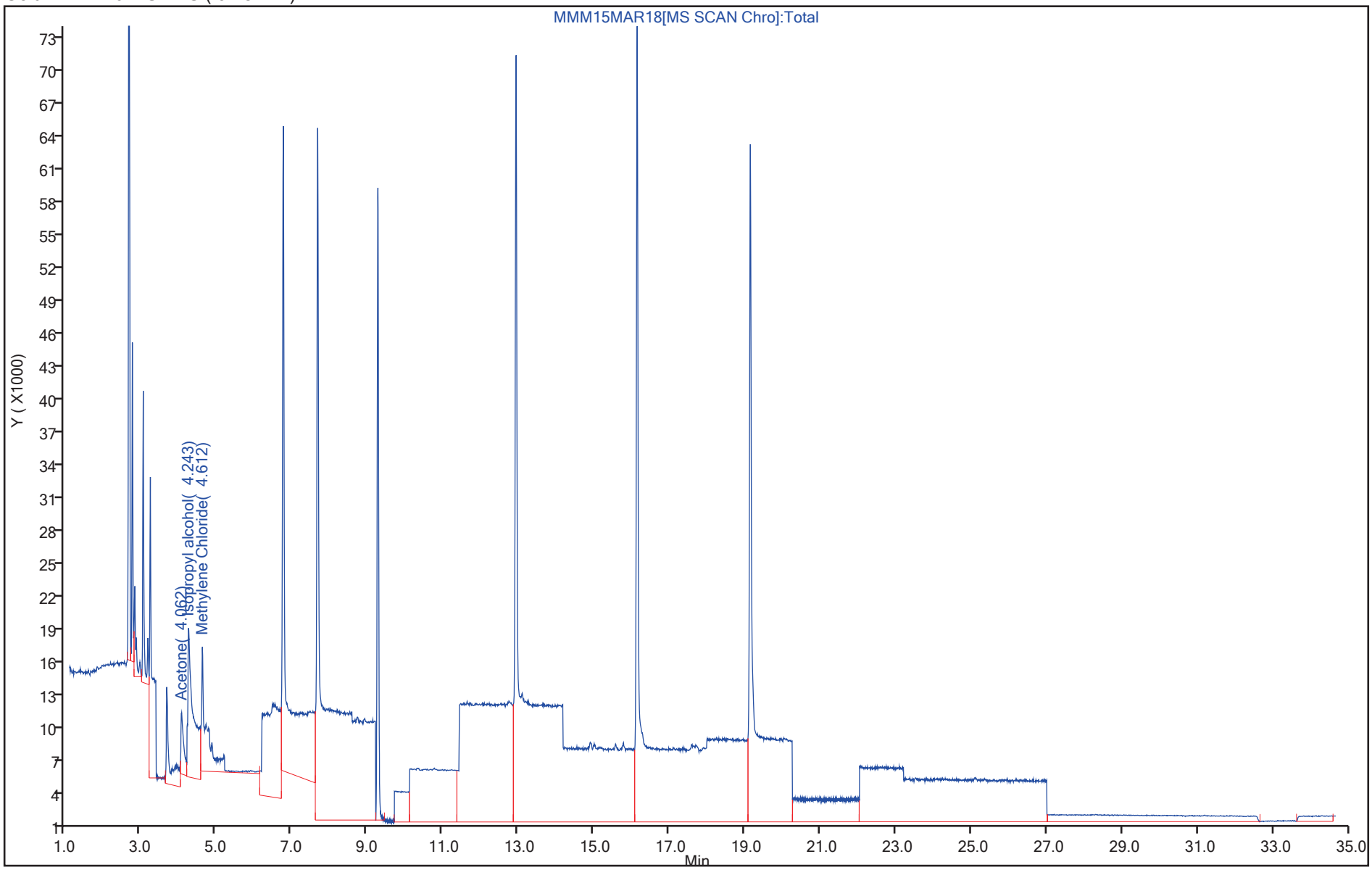
Report Date: 16-Mar-2021 13:38:50 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | Operator ID: | 12GR |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | Worklist Smp#: | 18 |
| Client ID: | D388 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |

Column: Rxi-624Sil MS ( 0.18 mm)



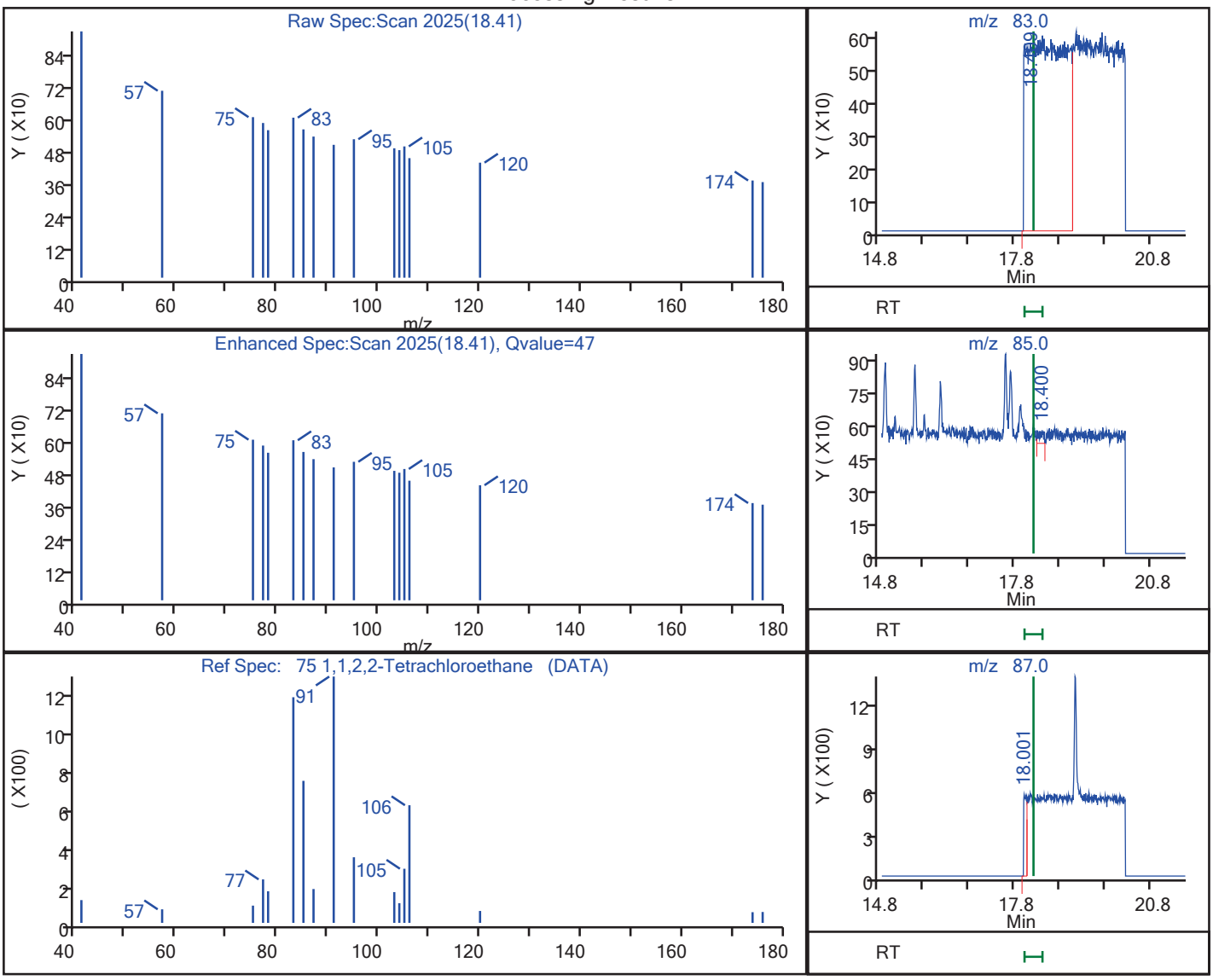
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 75 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.41 | 83.00 | 36645 | 0.081781 |
| 18.40 | 85.00 | 431 | |
| 18.00 | 87.00 | 2714 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

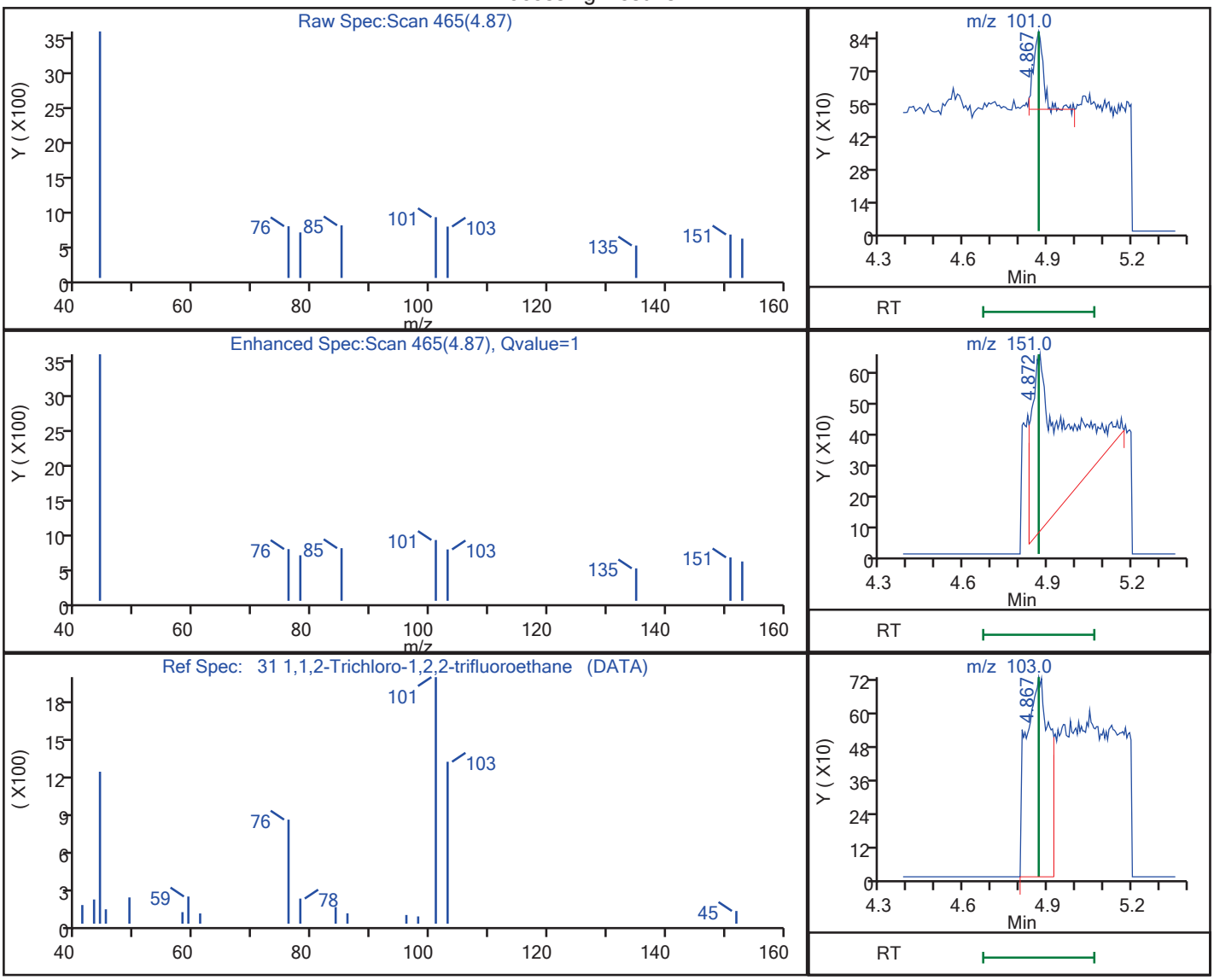
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 31 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.87 | 101.00 | 813 | 0.001910 |
| 4.87 | 151.00 | 4656 | |
| 4.87 | 103.00 | 4295 | |
| 4.88 | 153.00 | 9703 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

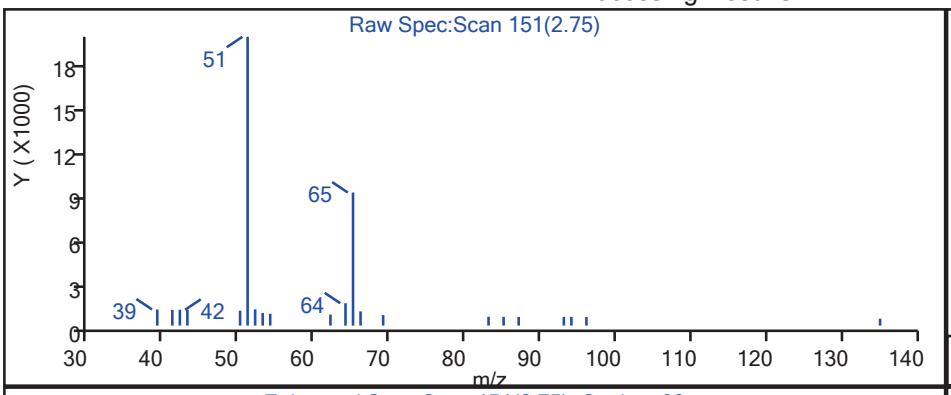
User Disabled Compound Report

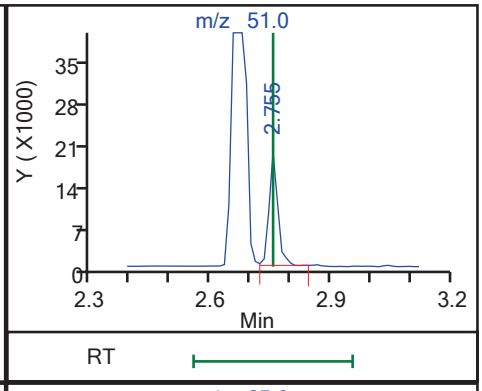
Eurofins Calscience LLC

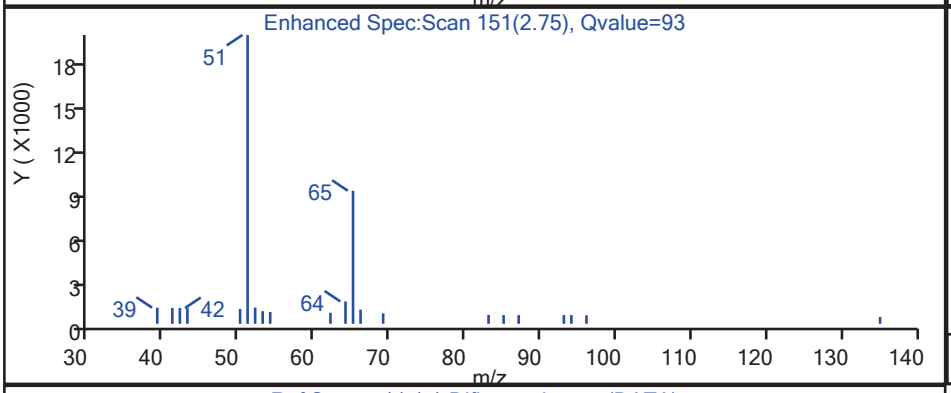
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

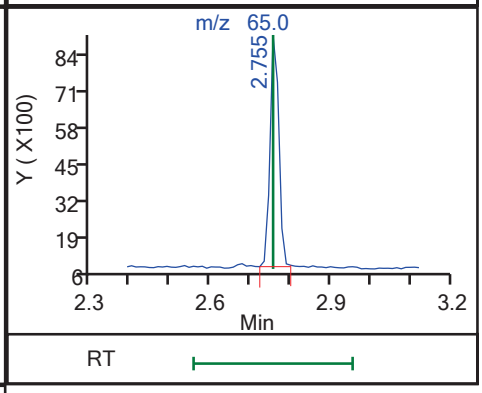
## 11 1,1-Difluoroethane, CAS: 75-37-6

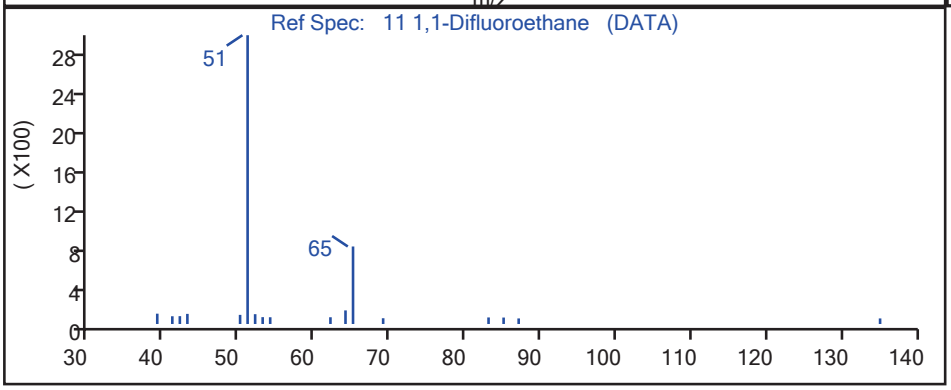
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.75 | 51.00 | 28633 | 0.113931 |
| 2.75 | 65.00 | 12848 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

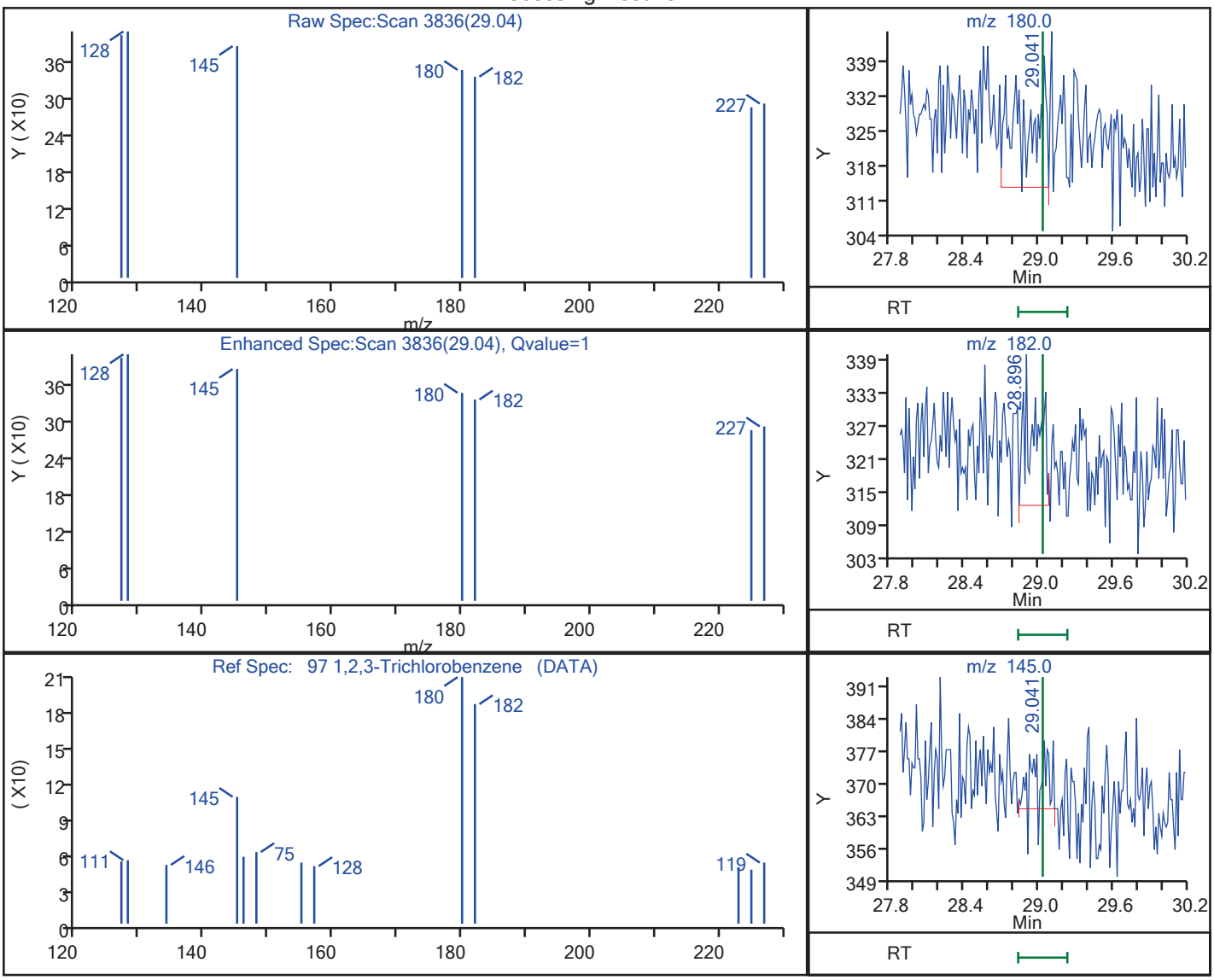
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 97 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 29.04 | 180.00 | 298 | 0.001407 |
| 28.90 | 182.00 | 187 | |
| 29.04 | 145.00 | 105 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

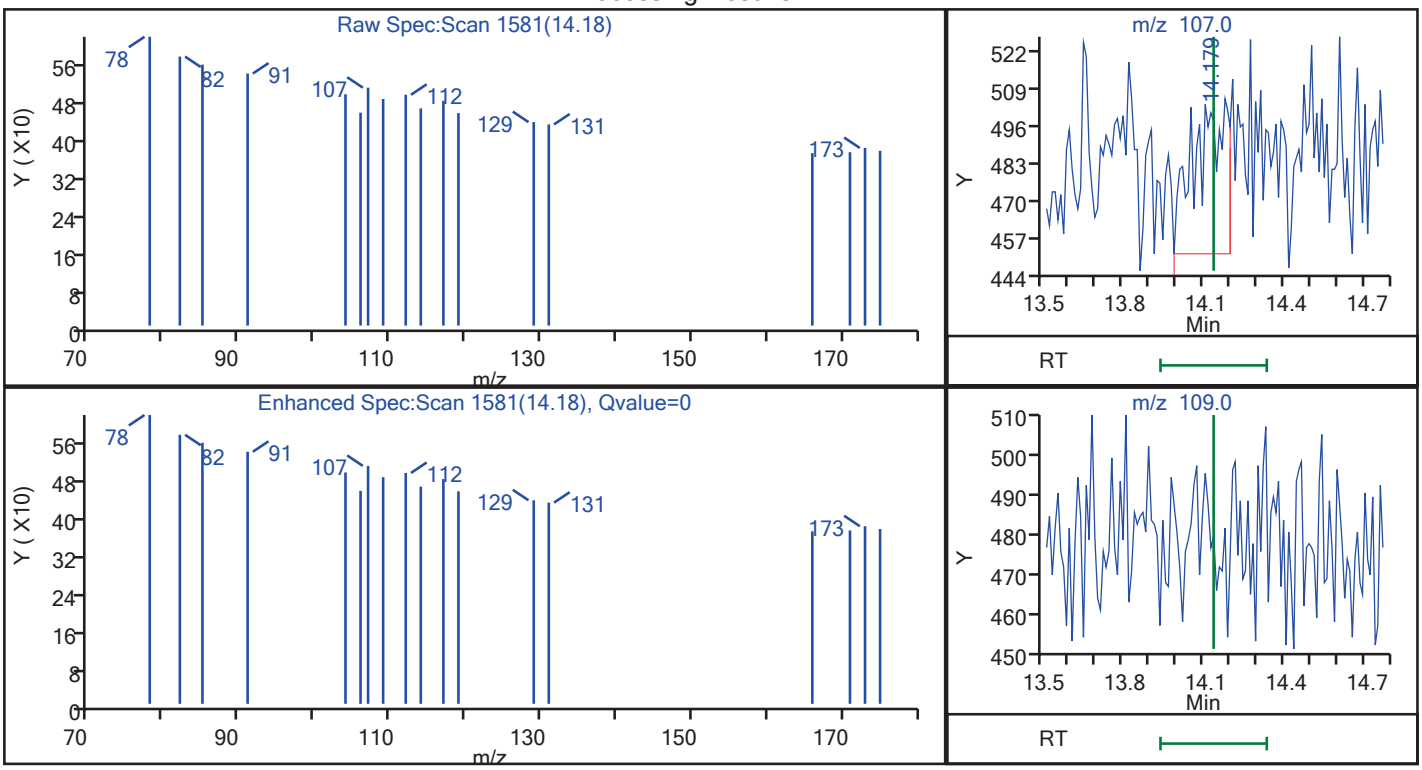
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 59 Ethylene Dibromide, CAS: 106-93-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 14.18 | 107.00 | 473 | 0.002201 |
| 14.14 | 109.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

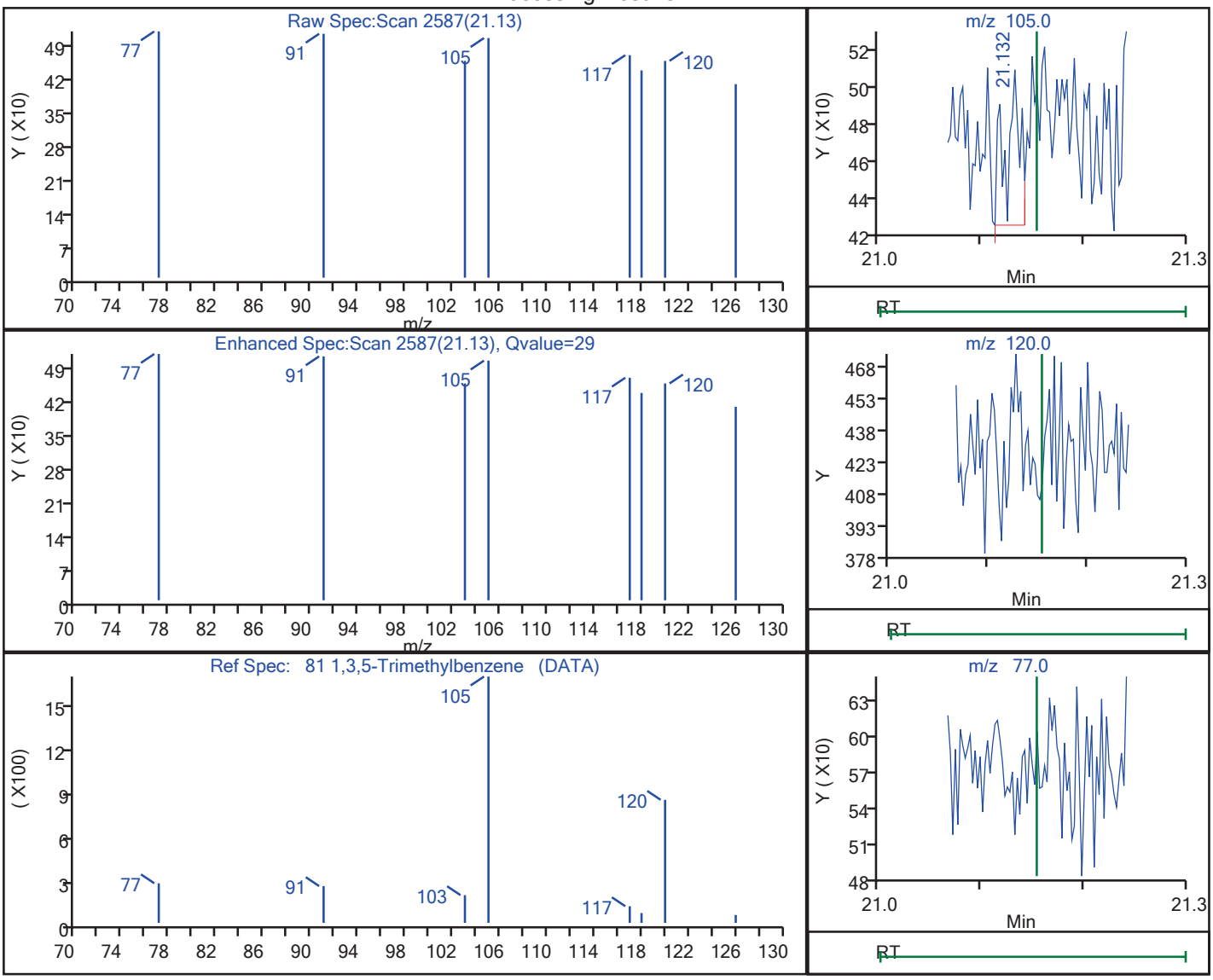
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 81 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 21.13 | 105.00 | 78 | 0.000352 |
| 21.15 | 120.00 | 0 | |
| 21.15 | 77.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

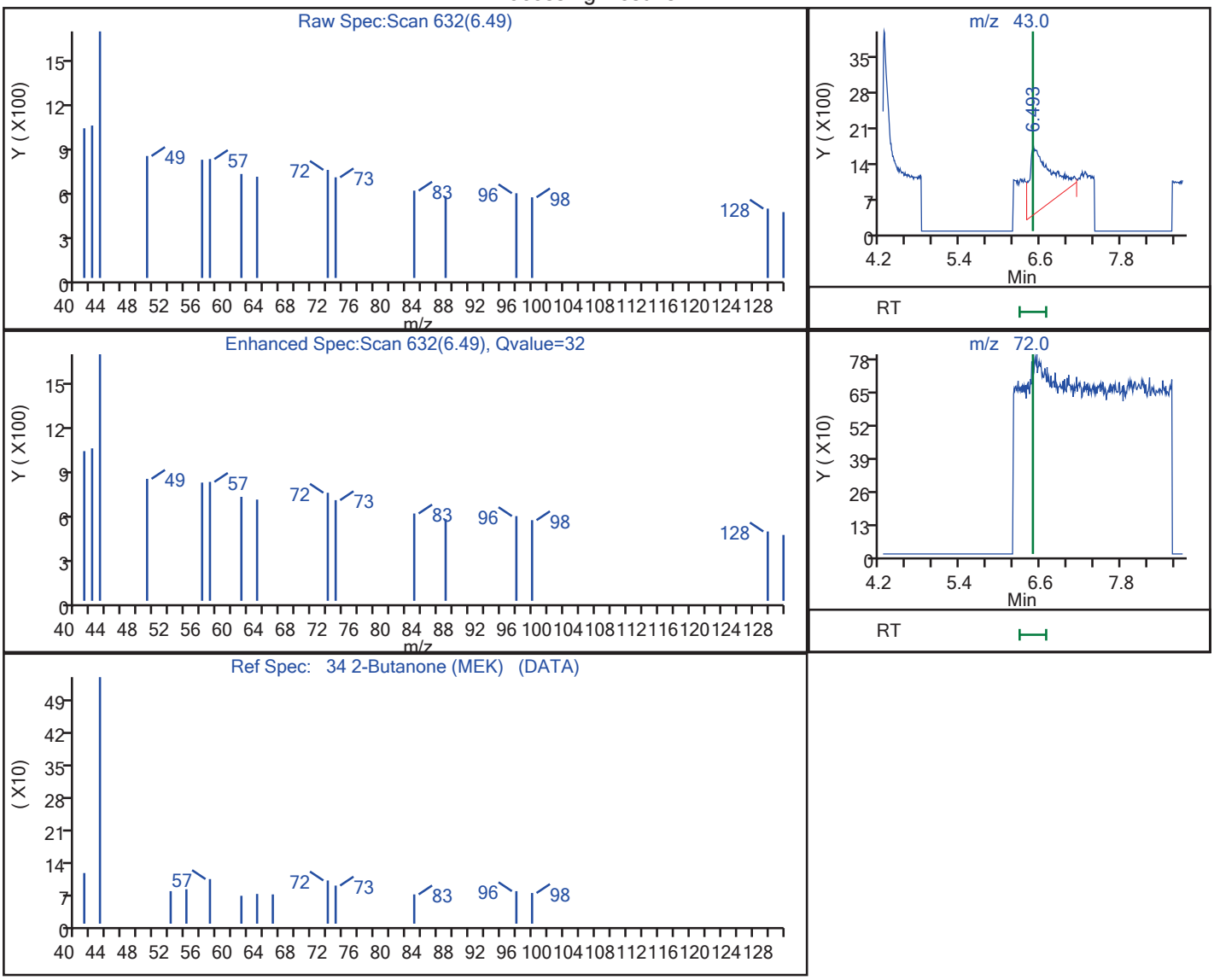
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 34 2-Butanone (MEK), CAS: 78-93-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.49 | 43.00 | 28308 | 0.109186 |
| 6.48 | 72.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

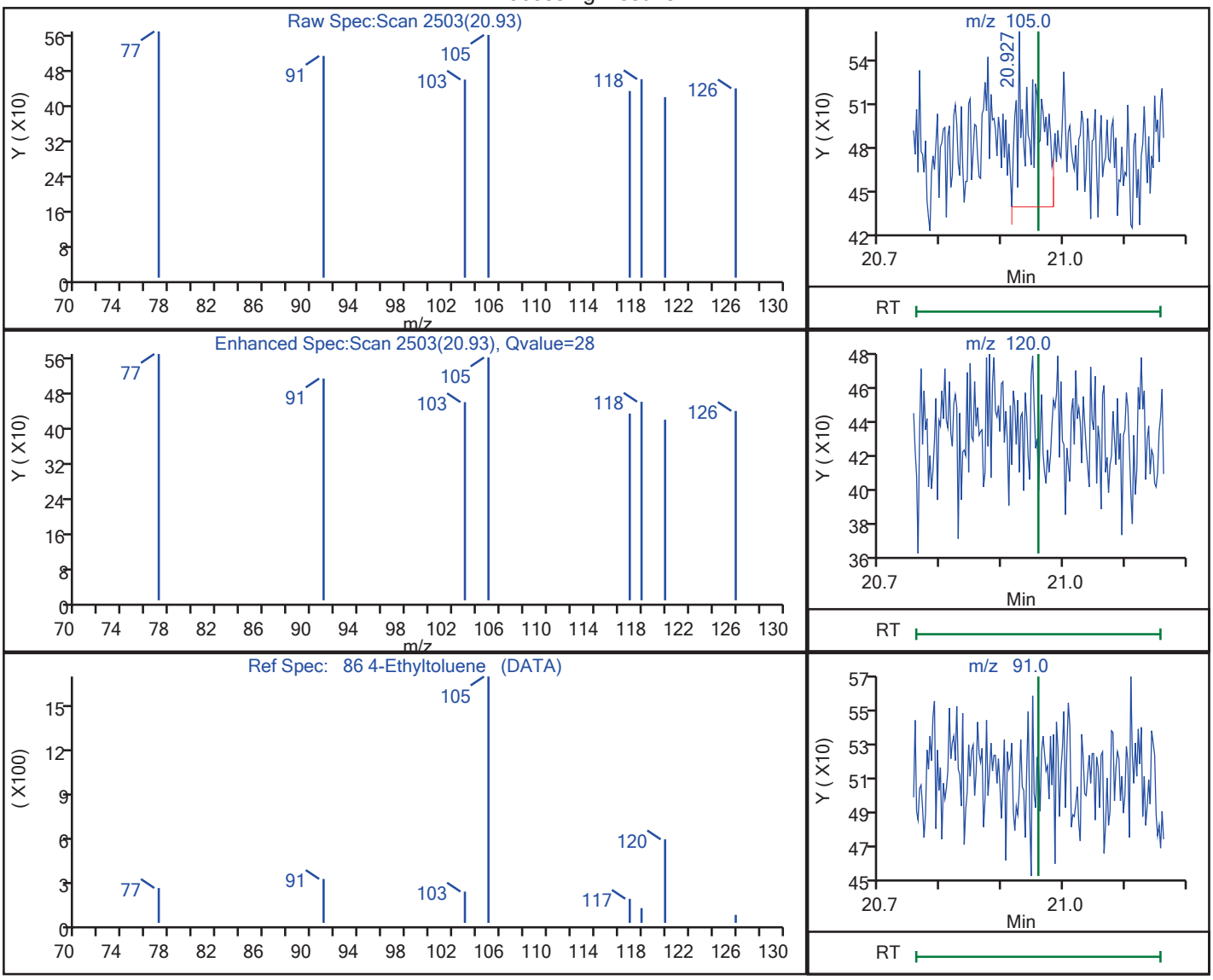
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 86 4-Ethyltoluene, CAS: 622-96-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 20.93 | 105.00 | 218 | 0.000888 |
| 20.96 | 120.00 | 0 | |
| 20.96 | 91.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

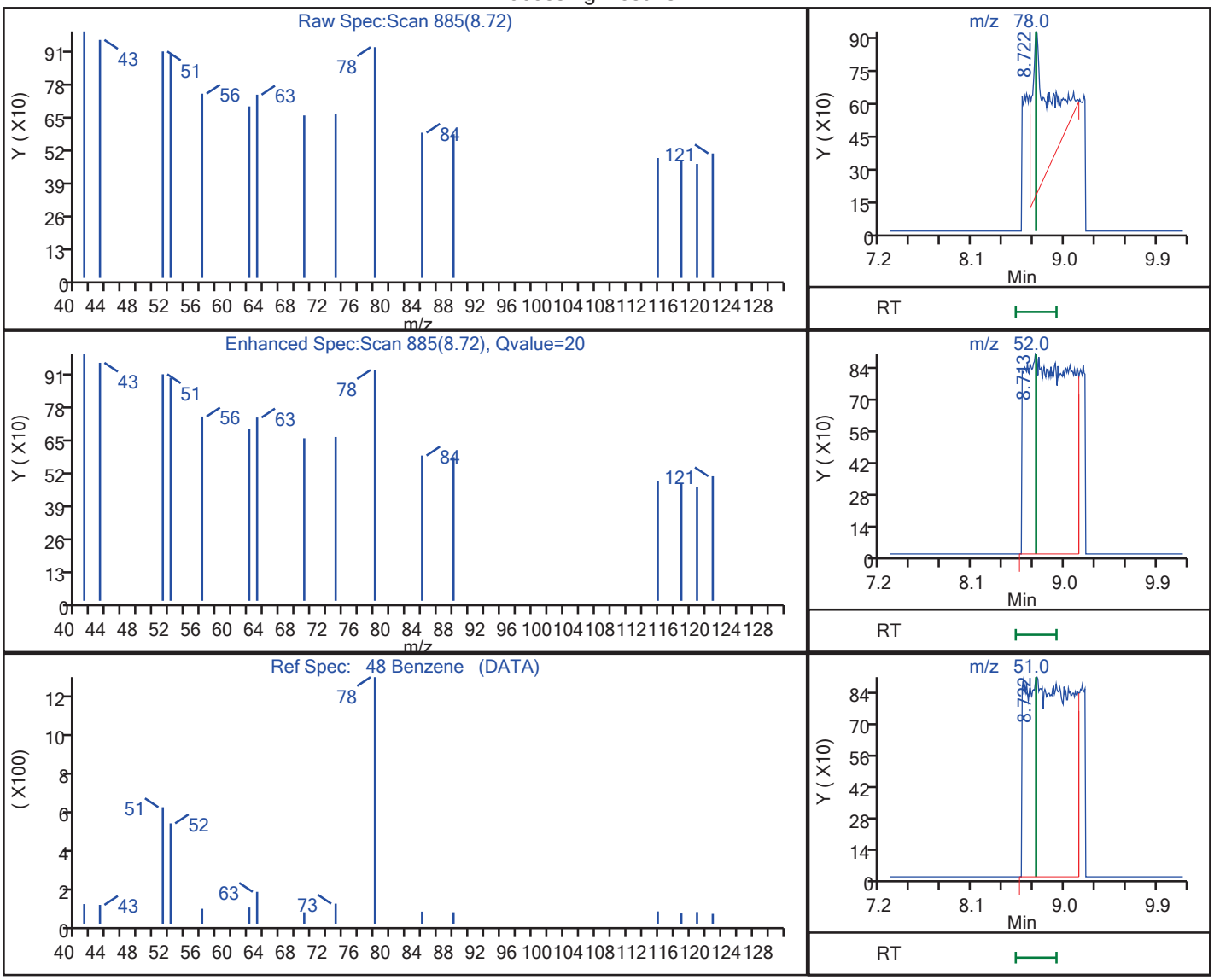
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 48 Benzene, CAS: 71-43-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.72 | 78.00 | 8340 | 0.027175 |
| 8.71 | 52.00 | 27895 | |
| 8.72 | 51.00 | 28499 | |
| 8.72 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

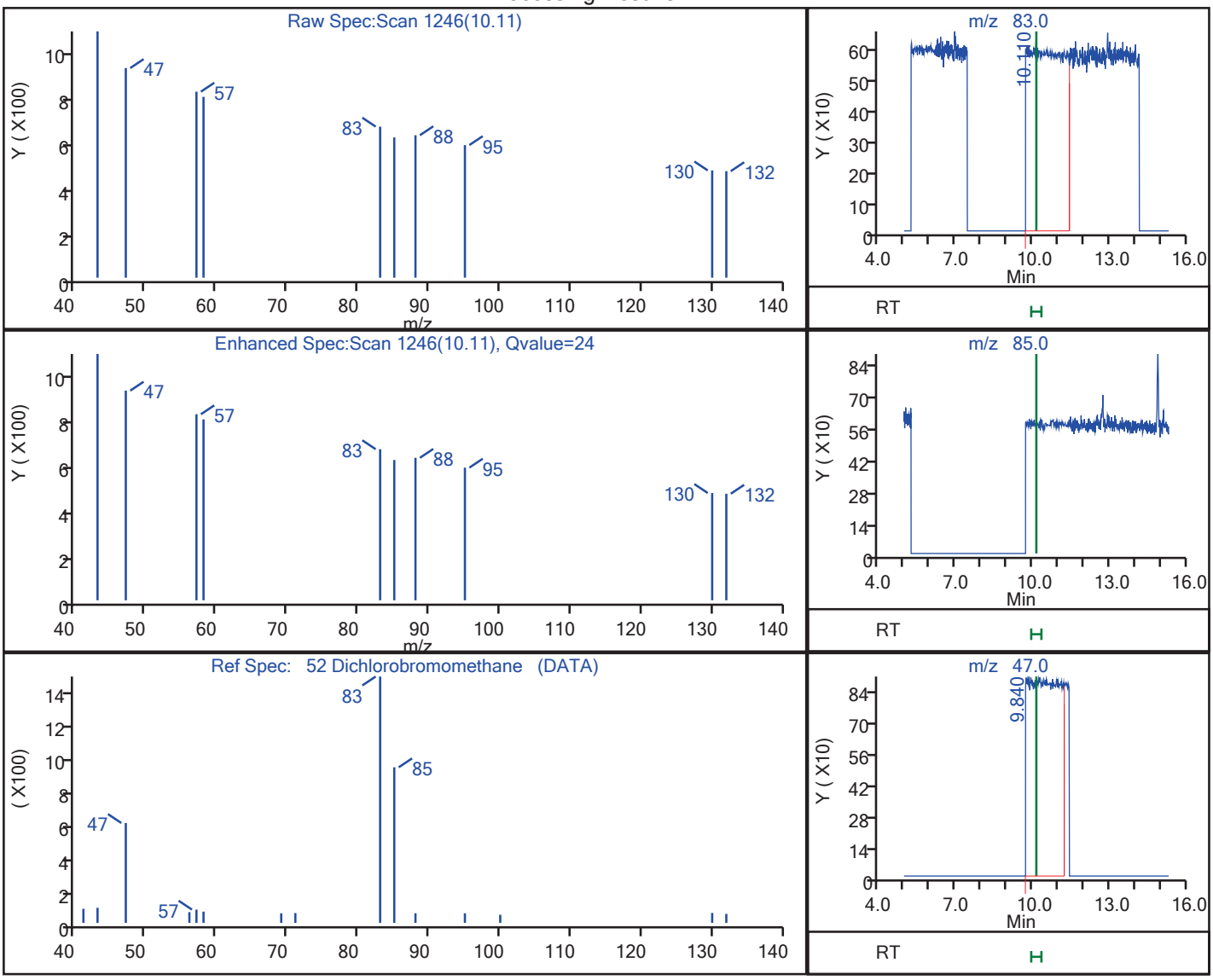
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 52 Dichlorobromomethane, CAS: 75-27-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 10.11 | 83.00 | 60441 | 0.187345 |
| 10.13 | 85.00 | 0 | |
| 9.84 | 47.00 | 79578 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

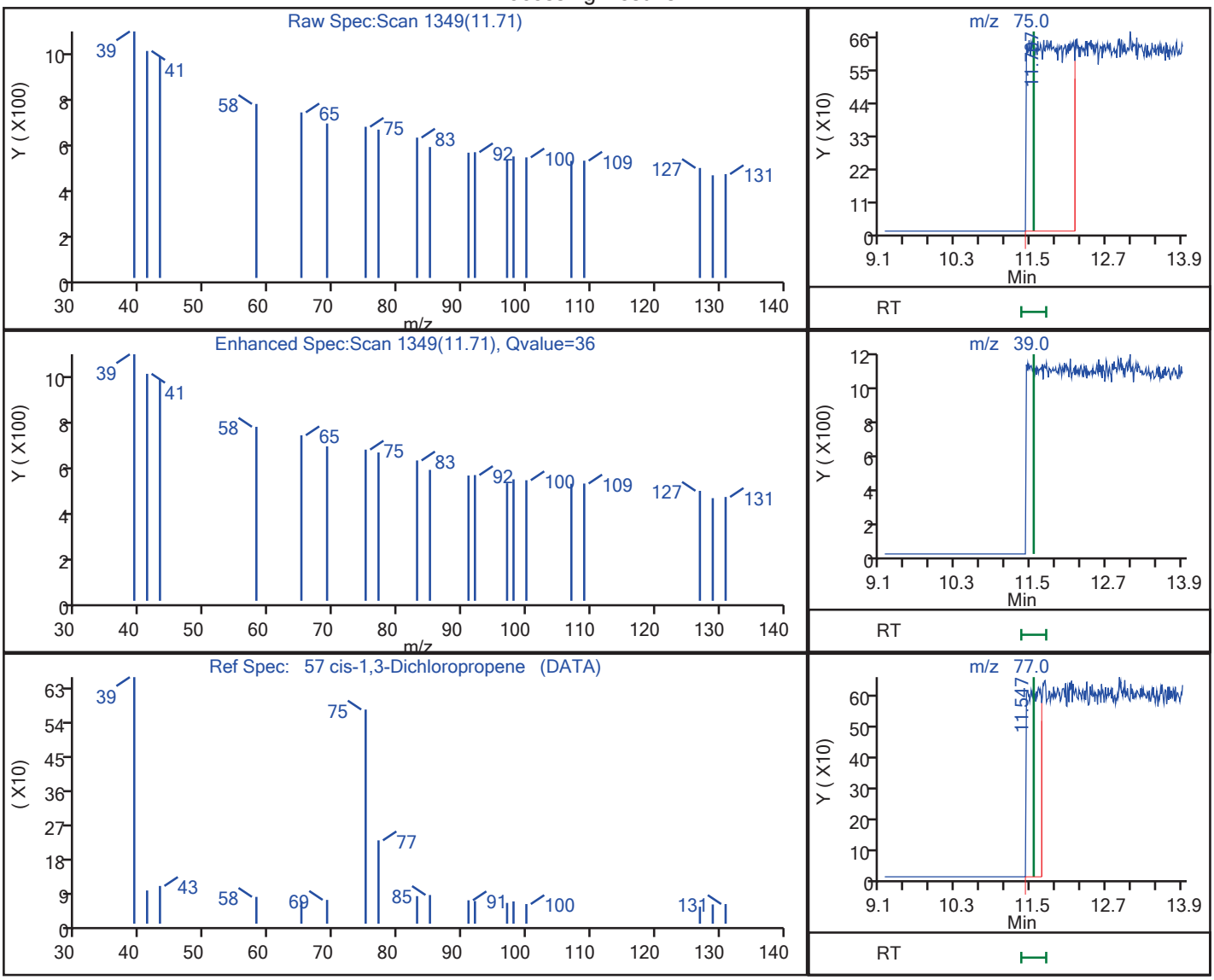
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 57 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 11.71 | 75.00 | 29237 | 0.192007 |
| 11.55 | 39.00 | 0 | |
| 11.55 | 77.00 | 9463 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

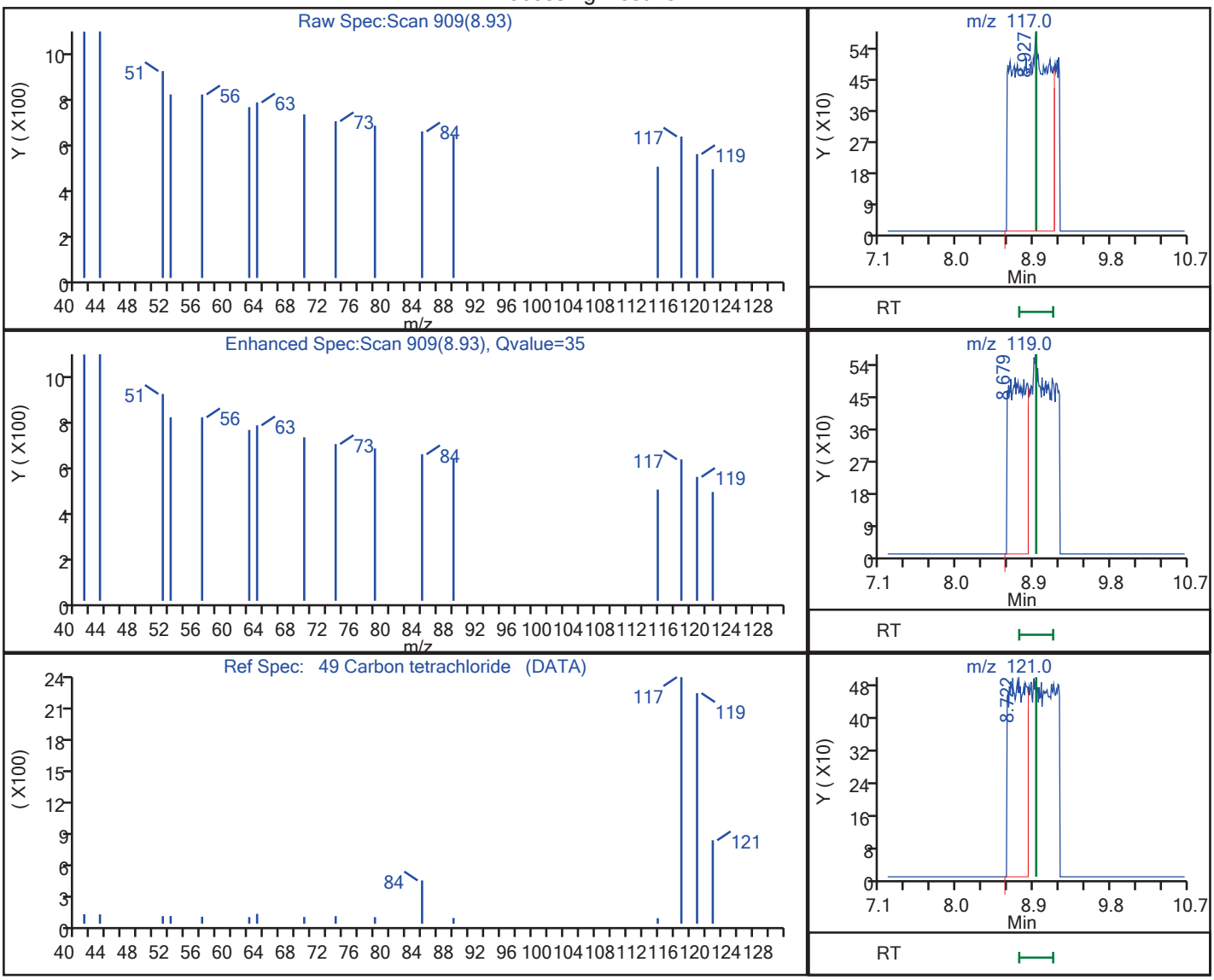
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 49 Carbon tetrachloride, CAS: 56-23-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.93 | 117.00 | 16161 | 0.048417 |
| 8.68 | 119.00 | 7234 | |
| 8.72 | 121.00 | 7178 | |
| 8.93 | 47.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

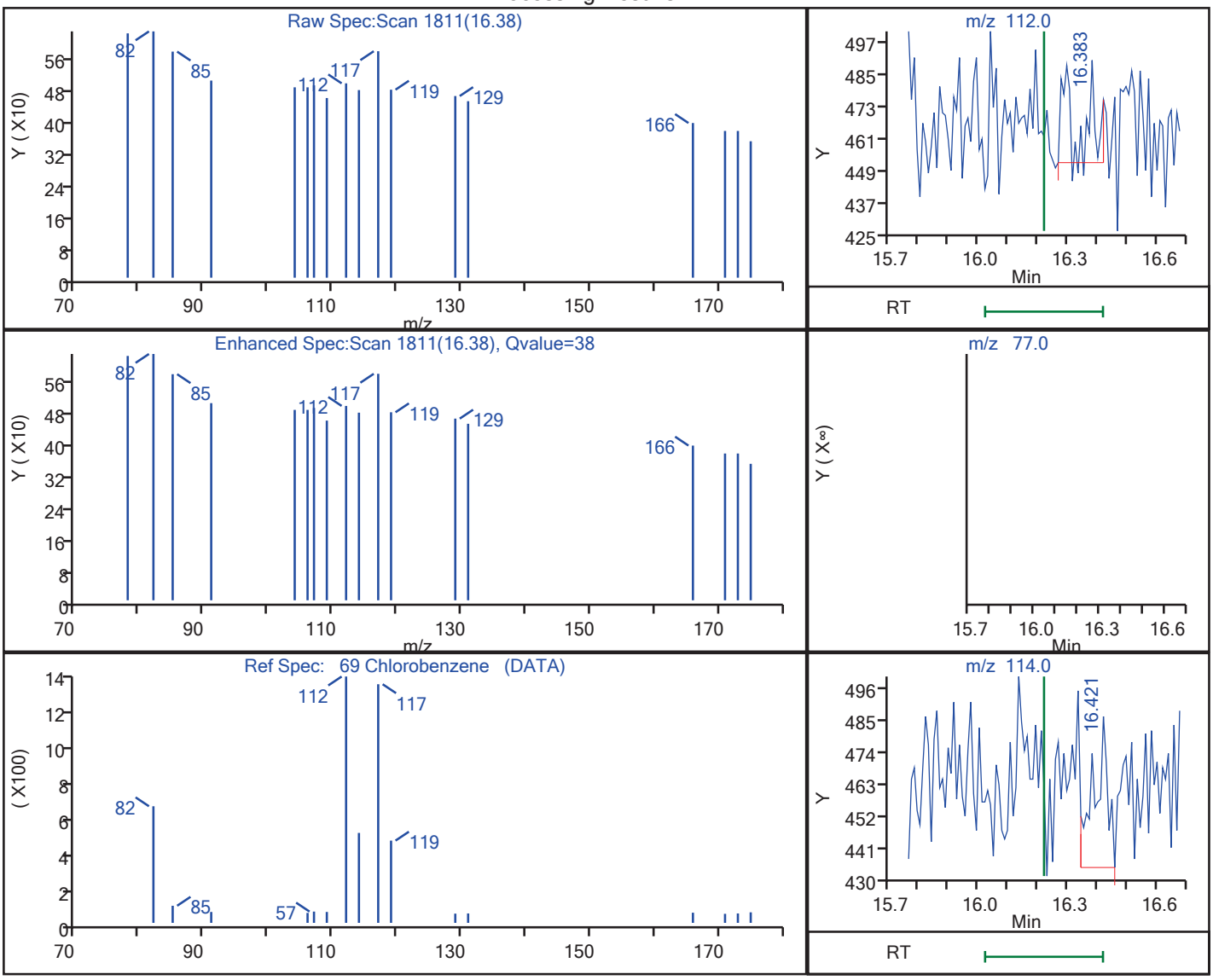
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 69 Chlorobenzene, CAS: 108-90-7

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 16.38 | 112.00 | 141 | 0.000580 |
| 16.22 | 77.00 | 0 | |
| 16.42 | 114.00 | 174 | |
| 16.22 | 51.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

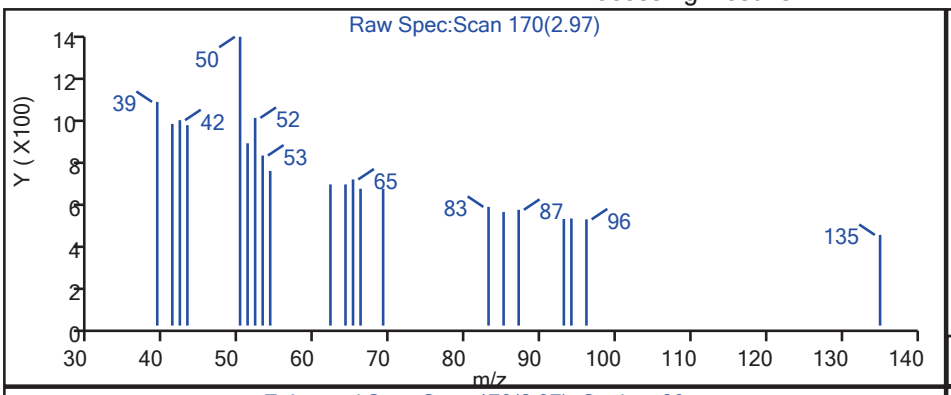
User Disabled Compound Report

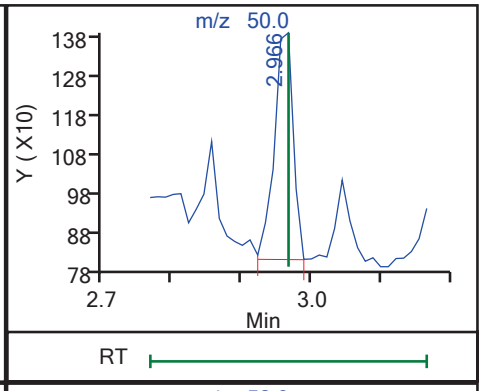
Eurofins Calscience LLC

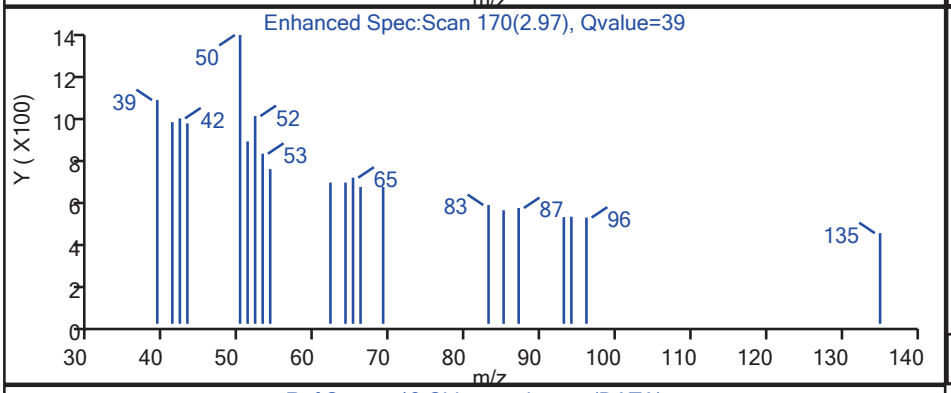
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

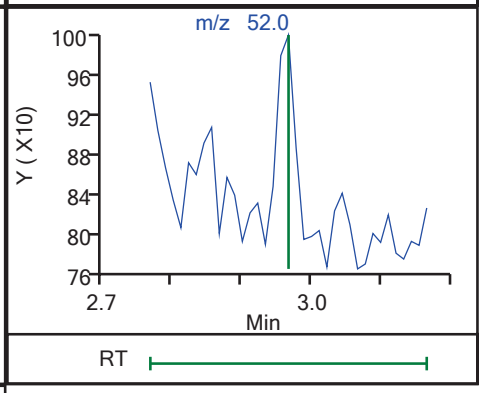
## 13 Chloromethane, CAS: 74-87-3

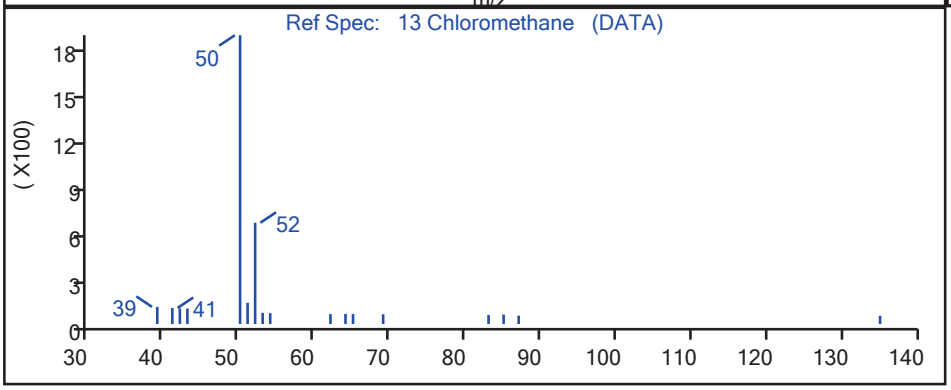
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.97 | 50.00 | 1115 | 0.005715 |
| 2.97 | 52.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

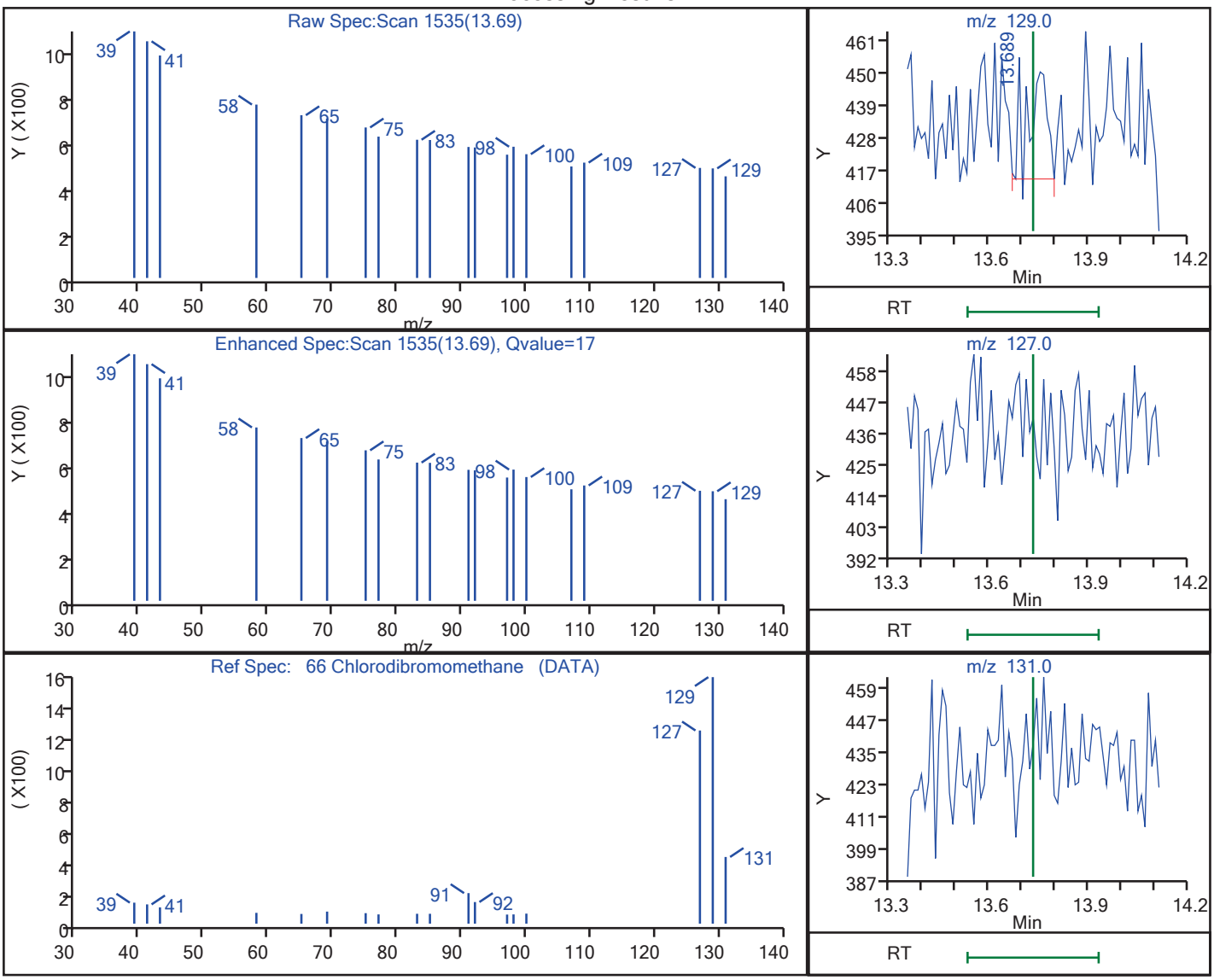
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 66 Chlorodibromomethane, CAS: 124-48-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.69 | 129.00 | 153 | 0.000520 |
| 13.73 | 127.00 | 0 | |
| 13.73 | 131.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

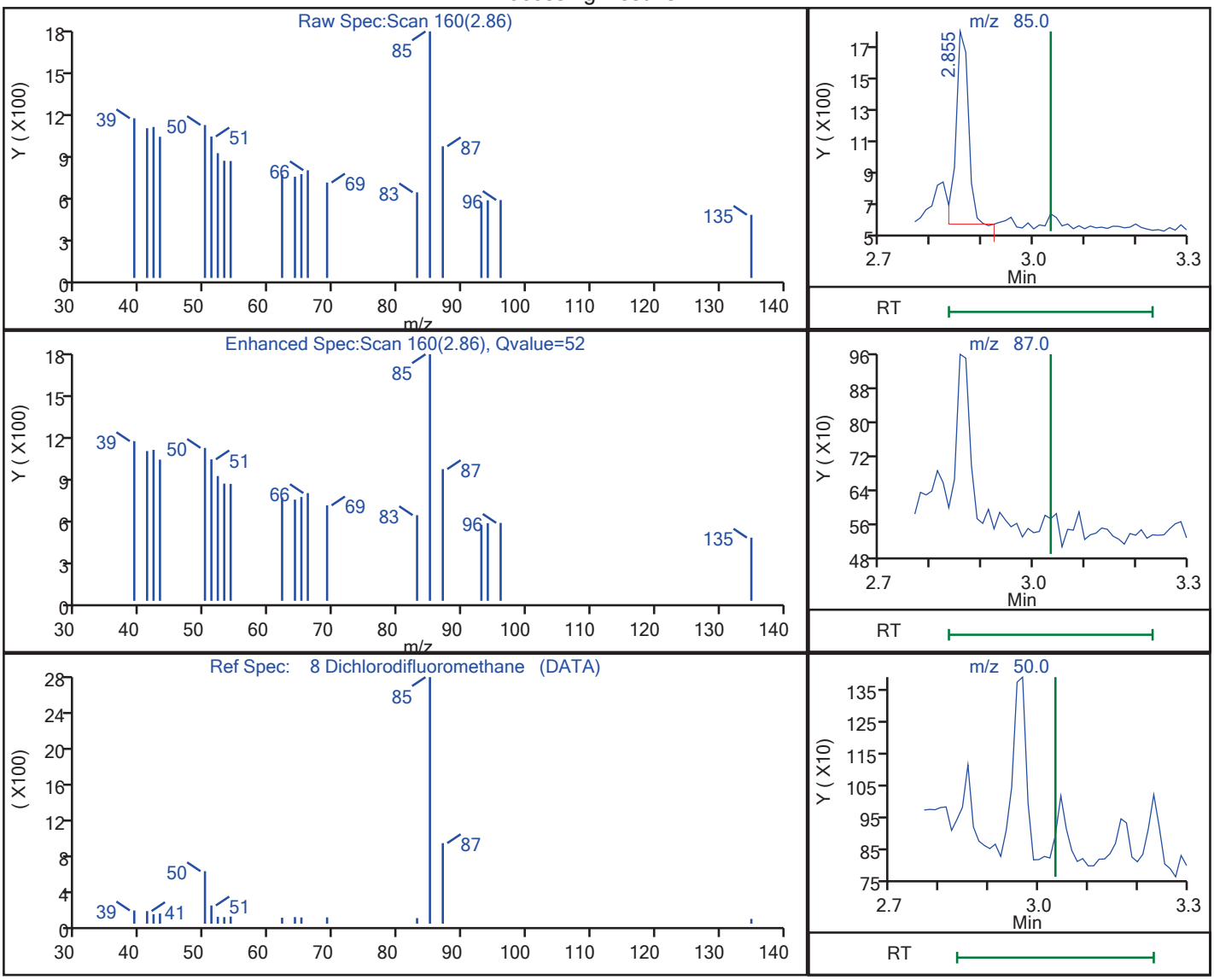
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 8 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.86 | 85.00 | 2063 | 0.003758 |
| 2.86 | 87.00 | 2472 | |
| 3.03 | 50.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

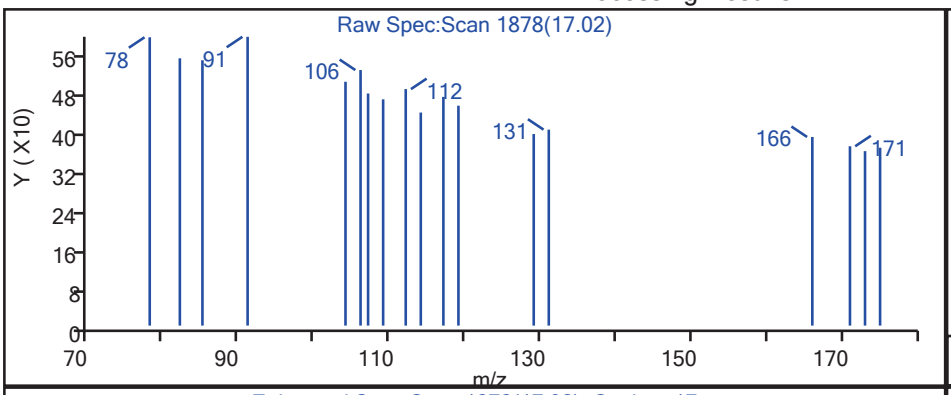
User Disabled Compound Report

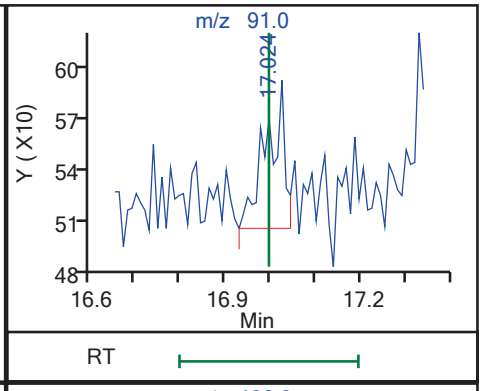
Eurofins Calscience LLC

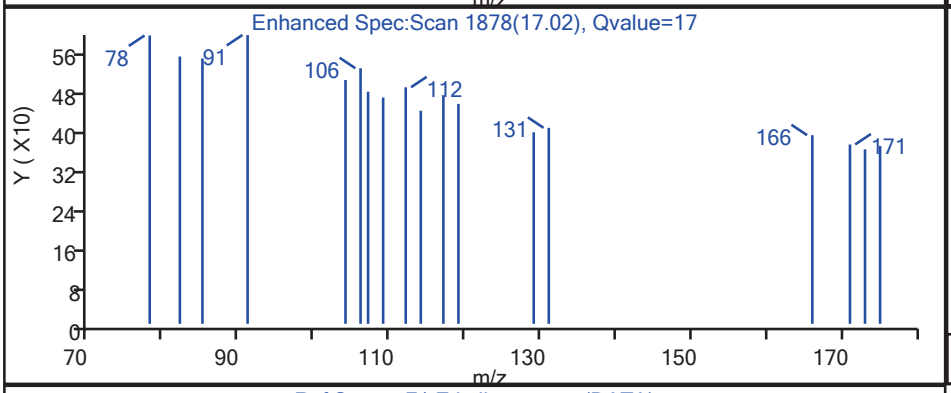
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

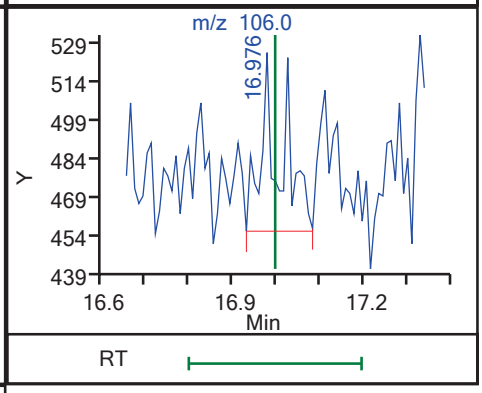
## 71 Ethylbenzene, CAS: 100-41-4

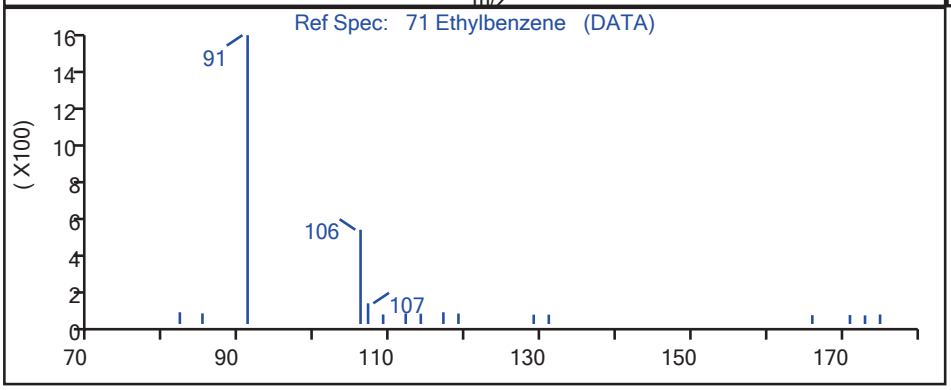
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 17.02 | 91.00 | 230 | 0.000892 |
| 16.98 | 106.00 | 228 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Calscience LLC

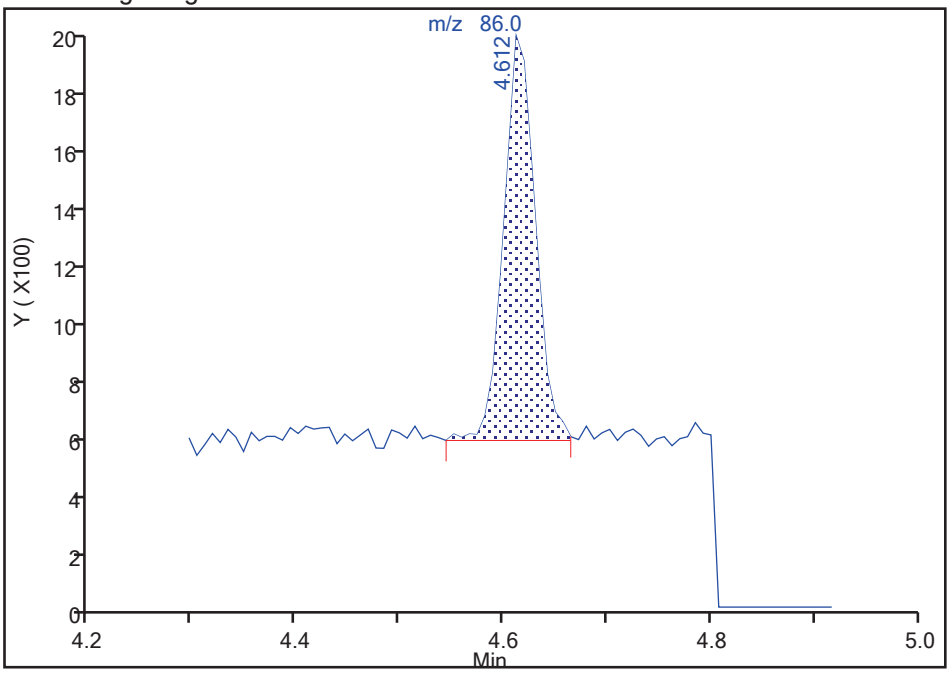
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 25 Methylene Chloride, CAS: 75-09-2

Signal: 2

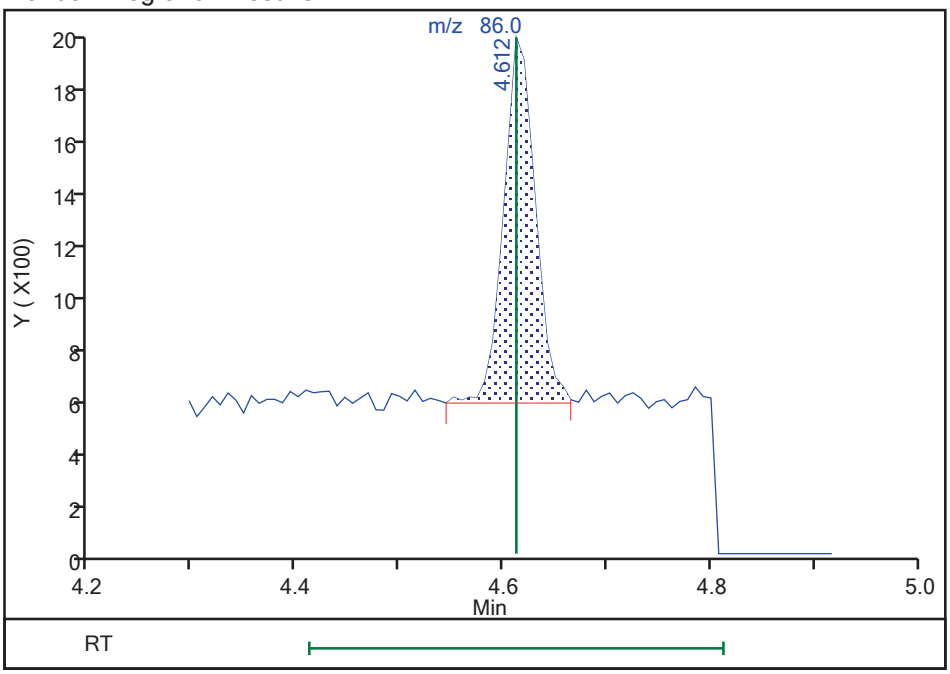
Processing Integration Results

RT: 4.61
Area: 2947
Amount: 0.025114
Amount Units: ppb v/v




Manual Integration Results

RT: 4.61
Area: 2947
Amount: 0.025114
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:32:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Calscience LLC

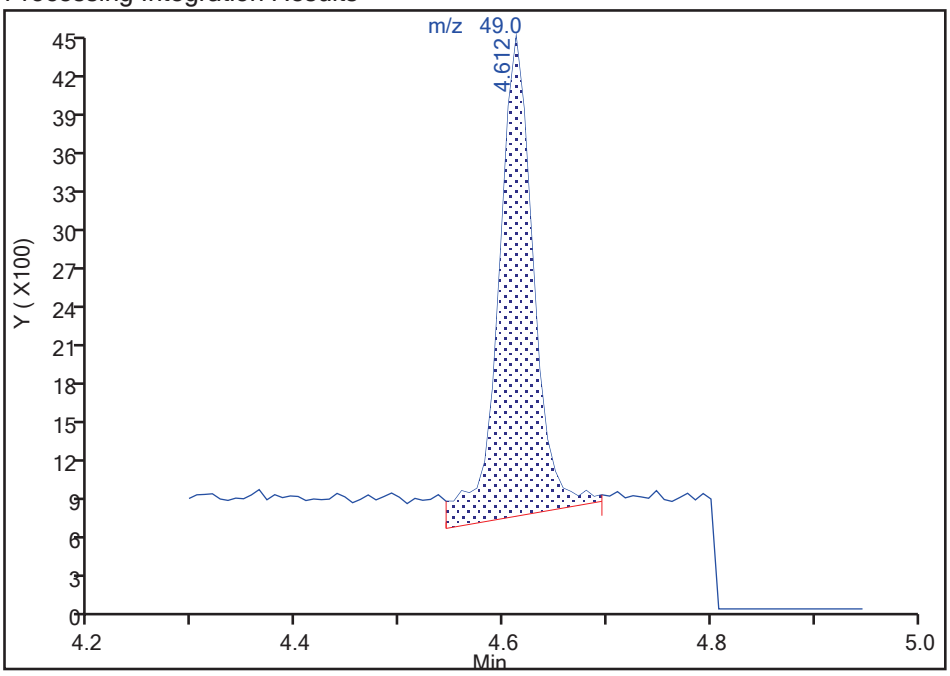
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 25 Methylene Chloride, CAS: 75-09-2

Signal: 3

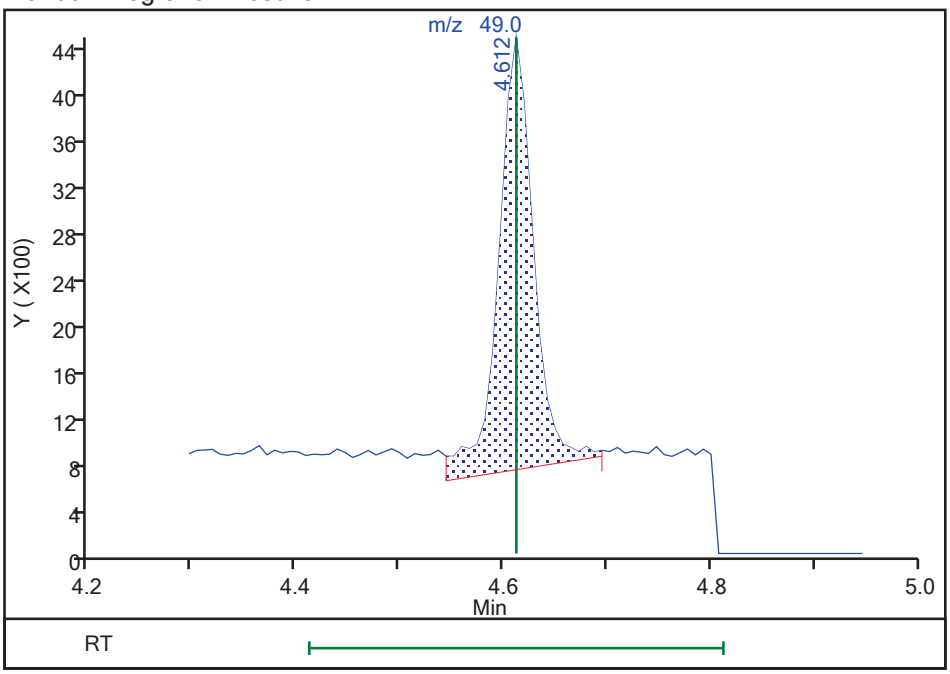
Processing Integration Results

RT: 4.61
Area: 8880
Amount: 0.025114
Amount Units: ppb v/v




Manual Integration Results

RT: 4.61
Area: 8880
Amount: 0.025114
Amount Units: ppb v/v




Reviewer: rhoadesw, 16-Mar-2021 13:32:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

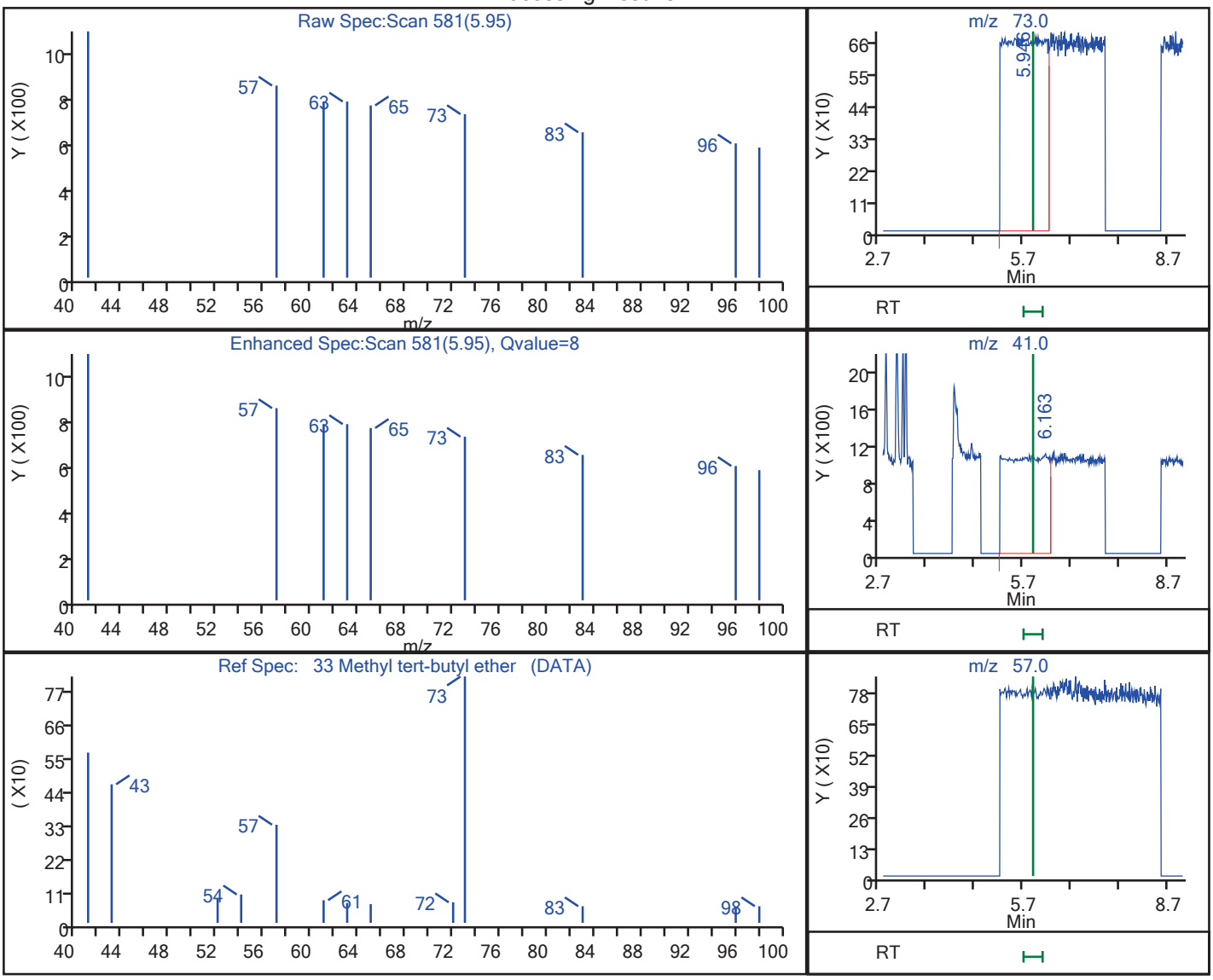
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 33 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.95 | 73.00 | 40890 | 0.222629 |
| 6.16 | 41.00 | 66004 | |
| 5.90 | 57.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

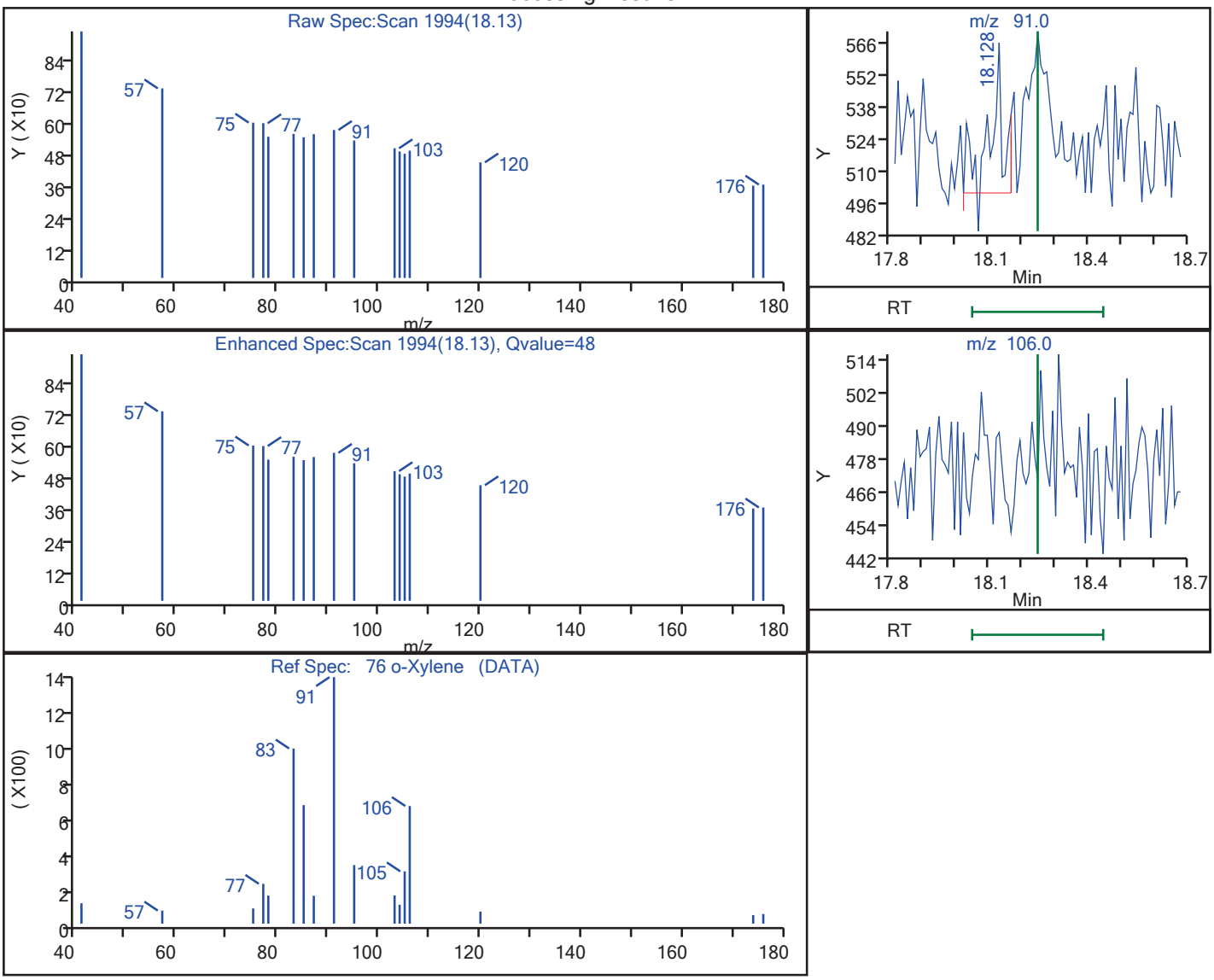
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 76 o-Xylene, CAS: 95-47-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.13 | 91.00 | 187 | 0.000885 |
| 18.25 | 106.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:33:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

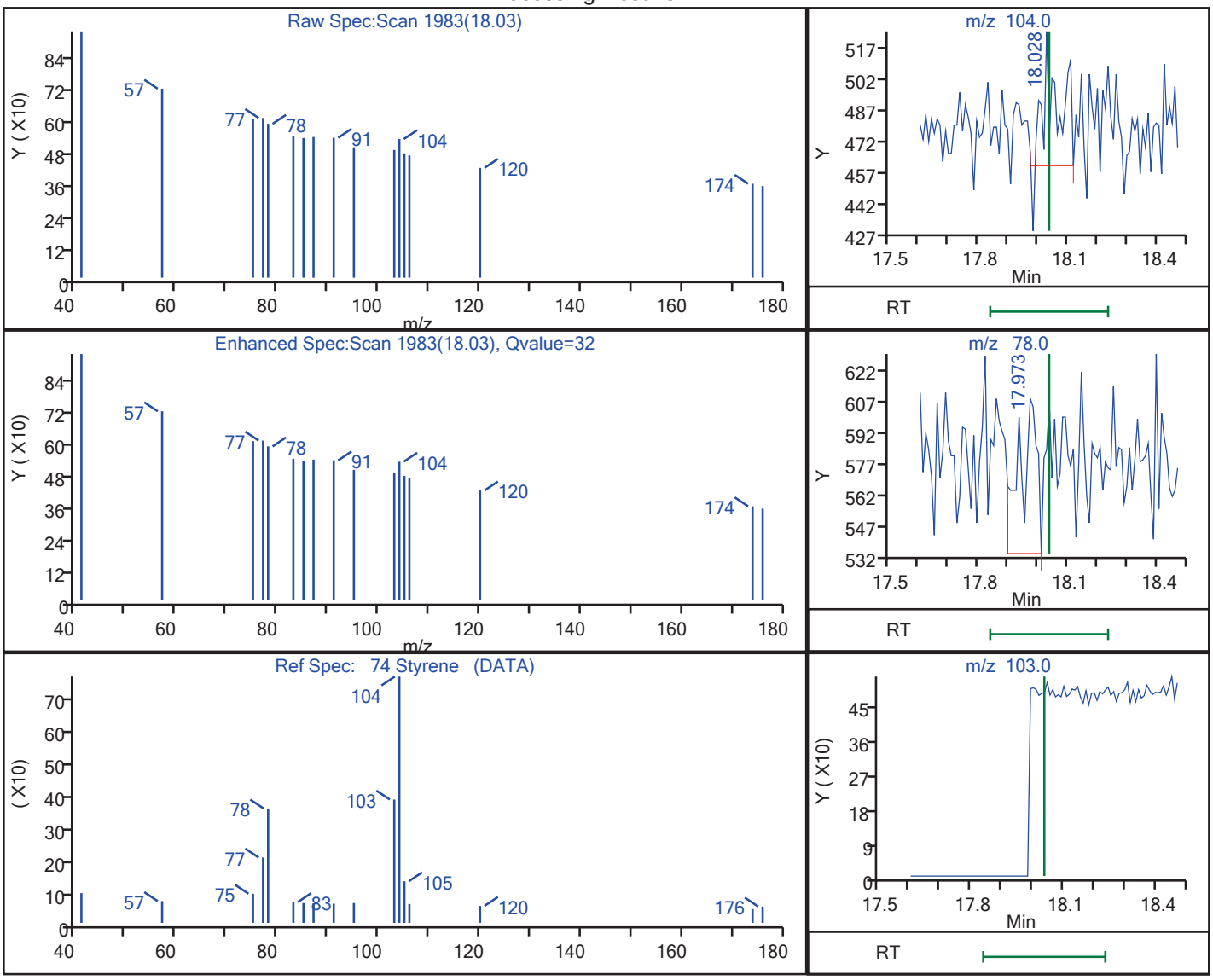
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 74 Styrene, CAS: 100-42-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 18.03 | 104.00 | 223 | 0.001916 |
| 17.97 | 78.00 | 309 | |
| 18.04 | 103.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

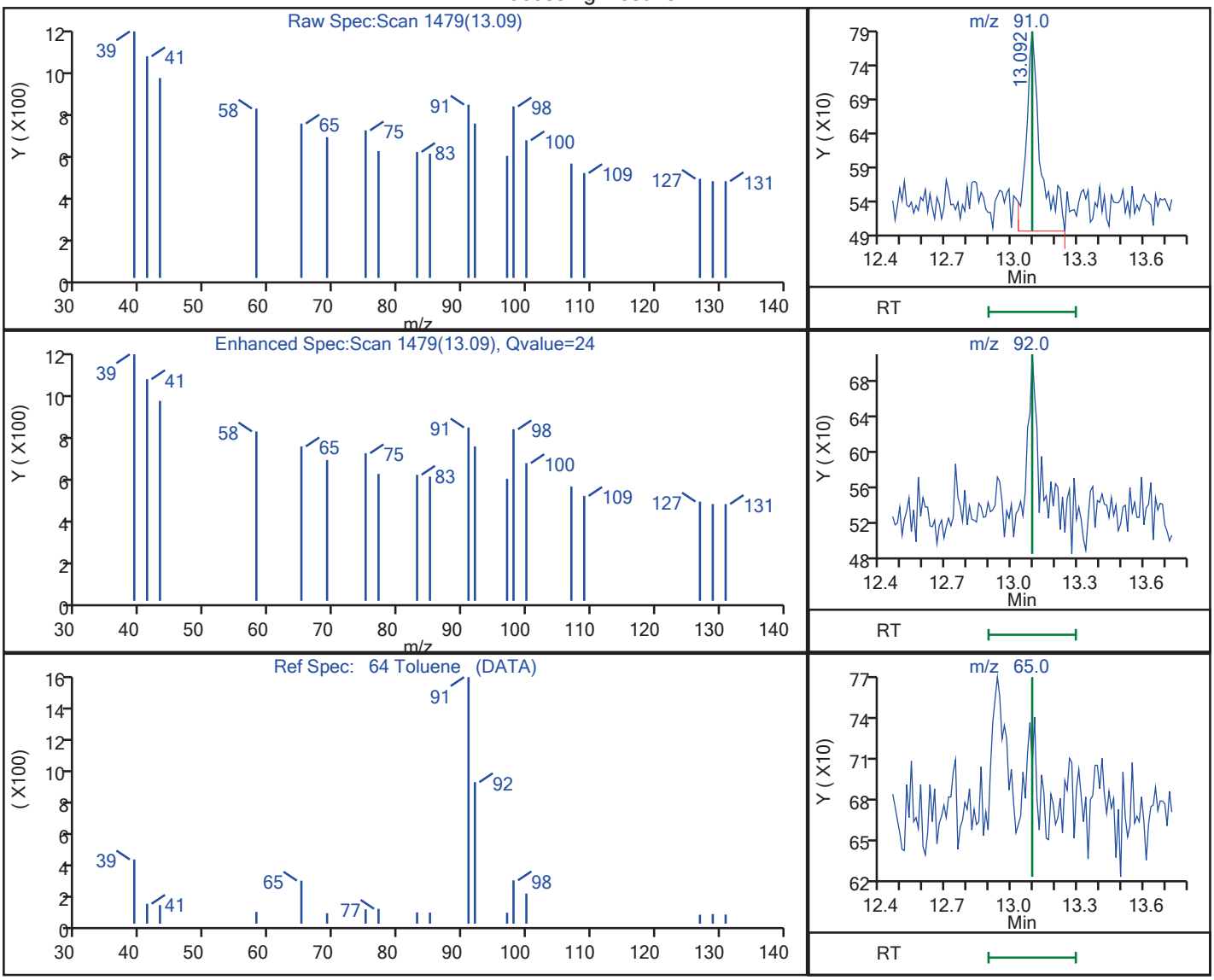
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 64 Toluene, CAS: 108-88-3

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.09 | 91.00 | 1292 | 0.004556 |
| 13.09 | 92.00 | 0 | |
| 13.09 | 65.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

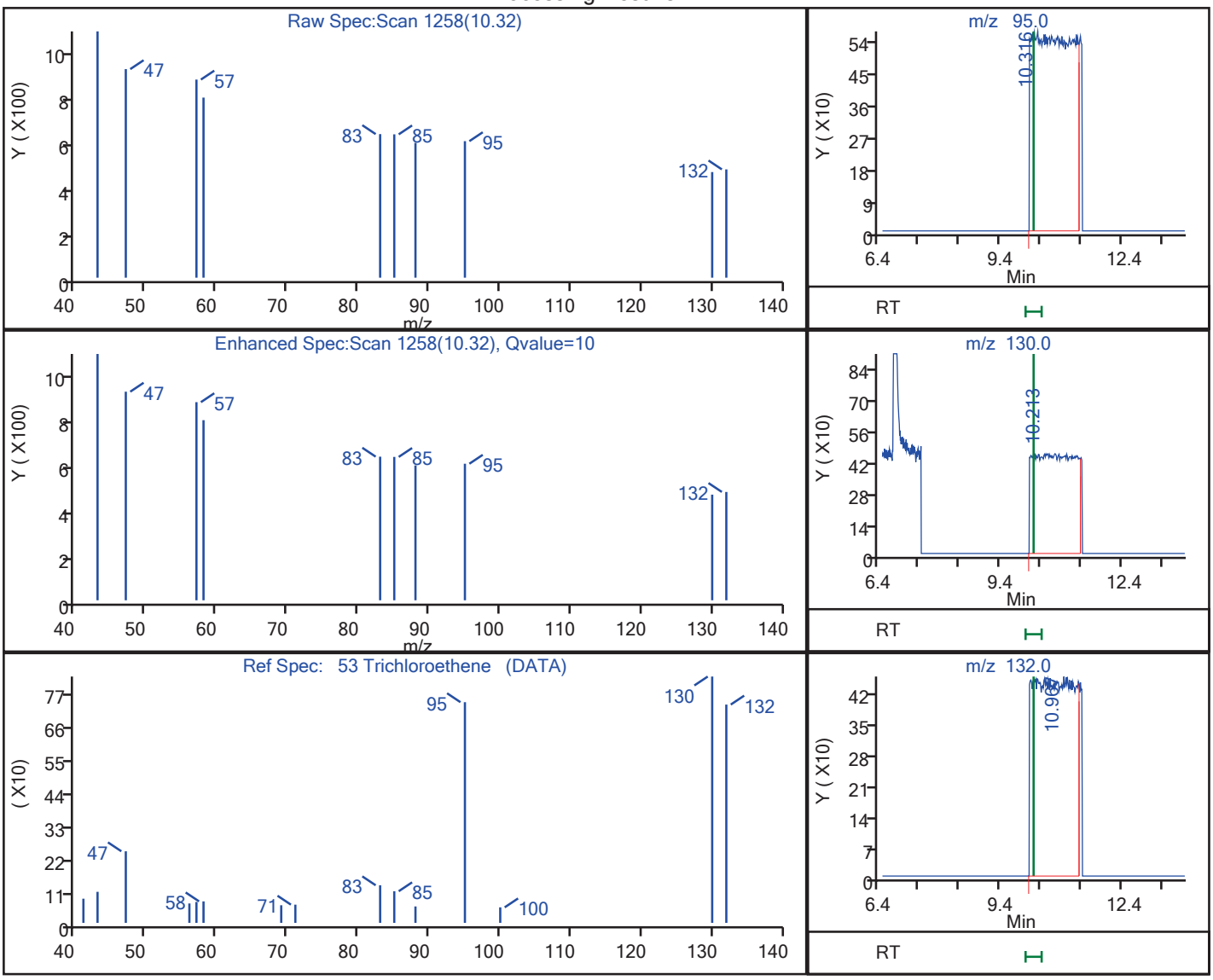
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 53 Trichloroethene, CAS: 79-01-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 10.32 | 95.00 | 39723 | 0.259969 |
| 10.21 | 130.00 | 33537 | |
| 10.97 | 132.00 | 32181 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

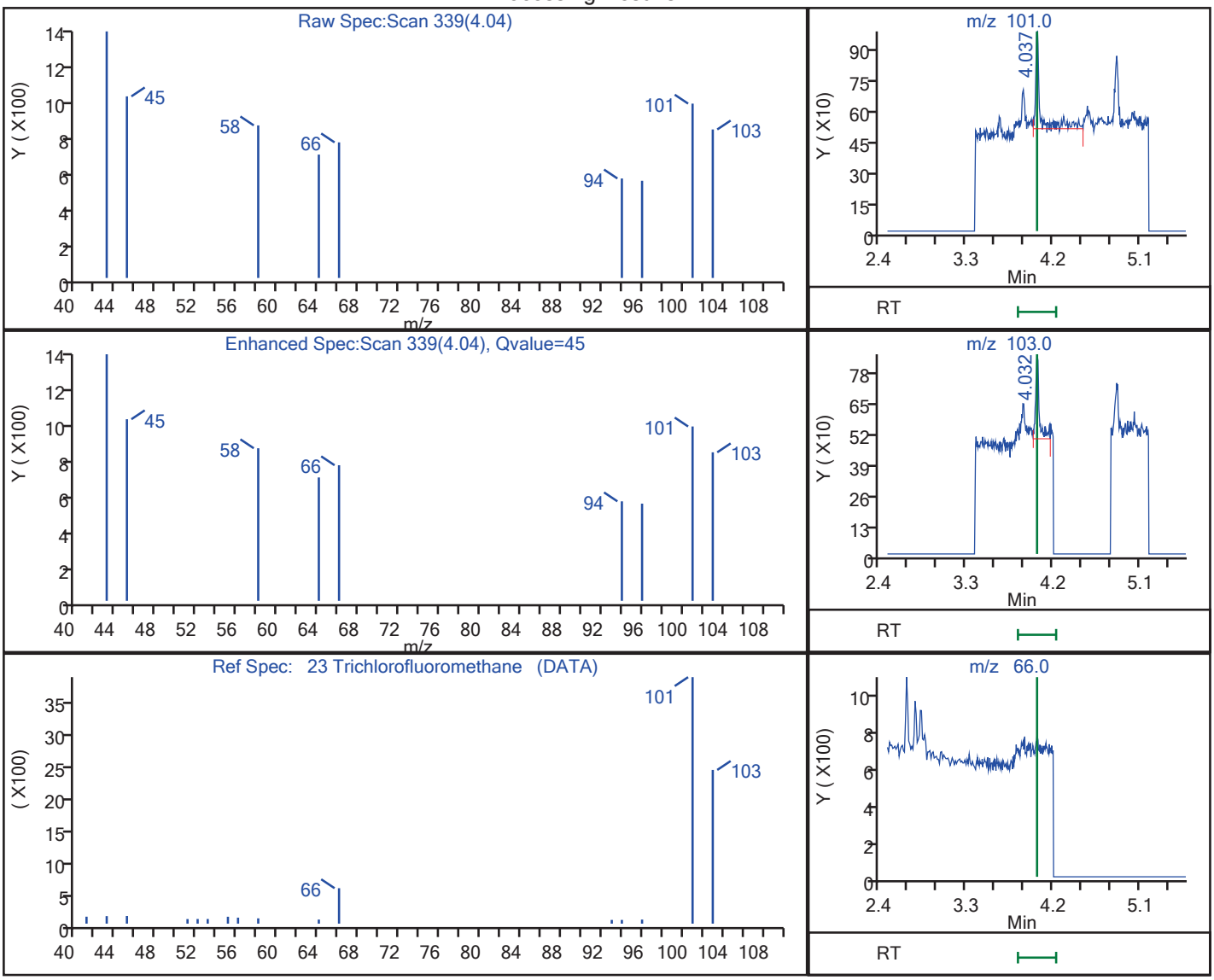
User Disabled Compound Report

Eurofins Calscience LLC

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR18.D | | | | |
| Injection Date: | 16-Mar-2021 00:15:30 | Instrument ID: | GCMSMMM | | |
| Lims ID: | 570-53377-A-6 | Lab Sample ID: | 570-53377-6 | | |
| Client ID: | D388 | | | | |
| Operator ID: | 12GR | ALS Bottle#: | 3 | Worklist Smp#: | 18 |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |
| Column: | Rxi-624Sil MS ( 0.18 mm) | Detector | MS SCAN | | |

## 23 Trichlorofluoromethane, CAS: 75-69-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.04 | 101.00 | 1835 | 0.003604 |
| 4.03 | 103.00 | 977 | |
| 4.03 | 66.00 | 0 | |

Reviewer: rhoadesw, 16-Mar-2021 13:32:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D762 | Lab Sample ID: 570-53377-7

Matrix: Air | Lab File ID: MMM15MAR20.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 01:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 0.025 | 0.010 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 0.025 | 0.016 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 0.025 | 0.0091 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 0.025 | 0.015 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 0.025 | 0.012 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 0.025 | 0.013 |
| 75-37-6 | 1,1-Difluoroethane | ND | | 0.25 | 0.11 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 0.050 | 0.042 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 0.050 | 0.0073 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 0.050 | 0.033 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 0.050 | 0.018 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 0.025 | 0.022 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 0.025 | 0.016 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 0.025 | 0.017 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 0.025 | 0.015 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 0.025 | 0.012 |
| 106-99-0 | 1,3-Butadiene | ND | | 0.025 | 0.013 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 0.025 | 0.014 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 0.025 | 0.013 |
| 123-91-1 | 1,4-Dioxane | ND | | 0.25 | 0.17 |
| 78-93-3 | 2-Butanone | ND | | 0.25 | 0.027 |
| 622-96-8 | 4-Ethyltoluene | ND | | 0.050 | 0.013 |
| 67-64-1 | Acetone | ND | | 0.50 | 0.41 |
| 71-43-2 | Benzene | ND | | 0.025 | 0.013 |
| 75-27-4 | Bromodichloromethane | ND | | 0.025 | 0.0098 |
| 74-83-9 | Bromomethane | ND | | 0.050 | 0.036 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 0.025 | 0.014 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 0.025 | 0.011 |
| 75-15-0 | Carbon disulfide | ND | | 0.25 | 0.16 |
| 56-23-5 | Carbon tetrachloride | ND | | 0.050 | 0.040 |
| 108-90-7 | Chlorobenzene | ND | | 0.050 | 0.017 |
| 75-00-3 | Chloroethane | ND | | 0.025 | 0.020 |
| 67-66-3 | Chloroform | ND | | 0.025 | 0.012 |
| 74-87-3 | Chloromethane | ND | | 0.025 | 0.013 |
| 124-48-1 | Dibromochloromethane | ND | | 0.025 | 0.010 |

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Calscience | Job No.: 570-53377-1

SDG No.:

Client Sample ID: D762 | Lab Sample ID: 570-53377-7

Matrix: Air | Lab File ID: MMM15MAR20.D

Analysis Method: TO-15 SIM | Date Collected: 03/09/2021 09:00

Sample wt/vol: 400(mL) | Date Analyzed: 03/16/2021 01:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624Sil MS ID: 0.18(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 136320 | Units: ppb v/v

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | ND | | 0.025 | 0.010 |
| 76-14-2 | Dichlorotetrafluoroethane | ND | | 0.025 | 0.0090 |
| 100-41-4 | Ethylbenzene | ND | | 0.025 | 0.012 |
| 87-68-3 | Hexachloro-1,3-butadiene | ND | | 0.10 | 0.050 |
| 110-54-3 | Hexane | ND | | 0.10 | 0.011 |
| 67-63-0 | Isopropanol | ND | | 0.25 | 0.13 |
| 75-09-2 | Methylene Chloride | ND | | 0.050 | 0.026 |
| 1634-04-4 | Methyl-t-Butyl Ether (MTBE) | ND | | 0.025 | 0.011 |
| 91-20-3 | Naphthalene | ND | | 0.050 | 0.033 |
| 95-47-6 | o-Xylene | ND | | 0.025 | 0.013 |
| 179601-23-1 | m,p-Xylene | ND | | 0.050 | 0.026 |
| 100-42-5 | Styrene | ND | | 0.025 | 0.0099 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 0.025 | 0.011 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 0.025 | 0.010 |
| 127-18-4 | Tetrachloroethene | ND | | 0.025 | 0.014 |
| 108-88-3 | Toluene | ND | | 0.050 | 0.015 |
| 1330-20-7 | Xylenes, Total | ND | | 0.075 | 0.039 |
| 79-01-6 | Trichloroethene | ND | | 0.025 | 0.018 |
| 75-69-4 | Trichlorofluoromethane | ND | | 0.025 | 0.0082 |
| 75-01-4 | Vinyl chloride | ND | | 0.050 | 0.023 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 97 | | 61-130 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 74 | | 59-130 |
| 2037-26-5 | Toluene-d8 (Surr) | 99 | | 70-130 |

Eurofins Calscience LLC
Target Compound Quantitation Report

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR20.D
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Client ID: D762
Sample Type: Client
Inject. Date: 16-Mar-2021 01:53:30 ALS Bottle#: 5 Worklist Smp#: 20
Purge Vol: 400.000 mL Dil. Factor: 1.0000
Sample Info: 570-53377-a-7
Misc. Info.: A_SIMIS/SS_00005
Operator ID: 12GR Instrument ID: GCMSMMM

Method: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\AIRMS_GCMSMMM.m
Limit Group: MSV - TO15 SIM TO15 SIMLL
Last Update: 16-Mar-2021 13:38:16 Calib Date: 09-Feb-2021 18:41:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
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Process Host: CTX1645

First Level Reviewer: rhoadesw Date: 16-Mar-2021 13:35:36

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 11 1,1-Difluoroethane | 51 | | 2.755 | | | | ND | U |
| 13 Chloromethane | 50 | | 2.966 | | | | ND | U |
| 8 Dichlorodifluoromethane | 85 | | 3.033 | | | | ND | U |
| 15 Vinyl chloride | 62 | | 3.111 | | | | ND | |
| 6 Butadiene | 54 | | 3.200 | | | | ND | |
| 14 Bromomethane | 94 | | 3.378 | | | | ND | |
| 18 Chloroethane | 64 | | 3.493 | | | | ND | U |
| 23 Trichlorofluoromethane | 101 | | 4.033 | | | | ND | U |
| 20 Acetone | 43 | 4.082 | 4.052 | 0.030 | 20 | 12770 | 0.0344 | |
| 21 Isopropyl alcohol | 45 | 4.266 | 4.259 | 0.007 | 2 | 14440 | 0.0470 | |
| 24 1,1-Dichloroethene | 61 | | 4.522 | | | | ND | U |
| 25 Methylene Chloride | 84 | 4.620 | 4.612 | 0.008 | 32 | 4561 | 0.0218 | |
| 31 1,1,2-Trichloro-1,2,2-trifluoroe | 101 | | 4.867 | | | | ND | U |
| 29 1,2-Dichloro-1,1,2,2-tetrafluoro | 151 | | 4.867 | | | | ND | |
| 30 Carbon disulfide | 76 | | 4.872 | | | | ND | |
| 26 trans-1,2-Dichloroethene | 96 | | 5.483 | | | | ND | |
| 32 1,1-Dichloroethane | 63 | | 5.684 | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 5.900 | | | | ND | |
| 34 2-Butanone (MEK) | 43 | | 6.484 | | | | ND | |
| 35 cis-1,2-Dichloroethene | 96 | | 6.587 | | | | ND | |
| * 36 Chlorobromomethane (IS) | 130 | 6.758 | 6.758 | 0.000 | 79 | 35640 | 0.5000 | |
| 40 Hexane | 57 | | 6.869 | | | | ND | U |
| 39 Chloroform | 83 | | 6.920 | | | | ND | |
| $ 42 1,2-Dichloroethane-d4 (Surr) | 65 | 7.670 | 7.670 | 0.000 | 95 | 77018 | 0.4829 | |
| 38 1,2-Dichloroethane | 62 | | 7.806 | | | | ND | U |
| 45 1,1,1-Trichloroethane | 97 | | 8.132 | | | | ND | |
| 48 Benzene | 78 | | 8.721 | | | | ND | U |
| 49 Carbon tetrachloride | 117 | | 8.927 | | | | ND | |
| * 50 1,4-Difluorobenzene | 114 | 9.267 | 9.267 | 0.000 | 63 | 107138 | 0.5000 | |
| 41 1,2-Dichloropropane | 63 | | 9.860 | | | | ND | |
| 52 Dichlorobromomethane | 83 | | 10.127 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ppb v/v | Flags |
|---|---|---|---|---|---|---|---|---|
| 53 Trichloroethene | 95 | | 10.213 | | | | ND | U |
| 54 1,4-Dioxane | 57 | | 10.761 | | | | ND | |
| 57 cis-1,3-Dichloropropene | 75 | | 11.547 | | | | ND | U |
| 60 trans-1,3-Dichloropropene | 75 | | 12.399 | | | | ND | U |
| 61 1,1,2-Trichloroethane | 83 | | 12.623 | | | | ND | |
| $ 63 Toluene-d8 (Surr) | 98 | 12.932 | 12.932 | 0.000 | 98 | 99482 | 0.4950 | |
| 64 Toluene | 91 | | 13.092 | | | | ND | U |
| 66 Chlorodibromomethane | 129 | | 13.731 | | | | ND | U |
| 59 Ethylene Dibromide | 107 | | 14.136 | | | | ND | |
| 67 Tetrachloroethene | 166 | | 15.012 | | | | ND | U |
| * 68 Chlorobenzene-d5 | 117 | 16.143 | 16.143 | 0.000 | 96 | 97319 | 0.5000 | |
| 69 Chlorobenzene | 112 | | 16.219 | | | | ND | U |
| 71 Ethylbenzene | 91 | | 16.995 | | | | ND | U |
| 72 m-Xylene & p-Xylene | 91 | | 17.330 | | | | ND | |
| 74 Styrene | 104 | | 18.037 | | | | ND | U |
| 75 1,1,2,2-Tetrachloroethane | 83 | | 18.209 | | | | ND | |
| 76 o-Xylene | 91 | | 18.245 | | | | ND | U |
| 77 1,2,3-Trichloropropane | 75 | | 18.472 | | | | ND | U |
| $ 79 4-Bromofluorobenzene (Surr) | 95 | 19.143 | 19.143 | 0.000 | 99 | 52587 | 0.3676 | |
| 86 4-Ethyltoluene | 105 | | 20.959 | | | | ND | U |
| 81 1,3,5-Trimethylbenzene | 105 | | 21.154 | | | | ND | U |
| 85 1,2,4-Trimethylbenzene | 105 | | 22.073 | | | | ND | |
| 92 1,3-Dichlorobenzene | 146 | | 22.305 | | | | ND | |
| 93 1,4-Dichlorobenzene | 146 | | 22.487 | | | | ND | |
| 89 1,2-Dichlorobenzene | 146 | | 23.286 | | | | ND | |
| 96 1,2,4-Trichlorobenzene | 180 | | 28.061 | | | | ND | |
| 98 Naphthalene | 128 | | 28.303 | | | | ND | |
| 97 1,2,3-Trichlorobenzene | 180 | | 29.029 | | | | ND | U |
| 99 Hexachlorobutadiene | 225 | | 29.416 | | | | ND | U |
| 102 Xylenes, Total | 1 | | 0.000 | | | | ND | |

## QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

## Reagents:

A_Sim IS/SS_00005 Amount Added: 100.00 Units: mL Run Reagent

Report Date: 16-Mar-2021 13:38:55 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins Calscience LLC

Data File: \\chromfs\CalScience\ChromData\GCMSMMM\20210316-40931.b\MMM15MAR20.D

| | | | | | |
|---|---|---|---|---|---|
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| Lims ID: | 570-53377-A-7 | Lab Sample ID: | 570-53377-7 | Worklist Smp#: | 20 |
| Client ID: | D762 | | | | |
| Purge Vol: | 400.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | AIRMS_GCMSMMM | Limit Group: | MSV - TO15 SIM TO15 SIMLL | | |

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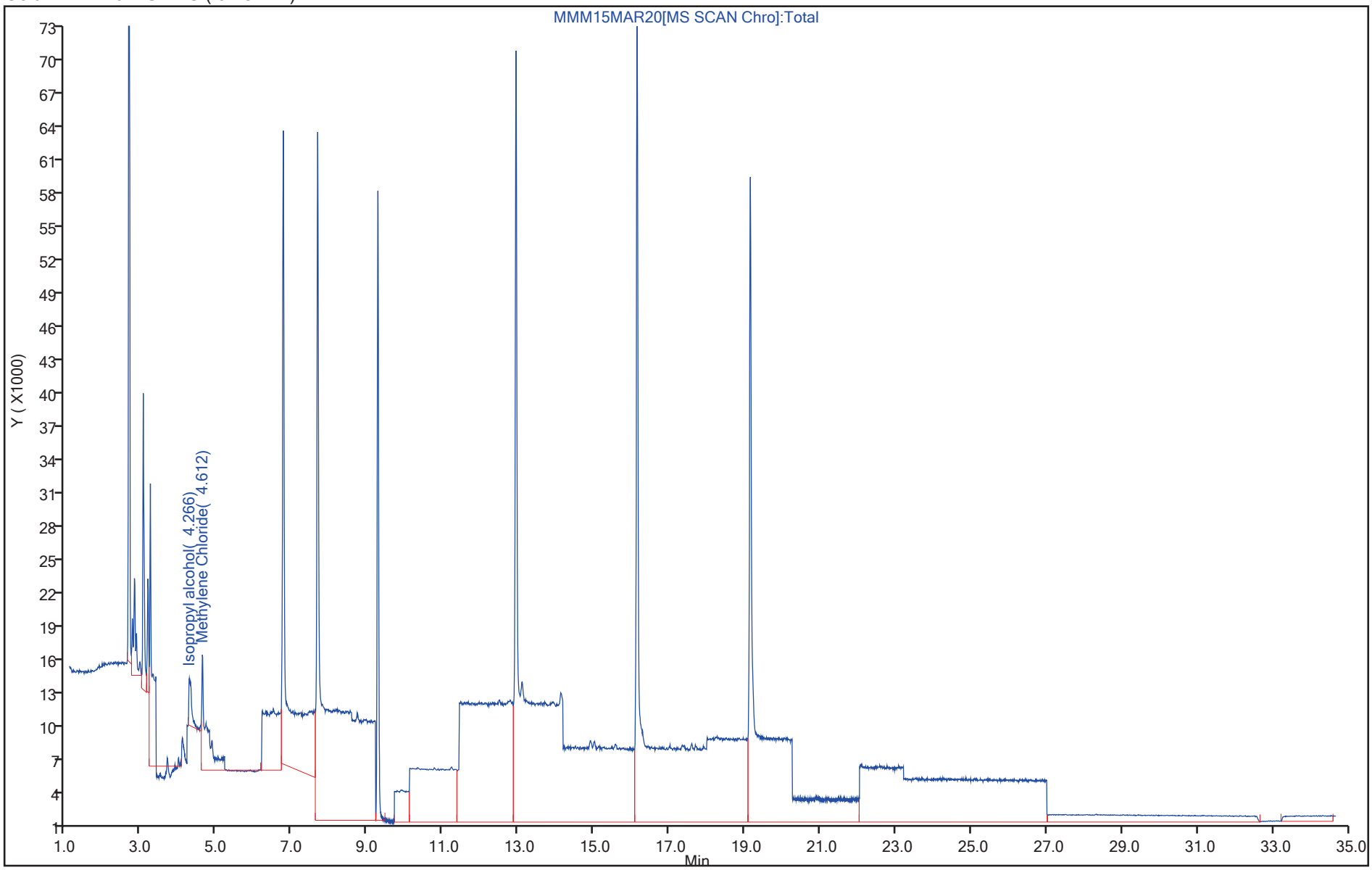

# Appendix E
Soil Vapor Sampling Report

DRAFT

# Soil Vapor Sampling Report

# Proposed Emergency Department Expansion

## 1011 Baldwin Park Boulevard, Baldwin Park, California 91706

**SEPTEMBER 2022**

*Prepared for:*

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*Prepared by:*

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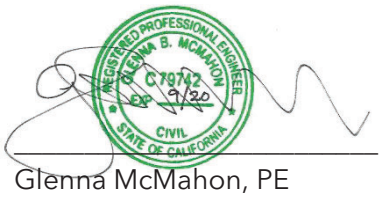


Glenna McMahon, PE
Principal Environmental Engineer

Brandon Page
Hydrogeologist

Printed on 30% post-consumer recycled material.

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C Soil Vapor Analytical Results

# Acronyms and Abbreviations

| Acronym/Abbreviation | Definition |
|---|---|
| µg/m$^3$ | micrograms per cubic meter |
| bgs | below ground surface |
| COC | contaminant of concern |
| DTSC | Department of Toxic Substances Control |
| EPA | U.S. Environmental Protection Agency |
| ESA | environmental site assessment |
| PCE | tetrachlorethylene |
| PID | photoionization detector |
| RSL | regional screening level |
| RWQCB | Regional Water Quality Control Board |
| SL | screening level |
| ULS | ULS Service Corp. of San Diego, California |
| VOC | volatile organic compound |

# 1 Introduction and Background

This soil vapor sampling report has been prepared by Dudek on behalf of Kaiser Foundation Health Plan, Inc. (Kaiser) for the proposed emergency department expansion at the Kaiser Permanente Baldwin Park Medical Center (Project). The Project is located on the north side of Baldwin Park Boulevard, south of the existing emergency department and clinic wing of the medical center, and is associated with the address 1011 Baldwin Park Boulevard, Baldwin Park, California 91706 (Project Site). The purpose of this soil vapor sampling is to evaluate potential soil vapor contamination within the Project Site.

The Project Site is located within the Baldwin Park Operational Unit of the San Gabriel Valley Superfund Site (Superfund site), which is a regional groundwater contamination plume impacting portions of Azusa, Irwindale, Baldwin Park, and West Covina. Based on the 2019 Annual Performance Evaluation Report completed for the Superfund site (Geosyntec 2019), the Project Site is located within the footprint of the groundwater contamination plume, in an area where contaminants of concern (COCs) exceed United States Environmental Protection Agency (EPA) maximum contaminant levels for drinking water by 10 times or more. COCs are volatile organic compounds (VOCs) including 1,4-dioxane, carbon tetrachloride, N-Nitrosodimethylamine, perchlorate, tetrachloroethylene (PCE), and trichloroethylene.

A Phase II Environmental Site Assessment (ESA) was conducted by Terracon on the Broken Horn property (Terracon 2020), west of the Project Site (on the western corner of the hospital property) and also located within the Superfund site footprint. The Phase II ESA identified COCs (multiple VOCs) in soil vapor and indoor air above applicable Department of Toxic Substances Control Screening Levels (DTSC-SLs). Based on the identified COCs and lack of documented use or storage of these constituents on the property, the Phase II ESA concluded the likely source of these COCs was the regional groundwater contamination plume located approximately 120 below ground surface (bgs) at the project site (Terracon 2020). COCs identified in soil gas, sub slab, and indoor air during the 2020 Phase II ESA include PCE, chloroform, bromodichloromethane, trichloroethylene, benzene, carbon tetrachloride, and methylene chloride.

Based on the available information and the Project Site's location within the Superfund site, it is suspected that soil vapor contamination may be present beneath the Project Site that could impact the Project. This soil vapor sampling was conducted to evaluate potential impacts to soil vapor beneath the proposed emergency department expansion. Soil vapor samples were collected from within the boundaries of the Project Site (Figure 1, Soil Vapor Boring Locations). Soil vapor samples were analyzed for VOCs.

# 2 Subsurface Investigation

## 2.1 Pre-Sampling Activities

ULS Service Corp. (ULS) of San Diego, California, performed underground location services at the Project Site on August 2, 2022. Underground utilities were identified by ULS near the proposed boring locations. The underground utilities were avoided during drilling. The ULS report is included in Appendix A.

## 2.2 Borehole Drilling

On August 29, 2022, eight soil vapor borings were advanced by Millennium Environmental (Millennium) using a Geoprobe 7822DT track-mounted direct-push technology rig to 20 feet bgs. Soil vapor borings were advanced with a 2.25-inch outside-diameter tool equipped with a sampling sleeve. Soil from two soil vapor boring locations was collected and evaluated at 5-foot intervals to characterize lithology. Soil vapor was sampled at 5 feet bgs and 20 feet bgs in each boring. The soil vapor boring locations are shown in Figure 1.

Soil vapor borings SV1 through SV8 were completed within the footprint of the Project Site. SV1 through SV4 are located within the sidewalk along the southwestern wall of the emergency department, while SV5 through SV8 are located in the adjacent grassy area (Figure 1). All eight borings were abandoned after soil vapor sampling; SV1 through SV4 located in the sidewalk were capped with concrete after abandonment.

## 2.3 Lithology

Lithology was characterized at SV4 and SV5 to ensure proper flow during soil vapor sampling at the proposed depths of 5 feet bgs and 20 feet bgs. Lithology was characterized at 5-foot intervals by a Dudek geologist according to ASTM D-2488 (visual-manual procedure), and color was characterized using a Munsell Coil Color Chart. A portable photoionization detector (PID) was used to screen soil samples in the field at 5-foot intervals.

Lithology encountered during drilling at each boring location consisted of loose, medium, poorly graded silty sand with trace gravel. No staining or odor was observed. No groundwater was encountered. Soil appeared moist to dry. Measurements made with the portable PID recorded <1.0 parts per million at the two boring locations where lithology was described.

## 2.4 Soil Vapor Probe Construction and Sampling

Nested soil vapor probes were constructed in each of the eight boreholes following guidance outlined in the Advisory Active Soil Gas Investigation (CalEPA et al. 2015). Temporary soil vapor probes were placed at 5 and 20 feet bgs in each boring. Filter pack (#3) sand was placed 6 inches above and below each soil vapor probe sample inlet (1 foot of sand). One foot of dry granular bentonite was placed on top of the sand, followed by hydrated bentonite to the next probe interval where another 1 foot of filter pack will be placed interval (e.g., 4.5 to 5.5 feet bgs) followed by another 1 foot of dry granular bentonite (e.g., 3.5 feet bgs to 4.5 feet bgs) then hydrated bentonite to the surface. Each probe was sealed with a valve attached to the end of the tubing and left to equilibrate for a minimum of 2 hours.

Each soil vapor probe was subjected to a shut-in test to check the above ground system for leaks by pulling 100-inches of mercury vacuum on the system and letting it sit for approximately 60 seconds. If the vacuum decreased, adjustments were made to the connections and the process was repeated until no discernible loss in the vacuum was observed. Soil vapor probes were then purged at a rate of 200 milliliters per minute for approximately 10 minutes using a portable vacuum pump connected to a pressure gauge. A tracer of n-pentane, n-hexane, n-propanol, and propanol was placed near the sampling container during sample collection to detect leaks. Soil vapor samples were collected by Jones Environmental Laboratories in a gas-tight glass syringe with Teflon seals and analyzed for VOCs by EPA Method 8260B in an on-site mobile lab.

After sample collection, the tubing was removed from each soil vapor boring and topped with granular bentonite when possible (SV5 through SV8). The granular bentonite expands in the space left by the tubing, plugging the annular space. Approximately 1 foot of bentonite material was removed from the upper portion of the soil vapor borings located in the sidewalk (SV1 through SV4) and the annular space was capped with cement to ground surface. No soil waste was generated during drilling or sampling.

# 3 Subsurface Investigation Sample Results

The laboratory analytical results for the soil vapor samples were compared to regulatory screening levels. The screening levels for soil vapor were calculated by dividing the DTSC-SLs and the EPA regional screening levels (RSLs) for commercial/industrial indoor air by a soil vapor to ambient air attenuation factor. The DTSC, in their final vapor intrusion guidance document, uses an attenuation factor for soil vapor to ambient air of 0.0005 in new commercial construction over a soil vapor contaminant source (DTSC 2011). A more conservative attenuation factor of 0.03 was proposed by the U.S. Environmental Protection Agency (EPA 2015). This more conservative attenuation factor was proposed for California in a draft guidance document presented by the DTSC and RWQCB in 2020 (DTSC and SWRCB 2020) and was used to calculate Environmental Screening Levels (ESLs) published by the State Water Quality Control Board (SFBRWQCB 2019). However, the EPA attenuation factor of 0.03 is based on several building and climate factors that generally do not apply to southern California buildings, and is therefore considered overly conservative. The DTSC is in the process of finalizing a study on attenuation factors based on buildings in California. As such, the following screening levels were used for comparison to the analytical sample results:

- DTSC-SLs (2020) Screening Level for Commercial/Industrial Indoor Air, Cancer End Point adjusted with a 0.0005 attenuation factor (AF) for new commercial construction (DTSC 2011)
- EPA RSLs for Industrial Indoor Air, Cancer End Point adjusted with a 0.0005 attenuation factor
- DTSC-SLs (2020) Screening Level for Commercial/Industrial Indoor Air, Cancer End Point adjusted with a 0.03 attenuation factor for soil vapor (DTSC and RWQCB 2020; DTSC 2022). This more conservative screening level based on draft guidance, is used for evaluation purposes only.
    - ESLs were calculated using the 0.03 attenuation factor, and as such they are almost identical to the adjusted DTSC-SL (with attenuation factor of 0.03). As the ESLs have been published by the San Francisco Regional Water Quality Control Board, they are also included in Appendix B, Table 1 for reference purposes. As noted by the San Francisco Regional Water Quality Control Board, ESLs are not intended to establish policy or regulation, but are intended to help expedite the identification and evaluation of potential environmental concerns at contaminated sites.

The non-cancer hazard value DTSC-SL and RSL was used to compare analytical sample results for detected analytes that do not have cancer risk values. RSL values were only used for analytes that do not have a DTSC-SL. Commercial/Industrial screening levels were used for comparison to analytical sample results based on the exposure factors used to calculate each screening level. Commercial/industrial values are based on an exposure duration of 25 years at a frequency of 250 days per year at 8 hours per day and residential values are based on an exposure duration of 26 years at a frequency of 350 days per year at 24 hours per day (DTSC 2019). Exposure in an emergency department is assumed to be similar (or less) than that of the commercial/industrial screening level.

Laboratory reports for soil vapor samples are included in Appendix C. A summary of detected analytes for samples are presented in Table 1 (Appendix B).

## 3.1 Volatile Organic Compounds

VOCs were not detected at concentrations exceeding DTSC commercial/industrial screening levels with an attenuation factor of 0.0005. Benzene, bromodichloromethane, chloroform, and vinyl chloride were detected above DTSC-SL and/or RSL values calculated with the more conservative attenuation factor of 0.03.

Benzene concentrations ranged from 2.1 micrograms per cubic meter (µg/m$^3$) to 54.9 µg/m$^3$, with the highest concentration in SV1-5 (boring SV1 at 5 feet bgs). In general, higher concentrations of benzene were detected at 5-foot bgs at each location with the exception of SV8, where the higher concentration was observed at 20 feet bgs. The commercial/industrial DTSC-SL (AF = 0.0005) is 840 µg/m$^3$, and commercial/industrial DTSC-SL (AF = 0.03) is 14 µg/m$^3$.

Bromodichloromethane concentrations ranged from <2.0 µg/m$^3$ to 46.1 µg/m$^3$, with the highest concentration in SV4-5 (boring SV4 at 5 feet bgs). Higher concentrations of bromodichloromethane were detected in the 5-foot bgs samples at each location, with the exception of SV6 where concentrations were below the laboratory reporting limit (RL) at both depths. The commercial/industrial DTSC-SL (AF = 0.0005) is 660 µg/m$^3$, and commercial/industrial DTSC-SL (AF = 0.03) is 11 µg/m$^3$.

Chloroform concentrations ranged from <2.0 µg/m$^3$ to 265 µg/m$^3$, with the highest concentration in SV4-5 (boring SV4 at 5 feet bgs). Higher concentrations of chloroform were detected in the 5-foot bgs samples at each location. The commercial/industrial RSL (AF = 0.0005) is 1060 µg/m$^3$, and industrial RSL (AF = 0.03) is 18 µg/m$^3$.

Vinyl chloride was only detected above the laboratory RL in one sample, SV7-5 (boring SV-7 at 5 feet bgs) at a concentration of 10.3 µg/m$^3$. The commercial/industrial DTSC-SL (AF = 0.0005) is 320 µg/m$^3$, and commercial/industrial DTSC-SL (AF = 0.03) is 5.3 µg/m$^3$.

Bromoform, carbon tetrachloride, dichlorofluoromethane, ethylbenzene, methylene chloride, styrene, PCE, toluene, trichloroethylene, trichlorofluoromethane, and 1,2,4-trimethylbenzene were detected at some locations above laboratory RLs but below DTSC-SLs (AF of 0.0005 and AF of 0.03). Additionally, 4-Isopropyltoluene was detected above the laboratory RL in SV3 through SV7 but does not have an associated DTSC-SL or RSL. All other VOCs were below their respective laboratory RLs. N-pentane, n-hexane, and n-heptane were used as a tracer during soil gas sampling for leak detection. All three tracer types were not detected in any samples.

# 4 Quality Assurance and Quality Control Measures

Quality assurance and quality control measures were performed in the field by the Dudek geologist and in the laboratory by Jones Environmental. Field measures included PID calibration, leak detection, and duplicate sampling. Laboratory measures included sample surrogates, analytical laboratory control samples, and matrix spike/matrix spike duplicates.

## 4.1 Soil Vapor Sampling Quality Assurance/Quality Control

One duplicate soil vapor sample was collected from SV3 at 5 feet bgs. The results for the original and duplicate samples were below the laboratory-accepted relative percent difference of less than or equal to 20%.

As part of the laboratory quality assurance, the surrogates toluene-$d_8$, dibromofluoromethane, and 4-bromofluorobenzene were added to each sample at known concentrations. The analytical results were compared to the known concentration and reported as percent recovered. The percent recoveries were within the laboratory's acceptable range of 60% to 140%.

The laboratory quality control evaluation also included a method blank, sampling blank, laboratory control sample, and laboratory control sample duplicate. No VOCs were detected in the method and sampling blanks. The percent recoveries and relative percent difference for the for laboratory control sample and laboratory control sample duplicate were within the acceptable range therefore the data are considered acceptable.

Leak checks were conducted at each sampling location as described in Section 2.4, Soil Vapor Probe Construction and Sampling. The leak check compound (n-pentane, n-hexane, n-propanol, and propanol) was not detected in any of the soil vapor samples.

This quality assurance and quality control evaluation indicates that the data are of acceptable quality.

# 5 Human Health Risk

All soil vapor samples collected from each of the eight locations are within the proposed emergency department expansion footprint (Project Site). This section presents a screening level risk evaluation using the maximum concentration of VOCs detected within the Project Site. The potential exposure scenario within the Project Area is vapor intrusion into the future building impacting indoor air; therefore, it is appropriate to use the soil vapor samples collected during this investigation. Additionally, use of the 0.0005 attenuation factor is appropriate due to the new construction associated with the future building (DTSC 2011).

Table 2 (Appendix B) presents the screening level risk evaluation under this scenario using the maximum detected concentration of each VOC in the Project Site and an attenuation factor of 0.0005 for new commercial construction. The cumulative commercial cancer risk is estimated to be $4.9 \times 10^{-7}$. The cumulative commercial non-cancer risk, or hazard index, is estimated to be 0.004. As discussed in the DTSC Vapor Intrusion Guidance, a cancer risk $<1 \times 10^{-6}$ and a Hazard Index $\leq 1$ do not pose an unacceptable human health risk and do not require further action assuming future risk does not increase due to increasing concentrations of COCs (DTSC 2011).

Under a more conservative approach, in accordance with the 2020 draft DTSC and RWQCB vapor intrusion guidance, the attenuation factor of 0.03 was also considered. Table 2 also presents the risk estimates using the more conservative attenuation factor of 0.03. The resulting cumulative commercial cancer risk is estimated to be $3 \times 10^{-5}$. This estimated cancer risk is above the de minimis cancer risk of one in a million ($1 \times 10^{-6}$), but falls within the risk management range, for which potential response actions could include no action, additional sampling, monitoring, mitigation, or remediation, among other actions (DTSC and RWQCB 2020). As such, while the cumulative cancer risk is above the de minimis threshold, it is still within an acceptable range for a commercial exposure scenario. The cumulative commercial non-cancer risk, or hazard index, is estimated to be 0.24. The non-cancer risk estimate for commercial use scenarios is de minimis, indicating no need for vapor mitigation.

# 6 Summary and Conclusion

Eight soil vapor borings were advance using direct-push methods to a depth of 20 feet bgs. Soil vapor borings were located southeast of the current emergency department within the Project Site. Soil vapor probes were installed at 5 feet bgs and 20 feet bgs in each borehole, and samples were collected in gas-tight glass syringes with Teflon seals. The soil vapor samples were analyzed for VOCs by Jones Environmental Laboratory by method 8260B. Following sampling, the tubing was removed from each borehole and the boreholes abandoned.

Lithology encountered consisted mainly of loose, poorly graded silty sands. No odor or staining was observed. No groundwater was encountered. PID measurements were <1.0 parts per million at the 5-foot intervals in the two borings where lithology was characterized (SV4 and SV5).

Soil vapor sampling results were compared to commercial/industrial DTSC-SLs with an applied attenuation factor of 0.0005 for a new commercial building as outlined in the DTSC Vapor Intrusion Guidance (DTSC 2011). No VOC concentrations were detected above this DTSC-SL. Soil vapor samples were also conservatively compared to commercial/industrial DTSC-SLs with an applied attenuation factor of 0.03 as outlined in the Draft Vapor Intrusion Guidance (DTSC 2020), and to the SWQCB ESLs (SFBRWQCB 2019). Benzene, bromodichloromethane, chloroform, and vinyl chloride were detected above this DTSC-SL/ESL. All other VOCs detected above laboratory reporting limits were below both screening levels. Detected COCs in soil vapor at the Project Site are similar to those identified at the Broken Horn property to the west.

A screening level risk evaluation was conducted to estimate potential cancer and non-cancer risk associated with potential vapor intrusion into the future proposed emergency department expansion in the Project Site. As the evaluation considers vapor intrusion into the future proposed building expansion, all samples were collected from within the proposed building footprint.

The cancer and non-cancer risk estimates for commercial use scenarios using the 0.0005 attenuation factor are all de minimis, indicating no need for vapor mitigation or other response actions as discussed in the DTSC Vapor Intrusion Guidance (DTSC 2011). However, in accordance with the 2020 draft DTSC and RWQCB vapor intrusion guidance (DTSC and RWQCB 2020), the more conservative attenuation factor of 0.03 was also considered. The estimated cancer risk using the attenuation factor of 0.03 is above the de minimis cancer risk of one in a million ($1 \times 10^{-6}$), but falls within the risk management range, for which potential response actions could include no action, additional sampling, monitoring, mitigation, or remediation, among other actions. The non-cancer risk estimate for commercial use scenarios using the 0.03 attenuation factor fall below the de minimis value of 1, indicating no unacceptable risk to human health and need for vapor mitigation based on the 2020 draft DTSC and RWQCB vapor intrusion guidance.

# 7 References

DTSC (California Department of Toxic Substances Control). 2011. Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). October 2011.

DTSC. 2019. Human Health Risk Assessment Note Number 1, Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities. Human and Ecological Risk Office. April 2019.

DTSC. 2020. Human Health Risk Assessment Note Number 3, DTSC-modified Screening Levels. Human and Ecological Risk Office. June 2020.

DTSC and RWQCB (California Department of Toxic Substances Control and Regional Water Quality Control Board). 2020. Supplemental Guidance: Screening and Evaluating Vapor Intrusion (DRAFT Vapor Intrusion Guidance). February 2020.

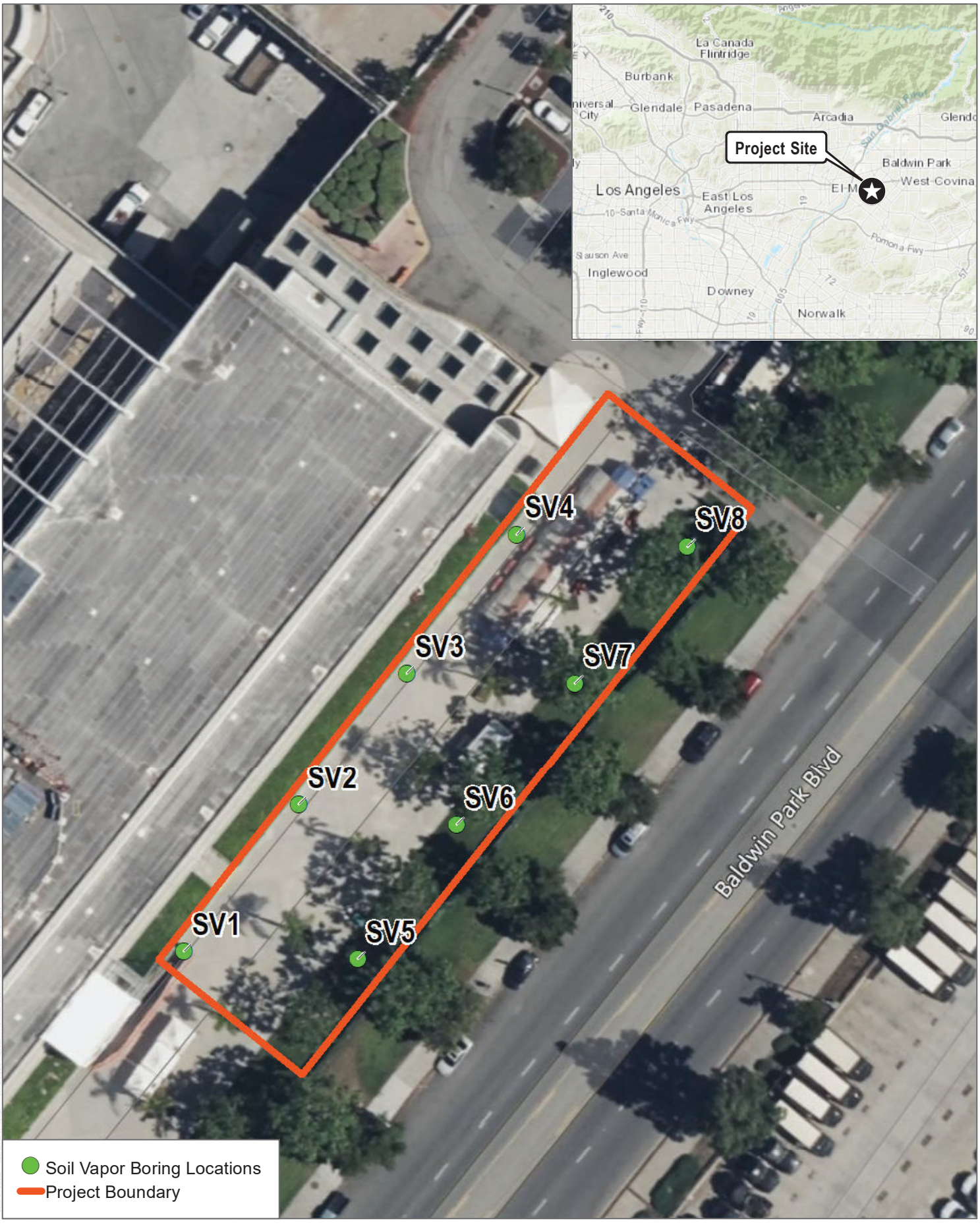
California Environmental Protection Agency (CalEPA), Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Quality Control Board. 2015. Advisory Active Soil Gas Investigation. July 2015.

Geosyntec. 2019. 2019 Annual Performance Evaluation Report – Volume 1: Baldwin Park Operable Unit of the San Gabriel Valley Superfund Sites, Los Angeles, California. April 30, 2019.

SFBRWQCB (San Francisco Bay Regional Water Quality Control Board). 2019. Environmental Screening Levels. January 2019.

Terracon. 2020. Phase II Environmental Site Assessment: 1022-1026 Leorita Street, Baldwin Park, Los Angeles County, California. April 2021.

EPA (United State Environmental Protection Agency). 2015. Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air. June 2015.




SOURCE: Bing Maps

DUDEK

0 25 50 Feet

**FIGURE 1**

Soil Vapor Boring Locations

Kaiser Baldwin Park Soil Vapor Sampling

# Appendix A

ULS Service Report

SAN DIEGO/ LA / SACRAMENTO
WWW.ULSSERVICES.COM
WWW.1ULS.COM

CORPORATE ADDRESS
4275 37th St., Suite 232
San Diego, CA 92105

FIELD SERVICES:

THROUGHOUT CALIFORNIA

# ULS CA, INC

## Work Order Agreement

| | |
|---|---|
| **Job Site Location**<br>**KAISER EMERGENCY**<br>**1011 BALDWIN PARK RD** | |
| **City, State**<br>**BALDWIN PARK, CA** | **Job Date**<br>**8-2-11** |

| | | |
|---|---|---|
| **CLIENT DUDEK** | **FIELD TIME 2.5 REPORT 1** | **LABOR HOURS W/REPORT/ HRS 3.5** |
| **ADDRESS** | | **FAXED** |
| **CITY, STATE, ZIP** | | **TELEPHONED** |
| **PHONE/FAX** | | **HAND DELIVERED** |
| **E-MAIL** | | **E-MAILED** |

**WORK REQUESTED: UTILITY SURVEY AT 8 PROPOSED SV LOCATIONS**

| **WORK PERFORMED** | **PRELIMINARY REVIEW OF CLIENT PROVIDED UTILITY DRAWINGS/AS-BUILTS: NONE** |
|---|---|
| **VISUAL SITE INSPECTION (MANHOLES, DRAINS): YES SURFACE ONLY** | **EMPCL CONDUCTIVE UTILITY SURVEY: CHECKED**<br>**GAS: X ELECTRIC: X COMM.: X WATER: X** |
| **EMIMD METAL DETECTION SURVEY : YES**<br>**AMBIENT NOISE AND SETTINGS**<br>**LOW NOISE** \| **GAIN 6** \| **ELEV LOW**<br>**REBAR IN CONCRETE ?** | **EM INSERTION : NF - INSERTION METHODS NOT PROVIDED DUE TO HEALTH AND SAFETY. SEE NOTES BELOW REGARDING LATERALS** |
| **GPR NON-CONDUCTIVE SURVEY: FAIR TO POOR** | **CLIENT ON-SITE REVIEW OF FINDINGS: YES** |

**GENERAL LIMITATIONS**

NOTE: The work described herein is performed to industry standards (or higher) using multiple methodology and QA/QC protocol. ULS cannot guarantee the accuracy or the ability to detect all underground facilities and potential interferences. Non-conductive or conductive utilities/facilities may not be detected due to variables and constraints beyond ULS control. Where known, constraints and limitations will be brought to the client's attention. Excavation work may result in injury to persons and/or damage to facilities. Client and/or excavator are advised to take all steps necessary to avoid contact with underground facilities. This includes, but is not limited to, safe digging practices, hand tooling in congested areas and within two feet on side of marked utilities (distance may vary by law), utility drawing review, site facilities representative review, and "one-call" utilities notification. ULS and its representatives are not responsible for injury to persons or damage to facilities. This document and accompanying pages will be delivered to the client before commencement of intrusive work for the client's review. If any questions arise, please notify our office immediately.

NOTE: Specific comments/limitations/constraints, known and recognized will be recorded on attached pages (field notes). Caution – some facilities (conductive or non- conductive) may not be detected. Not all limitations and constraints may be recognized.

| | | |
|---|---|---|
| **SIGNATURE OF ULS REPRESENTATIVE ON-SITE**<br>**CHRIS REIMER** | | **PAGE OF**<br>**1** |

**ULS CA, INC**

**CLIENT** **DUDEK**
**LOCATION** **1011 BALDWIN PARK RD**
**DATE** **8-2-22**

**METHODS AND GENERAL OBSERVATIONS:**

**ARRIVED SITE AND COMPLETED H&S TAILGATE AND/OR PERMIT TO WORK WITH CLIENT. SET UP DELINEATORS AROUND VEHICLE AND NEAR BLINDSPOTS AND ENTRY WAYS. MADE GENERAL SITE WALK TO REVIEW SURVEY AREAS (PROPOSED ZONES). CHECKED FOR SURFACE UTILITY MANIFESTATIONS SUCH AS VALVES, METERS, CONDUITS, TRENCHING SEAMS, VAULT LIDS AND EXISTING ONE CALL MARKINGS. BEGAN MARKOUT WORK.**

**METHODS UTILIZED INCLUDE: EM PIPE AND CABLE LOCATOR USING AMBIENT, GROUND INDUCTION AND CONNNECTION MODE SWEEPS. EM INDUCTION METAL DETECTOR AND GPR. A CARTISIAN GRID PATH IS WALKED AT EACH PROPOSED ZONE USING ALL METHODOLOGY. OBSERVATIONS ARE MARKED WITH WHITE AND/OR PINK PAINT. ZONE IS MARKED OUT WITH WHITE AND/OR PINK MARKINGS (REFER TO PHOTOS).**

**SITE CALIBRATION - GENERAL OBSERVATIONS**

EM PIPE AND CABLE TRANSMITTER TO RECIEVER (GROUND INDUCTION AND CONNECTION) BROADCASTING IS _GOOD____ATTENUATION EFFECTS FROM CONCRETE STEEL REINFORCEMENT NIL_____
EMIMD METAL DETECTOR BACKGROUND EM NOISE IS _HIGH/REBAR_____
GPR PENETRATION AND RESOLUTION IS __FAIR TO POOR_____.

**SEE QA / QC OBSERVATION COMMENTS TO RIGHT SIDE AND SPECIFIC OBSERVATIONS / COMMENTS BELOW**

[redacted]ULS CA, INC

**CLIENT** **DUDEK**
**LOCATION** **1011 BALDWIN PARK RD**
**DATE** **8-2-22**

## SPECIFIC OBSERVATIONS AND COMMENTS OR CONCERNS:

**PROPOSED :**

**SV1 – CAUTION FOR POSSIBLE REBAR NEAR CONCRETE SEAMS WITH ADDITIONAL MESH REINFORCEMENT**

**SV2 - CAUTION FOR POSSIBLE REBAR NEAR CONCRETE SEAMS WITH ADDITIONAL MESH REINFORCEMENT. GPR PARABOLICS TRENDING EAST TO WEST AT 12' SOUTH. PREVIOUSLY MARKED WATER (BLUE LINES) AT 16' SOUTH SHOWED EM OR GPR RESPONSE. PARABOLIC NOTED MAY BE WATER LINE TO IRRIGATION**

**SV3 - CAUTION FOR POSSIBLE REBAR NEAR CONCRETE SEAMS WITH ADDITIONAL MESH REINFORCEMENT**

**SV4 - CAUTION FOR POSSIBLE REBAR NEAR CONCRETE SEAMS WITH ADDITIONAL MESH REINFORCEMENT**

**### DUE TO CLOSE PROXIMITY TO BUILDING AND RAISED PLANTER CHECK SITE PLANS AND/OR AS-BUILTS TO CONFIRM NO SUB STRUCTURE OR BASEMENT AT SV1 THROUGH SV4**

**SV5, SV6, SV7 AND SV8 – IRRIGATION CONTROL ELECTRIC FOUND AT 2' TO 3' EAST OF CONCRETE. SEWER VISUAL ON MANHOLES NORTH AND SOUTH SHOWED TREND AT 9' EAST OF CONCRETE. SMALL STORM INLETS ALL SHOWED PIPING TRENDING EAST. POINTS WERE PLACE AT 2' TO 3' FROM IRRIGATION CONTROL LINES AND 4' TO 5' FROM SEWER. CAUTION FOR PVC IRRIGATION LINES NOT LOCATABLE.**

**END REPORT/ PHOTO EDITS ATTACHED**

**LOCATE ENERGY ISOLATION INCLUDING WATER AT THIS SITE AND SAWCUT, JACKHAMMER, AIRKNIFE DIG CAREFULLY IN EACH LOCATION.**

.

**CHRIS REIMER**
**ULS CA, INC**

| | QA / QC |
|---|---|
| X | **SITE WALK** |
| X | VISUALS |
| X | USA/DIG ALERT MARKED IN STREET AND AT EACH POINT |
| X | **UTILITY MAINS** |
| X | **ELECTRIC** – AWAY FROM PTS |
| X | **TELEPHONE** AWAY FROM PTS |
| X | **NAT GAS NONE OBSERVED IN AREA** |
| X | **WATER UNKNOWN PREVIOUS MARKS NO CONFIRMED** |
| X | SEWER/STORM VISUALS ON MANHOLES AND INLETS |
| X | **SEWER LATERAL** |
| X | **CAUTION NO CLEANOUTS OBSERVED** |
| X | CAUTION PVC IRRIGATION WATER LINES IN GRASS |
| X | |
| X | **OTHER** |
| | |
| | FUELS SYSTEM |
| | USTS |
| | PIPING |
| | VENTS |

USA
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USA
DUDEK

# Appendix B
Tables

## Table 1. Soil Vapor Sampling Results

| Sample Location | Sample ID | Sample Depth (feet bgs) | Sample Date | Benzene | Bromodichloromethane | Bromoform | Carbon tetrachloride | Chloroform | Dichlorodifluoromethane | Ethylbenzene | 4-Isopropyltoluene | Methylene chloride | Styrene | Tetrachloroethene (PCE) | Toluene | Trichloroethene (TCE) | Trichlorofluoromethane | 1,2,4-Trimethylbenzene | Vinyl chloride | m,p-Xylene | O-Xylene | n-Pentane* | n-Hexane* | n-Heptane* | All Other VOCs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | micrograms per cubic meter (µg/m³) | | | | | | | | | | | | | | | | | | | | | |
| SV1 | SV1-5 | 5 | 8/29/22 | **54.9** | **21.9** | <2.0 | <1.0 | **117** | 7.4 | 15.6 | <2.0 | 5.7 | <2.0 | 6.0 | 112 | 6.9 | <5.0 | <2.0 | <0.5 | <5.0 | 15.2 | <50.0 | <50.0 | <50.0 | ND |
| | SV1-20 | 20 | 8/29/22 | 3.7 | <2.0 | <2.0 | <1.0 | <2.0 | 7.4 | <2.0 | <2.0 | <2.0 | <2.0 | 16.7 | 33.4 | <5.0 | <5.0 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| SV2 | SV2-5 | 5 | 8/29/22 | **42.6** | **12.3** | <2.0 | <1.0 | **59.2** | 7.5 | 17.3 | <2.0 | 3.7 | <2.0 | <5.0 | 114 | <5.0 | <5.0 | <2.0 | <0.5 | 48.9 | 17.1 | <50.0 | <50.0 | <50.0 | ND |
| | SV2-20 | 20 | 8/29/22 | 3.2 | <2.0 | <2.0 | <1.0 | <2.0 | 8.9 | 1.9 | <2.0 | <2.0 | <2.0 | 16.5 | 48.9 | <5.0 | <5.0 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| SV3 | SV3-5 | 5 | 8/29/22 | **53.3** | **30.0** | <2.0 | 1.1 | **189** | 7.7 | 28.5 | 56.9 | 8.6 | <2.0 | 5.3 | 249 | 7.0 | <5.0 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| | SV3-5 REP | 5 | 8/29/22 | **46.0** | **25.8** | <2.0 | <1.0 | **159** | 6.9 | 22.2 | 46.3 | 6.2 | <2.0 | <5.0 | 183 | 5.6 | <5.0 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| | SV3-20 | 20 | 8/29/22 | 3.5 | <2.0 | <2.0 | <1.0 | <2.0 | 7.4 | 1.6 | <2.0 | <2.0 | <2.0 | 13.3 | 69.1 | <5.0 | <5.0 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| SV4 | SV4-5 | 5 | 8/29/22 | **33.7** | **46.1** | 3.0 | <1.0 | **265** | 9.1 | <2.0 | 1430 | 22.9 | <2.0 | 9.2 | 288 | 20.8 | <5.0 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| | SV4-20 | 20 | 8/29/22 | **27.1** | <2.0 | <2.0 | <1.0 | <2.0 | 7.3 | 6.6 | 38.1 | 4.2 | 4.1 | <5.0 | 60.8 | 12.8 | <5.0 | 4.2 | <0.5 | 16.3 | 5.5 | <50.0 | <50.0 | <50.0 | ND |
| SV5 | SV5-5 | 5 | 8/29/22 | **28.4** | **33.7** | 4.4 | <1.0 | **237** | 7.9 | <2.0 | 48.7 | 9.7 | <2.0 | 3.6 | 81.7 | <5.0 | 5.3 | <2.0 | <0.5 | 36.6 | 12.3 | <50.0 | <50.0 | <50.0 | ND |
| | SV5-20 | 20 | 8/29/22 | 2.6 | <2.0 | <2.0 | <1.0 | 2.8 | 8.4 | <2.0 | <2.0 | <2.0 | <2.0 | 29.9 | 51.3 | <5.0 | 6.1 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| SV6 | SV6-5 | 5 | 8/29/22 | **22.0** | <2.0 | <2.0 | <1.0 | **21.4** | 7.1 | 8.1 | 34.6 | <2.0 | <2.0 | 6.9 | 56.0 | <5.0 | <5.0 | <2.0 | <0.5 | 23.3 | 9.1 | <50.0 | <50.0 | <50.0 | ND |
| | SV6-20 | 20 | 8/29/22 | 3.1 | <2.0 | <2.0 | <1.0 | <2.0 | 7.1 | <2.0 | 4.2 | <2.0 | <2.0 | 26.6 | 29.9 | <5.0 | <5.0 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| SV7 | SV7-5 | 5 | 8/29/22 | **31.1** | **25.5** | <2.0 | <1.0 | **62.2** | 8.2 | 15.0 | 16.7 | <2.0 | <2.0 | 13.8 | 107 | <5.0 | <5.0 | <2.0 | **10.3** | 37.8 | 13.0 | <50.0 | <50.0 | <50.0 | ND |
| | SV7-20 | 20 | 8/29/22 | 2.1 | <2.0 | <2.0 | <1.0 | <2.0 | 9.4 | <2.0 | 67.2 | <2.0 | <2.0 | 35.0 | 23.8 | <5.0 | <5.0 | <2.0 | <0.5 | <5.0 | <2.0 | <50.0 | <50.0 | <50.0 | ND |
| SV8 | SV8-5 | 5 | 8/29/22 | 10.6 | 6.5 | <2.0 | <1.0 | **29.5** | 7.4 | 9.0 | <2.0 | <2.0 | <2.0 | 10.7 | 52.5 | <5.0 | <5.0 | 9.4 | <0.5 | 30.0 | 11.0 | <50.0 | <50.0 | <50.0 | ND |
| | SV8-20 | 20 | 8/29/22 | **14.3** | <2.0 | <2.0 | <1.0 | <2.0 | 9.2 | 5.9 | <2.0 | <2.0 | 2.1 | 25.0 | 44.9 | <5.0 | 5.4 | <2.0 | <0.5 | 5.7 | 2.6 | <50.0 | <50.0 | <50.0 | ND |
| *DTSC-SL, Soil Vapor - Commercial/Industrial[1] (AF = 0.0005)* | | | | *840* | *660* | *22,000* | *4,000* | *—* | *—* | *—* | *—* | *24,000* | *7,800,000 ** * | *4,000* | *2,600,000* | *—* | *10,600,000 ** * | *—* | *320* | *—* | *—* | *—* | *—* | *—* | *Varies* |
| *DTSC-SL, Soil Vapor - Commercial/Industrial[1] (AF = 0.03)* | | | | *14* | *11* | *367* | *67* | *—* | *—* | *—* | *—* | *400* | *130,000 ** * | *67* | *43,333* | *—* | *176,666 ** * | *—* | *5.3* | *—* | *—* | *—* | *—* | *—* | *Varies* |
| *SWQCB ESL, Soil Vapor - Commercial/Industrial* | | | | *14* | *11* | *370* | *68* | *18* | *—* | *160* | *—* | *410* | *130,000 ** * | *67* | *44,000** * | *100* | *—* | *—* | *5.2* | *15,000** * | *15,000** * | *—* | *—* | *—* | *Varies* |
| *RSL, Soil Vapor - Industrial[2] (AF = 0.0005)* | | | | *3,200* | *660* | *22,000* | *4,000* | *1060* | *880,000 ** * | *9,800* | *—* | *2,400,000* | *8,800,000 ** * | *94,000* | *44,000,000** * | *6,000* | *—* | *520,000 ** * | *5,600* | *880,000** * | *880,000** * | *8,800,000** * | *6,200,000** * | *3,600,000 ** * | *Varies* |
| *RSL, Soil Vapor - Industrial Air[2] (AF = 0.03)* | | | | *53* | *11* | *367* | *67* | *18* | *14,666 ** * | *163* | *—* | *40,000* | *146,666 ** * | *1,567* | *733,333** * | *100* | *—* | *8,667** * | *93* | *14,667** * | *14,667** * | *14,667** * | *103,333** * | *60,000** * | *Varies* |

# Table 1 Notes

**Notes:**
Samples analyzed by EPA Test Method 8260B by Jones Environmental.
**Bold text** indicates exceedance of DTSC-SL (AF = 0.03) or RSL (AF 0.03).
bgs = below ground surface
VOC = volatile organic compound
DTSC-SL = Department of Toxic Substance Control - Modified Screening Level
SWQCB ESL = State Water Quality Control Board Environmental Screening Level
RSL = USEPA Regional Screening Level
<1.0 = constituent not detected above method reporting limit shown.
ND = not detected above the laboratory method reporting limit. See laboratory reports for other VOCs and the associated reporting limits.
- = no documented value
[1] Department of Toxic Substances Control, Human Health Risk Assessment Note Number 3. Screening Level, Cancer End Point (DTSC 2020). Ambient air cancer endpoint was divided by the attenuation factor (AF) shown to estimate soil vapor cancer endpoint shown in the table.
[2] Environmental Protection Agency, Regional Screening Level, Industrial Air (May 2022). Industrial air screening level was divided by the AF shown to estimate soil vapor screening level.
* Tracer used during sampling
** Non-cancer hazard screening level used in the absence of a cancer risk screening level.

## Table 2. Soil Vapor Risk Evaluation

| | Attenuation Factor | Benzene | Bromodichloromethane | Bromoform | Carbon tetrachloride | Chloroform | Dichlorodifluoromethane | Ethylbenzene | 4-Isopropyltoluene | Methylene chloride | Styrene | Tetrachloroethene (PCE) | Toluene | Trichloroethene (TCE) | Trichlorofluoromethane | 1,2,4-Trimethylbenzene | Vinyl chloride | m,p-Xylene | O-Xylene | Total On-site Sources |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Concentration Detected in Project Area (µg/m³) | | 54.9 | 46.1 | 4.4 | 1 | 265 | 9.4 | 29 | 1430 | 22.9 | 4.1 | 35 | 288 | 20.8 | 6.1 | 9.4 | 10.3 | 48.9 | 17.1 | |
| Commercial/Industrial Cancer Risk[1] | 0.0005 | 6.54E-08 | 6.98E-08 | 2.00E-10 | 2.75E-10 | 2.50E-07 | – | 2.91E-08 | – | 9.54E-10 | - | 8.75E-09 | 1.11E-10 | 3.47E-08 | – | – | 3.22E-08 | – | – | 4.91E-07 |
| Commercial/Industrial Hazard Index[2] | 0.0005 | 2.11E-03 | 6.59E-05 | 6.29E-06 | 3.06E-06 | 3.08E-04 | 1.07E-05 | 3.24E-06 | – | 6.36E-06 | 5.26E-07 | 9.72E-05 | 1.11E-04 | 1.18E-03 | 5.75E-07 | 1.81E-05 | 1.17E-05 | 5.56E-05 | 1.94E-05 | 0.0040 |
| Commercial/Industrial Cancer Risk[1] | 0.03 | 3.92E-06 | 4.19E-06 | 1.20E-08 | 1.65E-08 | 1.50E-05 | – | 1.74E-06 | – | 5.73E-08 | – | 5.25E-07 | 6.65E-09 | 2.08E-06 | – | – | 1.93E-06 | – | – | 2.95E-05 |
| Commercial/Industrial Hazard Index[2] | 0.03 | 1.27E-01 | 3.95E-03 | 3.77E-04 | 1.83E-04 | 1.85E-02 | 6.41E-04 | 1.94E-04 | – | 3.82E-04 | 3.15E-05 | 5.83E-03 | 6.65E-03 | 7.09E-02 | 3.45E-05 | 1.08E-03 | 7.02E-04 | 3.33E-03 | 1.17E-03 | 0.24 |
| Commercial/Industrial Cancer-Based Screening Level, Indoor Air (µg/m³) | | 0.42 | 0.33 | 11 | 2 | 0.53 | – | 4.9 | – | 12 | – | 2 | 1,300 | 3 | – | – | 0.16 | – | – | – |
| Commercial/Industrial Noncancer-Based Screening Level, Indoor Air (µg/m³) | | 13 | 350 | 350 | 180 | 430 | 440 | 4,400 | 0 | 1,800 | 3,900 | 180 | 1,300 | 8.8 | 5,300 | 260 | 440 | 440 | 440 | – |

**Notes:**

1 Estimated cancer risk calculated by dividing the maximum site concentration by the Commercial/Industrial Cancer-Based Screening Level (DTSC-SL 2020) and multiplied by the de minimis risk value 1x10-6

2 Estimated hazard index calculated by dividing the maximum site concentration by the Commercial/Industrial Noncancer-Based Screening Level (DTSC-SL 2020) and multiplied by the de minimis hazard index of 1

-- - Not applicable, as screening level(s) are not documented

µg/m3 - microgram per cubic meter

# Appendix C
Soil Vapor Analytical Results

JONES ENVIRONMENTAL, INC.

714-449-9937
562-646-1611

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

# JONES ENVIRONMENTAL LABORATORY RESULTS

| | | | |
|---|---|---|---|
| **Client:** | Dudek | **Report date:** | 8/29/2022 |
| **Client Address:** | 605 Third Street<br>Encinitas, CA 92024 | **Jones Ref. No.:**<br>**Client Ref. No.:** | G-0484<br>14416.2-2E |
| **Attn:** | Susie Smith | **Date Sampled:**<br>**Date Received:** | 8/29/2022<br>8/29/2022 |
| **Project:** | Baldwin Park Medical Center-KP | **Date Analyzed:** | 8/29/2022 |
| **Project Address:** | 1011 Baldwin Park Blvd<br>Baldwin Park, CA | **Physical State:** | Soil Gas |

## ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, isopropanol, and n-propyl alcohol was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of collection.

**Approval:** _____

Annalise O'Toole
Mobile Lab Manager

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# JONES ENVIRONMENTAL LABORATORY RESULTS

| | | | |
|---|---|---|---|
| **Client:** | Dudek | **Report date:** | 8/29/2022 |
| **Client Address:** | 605 Third Street<br>Encinitas, CA 92024 | **Jones Ref. No.:**<br>**Client Ref. No.:** | G-0484<br>14416.2-2E |
| **Attn:** | Susie Smith | **Date Sampled:**<br>**Date Received:** | 8/29/2022<br>8/29/2022 |
| **Project:** | Baldwin Park Medical Center-KP | **Date Analyzed:** | 8/29/2022 |
| **Project Address:** | 1011 Baldwin Park Blvd<br>Baldwin Park, CA | **Physical State:** | Soil Gas |

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **SV4-5'** | **SV4-20'** | **SV3-5'** | **SV3-5' REP** | **SV3-20'** | | |
|---|---|---|---|---|---|---|---|
| **Jones ID:** | **G-0484-01** | **G-0484-02** | **G-0484-03** | **G-0484-04** | **G-0484-05** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | | | | |
| Benzene | **33.7** | **27.1** | **53.3** | **46.0** | **3.5** | 0.5 | µg/m3 |
| Bromobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Bromodichloromethane | **46.1** | ND | **30.0** | **25.8** | ND | 2.0 | µg/m3 |
| Bromoform | **3.0** | ND | ND | ND | ND | 2.0 | µg/m3 |
| n-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| sec-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Carbon tetrachloride | ND | ND | **1.1** | ND | ND | 1.0 | µg/m3 |
| Chlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Chloroform | **265** | ND | **189** | **159** | ND | 2.0 | µg/m3 |
| 2-Chlorotoluene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| 4-Chlorotoluene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Dibromochloromethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2-Dibromo-3-chloropropane | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| 1,2-Dibromoethane (EDB) | ND | ND | ND | ND | ND | 0.5 | µg/m3 |
| Dibromomethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2- Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,4-Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Dichlorodifluoromethane | **9.1** | **7.3** | **7.7** | **6.9** | **7.4** | 5.0 | µg/m3 |
| 1,1-Dichloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,1-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| cis-1,2-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| trans-1,2-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 2,2-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,1-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |

## JONES ENVIRONMENTAL LABORATORY RESULTS

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **SV4-5'** | **SV4-20'** | **SV3-5'** | **SV3-5' REP** | **SV3-20'** | | |
|---|---|---|---|---|---|---|---|
| **Jones ID:** | **G-0484-01** | **G-0484-02** | **G-0484-03** | **G-0484-04** | **G-0484-05** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | | | | |
| cis-1,3-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| trans-1,3-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Ethylbenzene | ND | **6.6** | **28.5** | **22.2** | **1.6** | 2.0 | µg/m3 |
| Freon 113 | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Hexachlorobutadiene | ND | ND | ND | ND | ND | 4.0 | µg/m3 |
| Isopropylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 4-Isopropyltoluene | **1430** | **38.1** | **56.9** | **46.3** | ND | 2.0 | µg/m3 |
| Methylene chloride | **22.9** | **4.2** | **8.6** | **6.2** | ND | 2.0 | µg/m3 |
| Naphthalene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| n-Propylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Styrene | ND | **4.1** | ND | ND | ND | 2.0 | µg/m3 |
| 1,1,1,2-Tetrachloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,1,2,2-Tetrachloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| Tetrachloroethene | **9.2** | ND | **5.3** | ND | **13.3** | 5.0 | µg/m3 |
| Toluene | **288** | **60.8** | **249** | **183** | **69.1** | 5.0 | µg/m3 |
| 1,2,3-Trichlorobenzene | ND | ND | ND | ND | ND | 10.0 | µg/m3 |
| 1,2,4-Trichlorobenzene | ND | ND | ND | ND | ND | 10.0 | µg/m3 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,1,2-Trichloroethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Trichloroethene | **20.8** | **12.8** | **7.0** | **5.6** | ND | 5.0 | µg/m3 |
| Trichlorofluoromethane | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| 1,2,3-Trichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2,4-Trimethylbenzene | ND | **4.2** | ND | ND | ND | 2.0 | µg/m3 |
| 1,3,5-Trimethylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Vinyl chloride | ND | ND | ND | ND | ND | 0.5 | µg/m3 |
| m,p-Xylene | ND | **16.3** | ND | ND | ND | 5.0 | µg/m3 |
| o-Xylene | ND | **5.5** | ND | ND | ND | 2.0 | µg/m3 |
| MTBE | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Ethyl-tert-butylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Di-isopropylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-amylmethylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-Butylalcohol | ND | ND | ND | ND | ND | 25.0 | µg/m3 |
| **Tracer:** | | | | | | | |
| n-Pentane | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| n-Hexane | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| Isopropyl Alcohol | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| n-Propyl Alcohol | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| **Dilution Factor** | 1 | 1 | 1 | 1 | 1 | | |
| **Surrogate Recoveries:** | | | | | | **QC Limits** | |
| Dibromofluoromethane | 105% | 105% | 102% | 103% | 104% | 60 - 140 | |
| Toluene-$d_8$ | ● | 95% | ● | ● | 95% | 60 - 140 | |
| 4-Bromofluorobenzene | ● | 101% | ● | ● | 101% | 60 - 140 | |
| **Batch ID:** | G1-082922-01 | G1-082922-01 | G1-082922-01 | G1-082922-01 | G1-082922-01 | | |

ND = Value below reporting limit

● = Hydrocarbon interference prevented adequate surrogate recovery.

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# JONES ENVIRONMENTAL LABORATORY RESULTS

| | | | |
|---|---|---|---|
| **Client:** | Dudek | **Report date:** | 8/29/2022 |
| **Client Address:** | 605 Third Street<br>Encinitas, CA 92024 | **Jones Ref. No.:**<br>**Client Ref. No.:** | G-0484<br>14416.2-2E |
| **Attn:** | Susie Smith | **Date Sampled:**<br>**Date Received:** | 8/29/2022<br>8/29/2022 |
| **Project:** | Baldwin Park Medical Center-KP | **Date Analyzed:** | 8/29/2022 |
| **Project Address:** | 1011 Baldwin Park Blvd<br>Baldwin Park, CA | **Physical State:** | Soil Gas |

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **SV2-5'** | **SV2-20'** | **SV1-5'** | **SV1-20'** | **SV5-5'** | | |
|---|---|---|---|---|---|---|---|
| **Jones ID:** | **G-0484-06** | **G-0484-07** | **G-0484-08** | **G-0484-09** | **G-0484-10** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | | | | |
| Benzene | **42.6** | **3.2** | **54.9** | **3.7** | **28.4** | 0.5 | µg/m3 |
| Bromobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Bromodichloromethane | **12.3** | ND | **21.9** | ND | **33.7** | 2.0 | µg/m3 |
| Bromoform | ND | ND | ND | ND | **4.4** | 2.0 | µg/m3 |
| n-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| sec-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Carbon tetrachloride | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| Chlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Chloroform | **59.2** | ND | **117** | ND | **237** | 2.0 | µg/m3 |
| 2-Chlorotoluene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| 4-Chlorotoluene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Dibromochloromethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2-Dibromo-3-chloropropane | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| 1,2-Dibromoethane (EDB) | ND | ND | ND | ND | ND | 0.5 | µg/m3 |
| Dibromomethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2- Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,4-Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Dichlorodifluoromethane | **7.5** | **8.9** | **7.4** | **7.4** | **7.9** | 5.0 | µg/m3 |
| 1,1-Dichloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,1-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| cis-1,2-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| trans-1,2-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 2,2-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,1-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |

## JONES ENVIRONMENTAL LABORATORY RESULTS

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **SV2-5'** | **SV2-20'** | **SV1-5'** | **SV1-20'** | **SV5-5'** | | |
|---|---|---|---|---|---|---|---|
| **Jones ID:** | **G-0484-06** | **G-0484-07** | **G-0484-08** | **G-0484-09** | **G-0484-10** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | | | | |
| cis-1,3-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| trans-1,3-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Ethylbenzene | **17.3** | **1.9** | **15.6** | ND | ND | 2.0 | µg/m3 |
| Freon 113 | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Hexachlorobutadiene | ND | ND | ND | ND | ND | 4.0 | µg/m3 |
| Isopropylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 4-Isopropyltoluene | ND | ND | ND | ND | **48.7** | 2.0 | µg/m3 |
| Methylene chloride | **3.7** | ND | **5.7** | ND | **9.7** | 2.0 | µg/m3 |
| Naphthalene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| n-Propylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Styrene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,1,1,2-Tetrachloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,1,2,2-Tetrachloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| Tetrachloroethene | ND | **16.5** | **6.0** | **16.7** | **3.6** | 5.0 | µg/m3 |
| Toluene | **114** | **48.9** | **112** | **33.4** | **81.7** | 5.0 | µg/m3 |
| 1,2,3-Trichlorobenzene | ND | ND | ND | ND | ND | 10.0 | µg/m3 |
| 1,2,4-Trichlorobenzene | ND | ND | ND | ND | ND | 10.0 | µg/m3 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,1,2-Trichloroethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Trichloroethene | ND | ND | **6.9** | ND | ND | 5.0 | µg/m3 |
| Trichlorofluoromethane | ND | ND | ND | ND | **5.3** | 5.0 | µg/m3 |
| 1,2,3-Trichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2,4-Trimethylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,3,5-Trimethylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Vinyl chloride | ND | ND | ND | ND | ND | 0.5 | µg/m3 |
| m,p-Xylene | **48.9** | ND | ND | ND | **36.6** | 5.0 | µg/m3 |
| o-Xylene | **17.1** | ND | **15.2** | ND | **12.3** | 2.0 | µg/m3 |
| MTBE | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Ethyl-tert-butylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Di-isopropylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-amylmethylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-Butylalcohol | ND | ND | ND | ND | ND | 25.0 | µg/m3 |
| **Tracer:** | | | | | | | |
| n-Pentane | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| n-Hexane | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| Isopropyl Alcohol | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| n-Propyl Alcohol | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| **Dilution Factor** | 1 | 1 | 1 | 1 | 1 | | |
| **Surrogate Recoveries:** | | | | | | **QC Limits** | |
| Dibromofluoromethane | 100% | 103% | 102% | 105% | 100% | 60 - 140 | |
| Toluene-$d_8$ | 137% | 94% | ● | 93% | 126% | 60 - 140 | |
| 4-Bromofluorobenzene | ● | 102% | ● | 101% | ● | 60 - 140 | |
| **Batch ID:** | G1-082922-01 | G1-082922-01 | G1-082922-01 | G1-082922-01 | G1-082922-01 | | |

ND = Value below reporting limit

● = Hydrocarbon interference prevented adequate surrogate recovery.

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# JONES ENVIRONMENTAL LABORATORY RESULTS

| | | | |
|---|---|---|---|
| **Client:** | Dudek | **Report date:** | 8/29/2022 |
| **Client Address:** | 605 Third Street<br>Encinitas, CA 92024 | **Jones Ref. No.:**<br>**Client Ref. No.:** | G-0484<br>14416.2-2E |
| **Attn:** | Susie Smith | **Date Sampled:**<br>**Date Received:** | 8/29/2022<br>8/29/2022 |
| **Project:** | Baldwin Park Medical Center-KP | **Date Analyzed:** | 8/29/2022 |
| **Project Address:** | 1011 Baldwin Park Blvd<br>Baldwin Park, CA | **Physical State:** | Soil Gas |

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **SV5-20'** | **SV6-5'** | **SV6-20'** | **SV7-5'** | **SV7-20'** | | |
|---|---|---|---|---|---|---|---|
| **Jones ID:** | **G-0484-11** | **G-0484-12** | **G-0484-13** | **G-0484-14** | **G-0484-15** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | | | | |
| Benzene | **2.6** | **22.0** | **3.1** | **31.1** | **2.1** | 0.5 | µg/m3 |
| Bromobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Bromodichloromethane | ND | ND | ND | **25.5** | ND | 2.0 | µg/m3 |
| Bromoform | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| n-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| sec-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-Butylbenzene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Carbon tetrachloride | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| Chlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Chloroform | **2.8** | **21.4** | ND | **62.2** | ND | 2.0 | µg/m3 |
| 2-Chlorotoluene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| 4-Chlorotoluene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Dibromochloromethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2-Dibromo-3-chloropropane | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| 1,2-Dibromoethane (EDB) | ND | ND | ND | ND | ND | 0.5 | µg/m3 |
| Dibromomethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2- Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,4-Dichlorobenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Dichlorodifluoromethane | **8.4** | **7.1** | **7.1** | **8.2** | **9.4** | 5.0 | µg/m3 |
| 1,1-Dichloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,1-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| cis-1,2-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| trans-1,2-Dichloroethene | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 2,2-Dichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,1-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |

## JONES ENVIRONMENTAL LABORATORY RESULTS

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **SV5-20'** | **SV6-5'** | **SV6-20'** | **SV7-5'** | **SV7-20'** | | |
|---|---|---|---|---|---|---|---|
| **Jones ID:** | **G-0484-11** | **G-0484-12** | **G-0484-13** | **G-0484-14** | **G-0484-15** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | | | | |
| cis-1,3-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| trans-1,3-Dichloropropene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Ethylbenzene | ND | **8.1** | ND | **15.0** | ND | 2.0 | µg/m3 |
| Freon 113 | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Hexachlorobutadiene | ND | ND | ND | ND | ND | 4.0 | µg/m3 |
| Isopropylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 4-Isopropyltoluene | ND | **34.6** | **4.2** | **16.7** | **67.2** | 2.0 | µg/m3 |
| Methylene chloride | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Naphthalene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| n-Propylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Styrene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,1,1,2-Tetrachloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| 1,1,2,2-Tetrachloroethane | ND | ND | ND | ND | ND | 1.0 | µg/m3 |
| Tetrachloroethene | **29.9** | **6.9** | **26.6** | **13.8** | **35.0** | 5.0 | µg/m3 |
| Toluene | **51.3** | **56.0** | **29.9** | **107** | **23.8** | 5.0 | µg/m3 |
| 1,2,3-Trichlorobenzene | ND | ND | ND | ND | ND | 10.0 | µg/m3 |
| 1,2,4-Trichlorobenzene | ND | ND | ND | ND | ND | 10.0 | µg/m3 |
| 1,1,1-Trichloroethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,1,2-Trichloroethane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Trichloroethene | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Trichlorofluoromethane | **6.1** | ND | ND | ND | ND | 5.0 | µg/m3 |
| 1,2,3-Trichloropropane | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,2,4-Trimethylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| 1,3,5-Trimethylbenzene | ND | ND | ND | ND | ND | 2.0 | µg/m3 |
| Vinyl chloride | ND | ND | ND | **10.3** | ND | 0.5 | µg/m3 |
| m,p-Xylene | ND | **23.3** | ND | **37.8** | ND | 5.0 | µg/m3 |
| o-Xylene | ND | **9.1** | ND | **13.0** | ND | 2.0 | µg/m3 |
| MTBE | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Ethyl-tert-butylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| Di-isopropylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-amylmethylether | ND | ND | ND | ND | ND | 5.0 | µg/m3 |
| tert-Butylalcohol | ND | ND | ND | ND | ND | 25.0 | µg/m3 |
| **Tracer:** | | | | | | | |
| n-Pentane | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| n-Hexane | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| Isopropyl Alcohol | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| n-Propyl Alcohol | ND | ND | ND | ND | ND | 50.0 | µg/m3 |
| **Dilution Factor** | 1 | 1 | 1 | 1 | 1 | | |
| **Surrogate Recoveries:** | | | | | | **QC Limits** | |
| Dibromofluoromethane | 100% | 96% | 96% | 96% | 101% | 60 - 140 | |
| Toluene-$d_8$ | 94% | 118% | 95% | 110% | 92% | 60 - 140 | |
| 4-Bromofluorobenzene | 100% | ● | 99% | 138% | 99% | 60 - 140 | |
| **Batch ID:** | G1-082922-01 | G1-082922-01 | G1-082922-01 | G1-082922-01 | G1-082922-01 | | |

ND = Value below reporting limit

● = Hydrocarbon interference prevented adequate surrogate recovery.

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# JONES ENVIRONMENTAL LABORATORY RESULTS

| | | | |
|---|---|---|---|
| **Client:** | Dudek | **Report date:** | 8/29/2022 |
| **Client Address:** | 605 Third Street<br>Encinitas, CA 92024 | **Jones Ref. No.:**<br>**Client Ref. No.:** | G-0484<br>14416.2-2E |
| **Attn:** | Susie Smith | **Date Sampled:**<br>**Date Received:** | 8/29/2022<br>8/29/2022 |
| **Project:** | Baldwin Park Medical Center-KP | **Date Analyzed:** | 8/29/2022 |
| **Project Address:** | 1011 Baldwin Park Blvd<br>Baldwin Park, CA | **Physical State:** | Soil Gas |

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **SV8-5'** | **SV8-20'** | | |
|---|---|---|---|---|
| **Jones ID:** | **G-0484-16** | **G-0484-17** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | |
| Benzene | **10.6** | **14.3** | 0.5 | µg/m3 |
| Bromobenzene | ND | ND | 2.0 | µg/m3 |
| Bromodichloromethane | **6.5** | ND | 2.0 | µg/m3 |
| Bromoform | ND | ND | 2.0 | µg/m3 |
| n-Butylbenzene | ND | ND | 5.0 | µg/m3 |
| sec-Butylbenzene | ND | ND | 5.0 | µg/m3 |
| tert-Butylbenzene | ND | ND | 5.0 | µg/m3 |
| Carbon tetrachloride | ND | ND | 1.0 | µg/m3 |
| Chlorobenzene | ND | ND | 2.0 | µg/m3 |
| Chloroform | **29.5** | ND | 2.0 | µg/m3 |
| 2-Chlorotoluene | ND | ND | 5.0 | µg/m3 |
| 4-Chlorotoluene | ND | ND | 5.0 | µg/m3 |
| Dibromochloromethane | ND | ND | 2.0 | µg/m3 |
| 1,2-Dibromo-3-chloropropane | ND | ND | 5.0 | µg/m3 |
| 1,2-Dibromoethane (EDB) | ND | ND | 0.5 | µg/m3 |
| Dibromomethane | ND | ND | 2.0 | µg/m3 |
| 1,2- Dichlorobenzene | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichlorobenzene | ND | ND | 2.0 | µg/m3 |
| 1,4-Dichlorobenzene | ND | ND | 2.0 | µg/m3 |
| Dichlorodifluoromethane | **7.4** | **9.2** | 5.0 | µg/m3 |
| 1,1-Dichloroethane | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloroethane | ND | ND | 1.0 | µg/m3 |
| 1,1-Dichloroethene | ND | ND | 1.0 | µg/m3 |
| cis-1,2-Dichloroethene | ND | ND | 1.0 | µg/m3 |
| trans-1,2-Dichloroethene | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloropropane | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichloropropane | ND | ND | 2.0 | µg/m3 |
| 2,2-Dichloropropane | ND | ND | 2.0 | µg/m3 |
| 1,1-Dichloropropene | ND | ND | 2.0 | µg/m3 |

## JONES ENVIRONMENTAL LABORATORY RESULTS

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **SV8-5'** | **SV8-20'** | | |
|---|---|---|---|---|
| **Jones ID:** | **G-0484-16** | **G-0484-17** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | |
| cis-1,3-Dichloropropene | ND | ND | 2.0 | µg/m3 |
| trans-1,3-Dichloropropene | ND | ND | 2.0 | µg/m3 |
| Ethylbenzene | **9.0** | **5.9** | 2.0 | µg/m3 |
| Freon 113 | ND | ND | 5.0 | µg/m3 |
| Hexachlorobutadiene | ND | ND | 4.0 | µg/m3 |
| Isopropylbenzene | ND | ND | 2.0 | µg/m3 |
| 4-Isopropyltoluene | ND | ND | 2.0 | µg/m3 |
| Methylene chloride | ND | ND | 2.0 | µg/m3 |
| Naphthalene | ND | ND | 2.0 | µg/m3 |
| n-Propylbenzene | ND | ND | 2.0 | µg/m3 |
| Styrene | ND | **2.1** | 2.0 | µg/m3 |
| 1,1,1,2-Tetrachloroethane | ND | ND | 1.0 | µg/m3 |
| 1,1,2,2-Tetrachloroethane | ND | ND | 1.0 | µg/m3 |
| Tetrachloroethene | **10.7** | **25.0** | 5.0 | µg/m3 |
| Toluene | **52.5** | **44.9** | 5.0 | µg/m3 |
| 1,2,3-Trichlorobenzene | ND | ND | 10.0 | µg/m3 |
| 1,2,4-Trichlorobenzene | ND | ND | 10.0 | µg/m3 |
| 1,1,1-Trichloroethane | ND | ND | 2.0 | µg/m3 |
| 1,1,2-Trichloroethane | ND | ND | 2.0 | µg/m3 |
| Trichloroethene | ND | ND | 5.0 | µg/m3 |
| Trichlorofluoromethane | ND | **5.4** | 5.0 | µg/m3 |
| 1,2,3-Trichloropropane | ND | ND | 2.0 | µg/m3 |
| 1,2,4-Trimethylbenzene | **9.4** | ND | 2.0 | µg/m3 |
| 1,3,5-Trimethylbenzene | ND | ND | 2.0 | µg/m3 |
| Vinyl chloride | ND | ND | 0.5 | µg/m3 |
| m,p-Xylene | **30.0** | **5.7** | 5.0 | µg/m3 |
| o-Xylene | **11.0** | **2.6** | 2.0 | µg/m3 |
| MTBE | ND | ND | 5.0 | µg/m3 |
| Ethyl-tert-butylether | ND | ND | 5.0 | µg/m3 |
| Di-isopropylether | ND | ND | 5.0 | µg/m3 |
| tert-amylmethylether | ND | ND | 5.0 | µg/m3 |
| tert-Butylalcohol | ND | ND | 25.0 | µg/m3 |
| **Tracer:** | | | | |
| n-Pentane | ND | ND | 50.0 | µg/m3 |
| n-Hexane | ND | ND | 50.0 | µg/m3 |
| Isopropyl Alcohol | ND | ND | 50.0 | µg/m3 |
| n-Propyl Alcohol | ND | ND | 50.0 | µg/m3 |
| **Dilution Factor** | 1 | 1 | | |
| **Surrogate Recoveries:** | | | **QC Limits** | |
| Dibromofluoromethane | 94% | 98% | 60 - 140 | |
| Toluene-$d_8$ | 103% | 95% | 60 - 140 | |
| 4-Bromofluorobenzene | 139% | 98% | 60 - 140 | |
| **Batch ID:** | G1-082922-01 | G1-082922-01 | | |

ND = Value below reporting limit

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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

| | | | |
|---|---|---|---|
| **Client:** | Dudek | **Report date:** | 8/29/2022 |
| **Client Address:** | 605 Third Street<br>Encinitas, CA 92024 | **Jones Ref. No.:**<br>**Client Ref. No.:** | G-0484<br>14416.2-2E |
| **Attn:** | Susie Smith | **Date Sampled:**<br>**Date Received:** | 8/29/2022<br>8/29/2022 |
| **Project:** | Baldwin Park Medical Center-KP | **Date Analyzed:** | 8/29/2022 |
| **Project Address:** | 1011 Baldwin Park Blvd<br>Baldwin Park, CA | **Physical State:** | Soil Gas |

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| **Sample ID:** | **METHOD BLANK** | **SAMPLING BLANK** | | |
|---|---|---|---|---|
| **Jones ID:** | **082922-G1MB1** | **082922-G1SB1** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | |
| Benzene | ND | ND | 0.5 | µg/m3 |
| Bromobenzene | ND | ND | 2.0 | µg/m3 |
| Bromodichloromethane | ND | ND | 2.0 | µg/m3 |
| Bromoform | ND | ND | 2.0 | µg/m3 |
| n-Butylbenzene | ND | ND | 5.0 | µg/m3 |
| sec-Butylbenzene | ND | ND | 5.0 | µg/m3 |
| tert-Butylbenzene | ND | ND | 5.0 | µg/m3 |
| Carbon tetrachloride | ND | ND | 1.0 | µg/m3 |
| Chlorobenzene | ND | ND | 2.0 | µg/m3 |
| Chloroform | ND | ND | 2.0 | µg/m3 |
| 2-Chlorotoluene | ND | ND | 5.0 | µg/m3 |
| 4-Chlorotoluene | ND | ND | 5.0 | µg/m3 |
| Dibromochloromethane | ND | ND | 2.0 | µg/m3 |
| 1,2-Dibromo-3-chloropropane | ND | ND | 5.0 | µg/m3 |
| 1,2-Dibromoethane (EDB) | ND | ND | 0.5 | µg/m3 |
| Dibromomethane | ND | ND | 2.0 | µg/m3 |
| 1,2- Dichlorobenzene | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichlorobenzene | ND | ND | 2.0 | µg/m3 |
| 1,4-Dichlorobenzene | ND | ND | 2.0 | µg/m3 |
| Dichlorodifluoromethane | ND | ND | 5.0 | µg/m3 |
| 1,1-Dichloroethane | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloroethane | ND | ND | 1.0 | µg/m3 |
| 1,1-Dichloroethene | ND | ND | 1.0 | µg/m3 |
| cis-1,2-Dichloroethene | ND | ND | 1.0 | µg/m3 |
| trans-1,2-Dichloroethene | ND | ND | 1.0 | µg/m3 |
| 1,2-Dichloropropane | ND | ND | 2.0 | µg/m3 |
| 1,3-Dichloropropane | ND | ND | 2.0 | µg/m3 |
| 2,2-Dichloropropane | ND | ND | 2.0 | µg/m3 |
| 1,1-Dichloropropene | ND | ND | 2.0 | µg/m3 |

## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

| Sample ID: | METHOD BLANK | SAMPLING BLANK | | |
|---|---|---|---|---|
| **Jones ID:** | **082922-G1MB1** | **082922-G1SB1** | **Reporting Limit** | **Units** |
| **Analytes:** | | | | |
| cis-1,3-Dichloropropene | ND | ND | 2.0 | µg/m3 |
| trans-1,3-Dichloropropene | ND | ND | 2.0 | µg/m3 |
| Ethylbenzene | ND | ND | 2.0 | µg/m3 |
| Freon 113 | ND | ND | 5.0 | µg/m3 |
| Hexachlorobutadiene | ND | ND | 4.0 | µg/m3 |
| Isopropylbenzene | ND | ND | 2.0 | µg/m3 |
| 4-Isopropyltoluene | ND | ND | 2.0 | µg/m3 |
| Methylene chloride | ND | ND | 2.0 | µg/m3 |
| Naphthalene | ND | ND | 2.0 | µg/m3 |
| n-Propylbenzene | ND | ND | 2.0 | µg/m3 |
| Styrene | ND | ND | 2.0 | µg/m3 |
| 1,1,1,2-Tetrachloroethane | ND | ND | 1.0 | µg/m3 |
| 1,1,2,2-Tetrachloroethane | ND | ND | 1.0 | µg/m3 |
| Tetrachloroethene | ND | ND | 5.0 | µg/m3 |
| Toluene | ND | ND | 5.0 | µg/m3 |
| 1,2,3-Trichlorobenzene | ND | ND | 10.0 | µg/m3 |
| 1,2,4-Trichlorobenzene | ND | ND | 10.0 | µg/m3 |
| 1,1,1-Trichloroethane | ND | ND | 2.0 | µg/m3 |
| 1,1,2-Trichloroethane | ND | ND | 2.0 | µg/m3 |
| Trichloroethene | ND | ND | 5.0 | µg/m3 |
| Trichlorofluoromethane | ND | ND | 5.0 | µg/m3 |
| 1,2,3-Trichloropropane | ND | ND | 2.0 | µg/m3 |
| 1,2,4-Trimethylbenzene | ND | ND | 2.0 | µg/m3 |
| 1,3,5-Trimethylbenzene | ND | ND | 2.0 | µg/m3 |
| Vinyl chloride | ND | ND | 0.5 | µg/m3 |
| m,p-Xylene | ND | ND | 5.0 | µg/m3 |
| o-Xylene | ND | ND | 2.0 | µg/m3 |
| MTBE | ND | ND | 5.0 | µg/m3 |
| Ethyl-tert-butylether | ND | ND | 5.0 | µg/m3 |
| Di-isopropylether | ND | ND | 5.0 | µg/m3 |
| tert-amylmethylether | ND | ND | 5.0 | µg/m3 |
| tert-Butylalcohol | ND | ND | 25.0 | µg/m3 |
| **Tracer:** | | | | |
| n-Pentane | ND | ND | 50.0 | µg/m3 |
| n-Hexane | ND | ND | 50.0 | µg/m3 |
| Isopropyl Alcohol | ND | ND | 50.0 | µg/m3 |
| n-Propyl Alcohol | ND | ND | 50.0 | µg/m3 |
| **Dilution Factor** | 1 | 1 | | |
| **Surrogate Recoveries:** | | | **QC Limits** | |
| Dibromofluoromethane | 119% | 119% | 60 - 140 | |
| Toluene-$d_8$ | 96% | 93% | 60 - 140 | |
| 4-Bromofluorobenzene | 88% | 89% | 60 - 140 | |
| **Batch ID:** | G1-082922-01 | G1-082922-01 | | |

ND = Value below reporting limit

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# JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

| | | | |
|---|---|---|---|
| **Client:** | Dudek | **Report date:** | 8/29/2022 |
| **Client Address:** | 605 Third Street<br>Encinitas, CA 92024 | **Jones Ref. No.:**<br>**Client Ref. No.:** | G-0484<br>14416.2-2E |
| **Attn:** | Susie Smith | **Date Sampled:**<br>**Date Received:** | 8/29/2022<br>8/29/2022 |
| **Project:** | Baldwin Park Medical Center-KP | **Date Analyzed:** | 8/29/2022 |
| **Project Address:** | 1011 Baldwin Park Blvd<br>Baldwin Park, CA | **Physical State:** | Soil Gas |

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

**Batch ID:** G1-082922-01

| **Jones ID:** | **082922-G1LCS1** | **082922-G1LCSD1** | | | **082922-G1CCV1** | |
|---|---|---|---|---|---|---|
| Parameter | LCS Recovery (%) | LCSD Recovery (%) | RPD | Acceptability Range (%) | CCV | Acceptability Range (%) |
| Vinyl chloride | 96% | 92% | 4.2% | 60 - 140 | 80% | 80 - 120 |
| 1,1-Dichloroethene | 126% | 124% | 2.2% | 60 - 140 | 110% | 80 - 120 |
| Cis-1,2-Dichloroethene | 114% | 111% | 3.2% | 70 - 130 | 106% | 80 - 120 |
| 1,1,1-Trichloroethane | 121% | 118% | 3.0% | 70 - 130 | 115% | 80 - 120 |
| Benzene | 113% | 111% | 1.8% | 70 - 130 | 105% | 80 - 120 |
| Trichloroethene | 124% | 119% | 4.6% | 70 - 130 | 112% | 80 - 120 |
| Toluene | 112% | 111% | 1.4% | 70 - 130 | 106% | 80 - 120 |
| Tetrachloroethene | 115% | 115% | 0.3% | 70 - 130 | 111% | 80 - 120 |
| Chlorobenzene | 118% | 112% | 5.2% | 70 - 130 | 104% | 80 - 120 |
| Ethylbenzene | 102% | 106% | 4.2% | 70 - 130 | 98% | 80 - 120 |
| 1,2,4 Trimethylbenzene | 89% | 96% | 6.9% | 70 - 130 | 82% | 80 - 120 |
| **Surrogate Recovery:** | | | | | | |
| Dibromofluoromethane | 115% | 107% | | 60 - 140 | 112% | 60 - 140 |
| Toluene-$d_8$ | 96% | 96% | | 60 - 140 | 96% | 60 - 140 |
| 4-Bromofluorobenzene | 91% | 96% | | 60 - 140 | 90% | 60 - 140 |

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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# Soil-Gas Chain-of-Custody Record

Client: Dudek
Date: 8/29/2022
Purge Number: ☐ 1P ☒ 3P ☐ 7P ☐ 10P
Report Options: EDD _____ EDF* - 10% Surcharge____
LAB USE ONLY — Jones Project #: G-0484

Project Name: Baldwin Park Medical Center-KP
Client Project #: 14416.2-2E
Shut-In Test: (Y) N
*Global ID _____

Project Address: 1011 Baldwin Park Blvd
Baldwin Park, CA

Email:

Phone:

Page 1 of 2

Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

**Turn Around Requested**
- ☐ Immediate Attention
- ☐ Rush 24 Hours
- ☐ Rush 48 Hours
- ☐ Rush 72 Hours
- ☐ Normal
- ☑ Mobile Lab

**Tracer**
- ☑ n-pentane
- ☑ n-hexane
- ☑ ~~n-heptane~~ propanol
- ☑ Isopropyl Alchohol
- ☐ 1,1-DFA
- ☐ _____

**Reporting Limits**
☑ Ultra-Low ☐ Standard ☐ Low Level* ☐ MDL*
*surcharge for these limits

**Units** mg/m³

Report To: Susie Smith
Sampler: Madison Jones

**Analysis Requested**

| Sample ID | Purge Number | Purge Volume (mL) | Date | Sample Collection Time | Sample Analysis Time | Laboratory Sample ID | Purge Rate (mL/min) | Pump Used | Magnehelic | Sample Matrix: Soil Gas (SG), Air (A), Material (M) | EPA 8260B (VOCs) | | | | Magnehelic Vacuum (In/$H_2O$) | Number of Containers | Notes & Special Instructions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV4-5' | 3 | 1270 | 8/29/22 | 12:05 | 12:06 | G-0484-01 | 200 | BSSC | 118012 | SG | X | | | | <2 | 1 | |
| SV4-20' | 3 | 1520 | 8/29/22 | 12:22 | 12:23 | G-0484-02 | 200 | ZARAK | M100.106 | SG | X | | | | <2 | 1 | |
| SV3-5' | 3 | 1270 | 8/29/22 | 12:38 | 12:40 | G-0484-03 | 200 | BSSC | M100.500 | SG | X | | | | <2 | 1 | |
| SV3-5' REP | - | - | 8/29/22 | 12:42 | 12:57 | G-0484-04 | - | - | M100.500 | SG | X | | | | <2 | 1 | |
| SV3-20' | 3 | 1520 | 8/29/22 | 13:08 | 13:14 | G-0484-05 | 200 | ZARAK | M100.501 | SG | X | | | | <2 | 1 | |
| SV2-5' | 3 | 1270 | 8/29/22 | 13:31 | 13:33 | G-0484-06 | 200 | BSSC | 118012 | SG | X | | | | <2 | 1 | |
| SV2-20' | 3 | 1520 | 8/29/22 | 13:49 | 13:50 | G-0484-07 | 200 | ZARAK | M100.106 | SG | X | | | | <2 | 1 | |
| SV1-5' | 3 | 1270 | 8/29/22 | 14:01 | 14:08 | G-0484-08 | 200 | BSSC | M100.500 | SG | X | | | | <2 | 1 | |
| SV1-20' | 3 | 1520 | 8/29/22 | 14:11 | 14:25 | G-0484-09 | 200 | ZARAK | M100.501 | SG | X | | | | <2 | 1 | |
| SV5-5' | 3 | 1270 | 8/29/22 | 14:42 | 14:44 | G-0484-10 | 200 | BSSC | 118012 | SG | X | | | | <2 | 1 | |

| Representative Signature | Printed Name | Laboratory Signature | Printed Name | | |
|---|---|---|---|---|---|
| | Brandon Page | Madison Jones | Madison Jones | 10 | Total Number of Containers |
| **Company** | **Date** | **Time** | **Company** | **Date** | **Time** |
| Dudek | 8/29/2022 | 17:20 | JONES ENVIRONMENTAL, INC. | 8/29/2022 | 17:20 |
| **Representative Signature** | **Printed Name** | | **Laboratory Signature** | **Printed Name** | |
| | | | | | |
| **Company** | **Date** | **Time** | **Company** | **Date** | **Time** |
| | | | | | |

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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# Soil-Gas Chain-of-Custody Record

Client: Dudek
Project Name: Baldwin Park Medical Center-KP
Project Address: 1011 Baldwin Park Blvd
Baldwin Park, CA
Email:
Phone:
Report To: Susie Smith
Sampler: Madison Jones

Date: 8/29/2022
Client Project #: 14416.2-2E

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options: EDD ____ EDF* - 10% Surcharge____ *Global ID _____

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer:
- ☒ n-pentane
- ☒ n-hexane
- ☒ ~~n-heptane~~ propanol
- ☒ Isopropyl Alchohol
- □ 1,1-DFA
- □ _____

Reporting Limits: ☒ Ultra-Low
□ Standard □ Low Level* ☒ MDL* *surcharge for these limits
Units: µg/m³

LAB USE ONLY
Jones Project #: G-0484
Page 2 of 2
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

| Sample ID | Purge Number | Purge Volume (mL) | Date | Sample Collection Time | Sample Analysis Time | Laboratory Sample ID | Purge Rate (mL/min) | Pump Used | Magnehelic | Sample Matrix: Soil Gas (SG), Air (A), Material (M) | EPA 8260B (VOCs) | | | | Magnehelic Vacuum (In/$H_2O$) | Number of Containers | Notes & Special Instructions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SV5-20' | 3 | 1520 | 8/29/22 | 14:59 | 15:01 | G-0484-11 | 200 | ZARAK | M100.106 | SG | X | | | | <2 | 1 | |
| SV6-5' | 3 | 1270 | 8/29/22 | 15:12 | 15:19 | G-0484-12 | 200 | BSSC | M100.500 | SG | X | | | | <2 | 1 | |
| SV6-20' | 3 | 1520 | 8/29/22 | 15:34 | 15:38 | G-0484-13 | 200 | ZARAK | M100.501 | SG | X | | | | <2 | 1 | |
| SV7-5' | 3 | 1270 | 8/29/22 | 15:48 | 15:56 | G-0484-14 | 200 | BSSC | 118012 | SG | X | | | | <2 | 1 | |
| SV7-20' | 3 | 1520 | 8/29/22 | 16:08 | 16:14 | G-0484-15 | 200 | ZARAK | M100.106 | SG | X | | | | <2 | 1 | |
| SV8-5' | 3 | 1270 | 8/29/22 | 16:25 | 16:32 | G-0484-16 | 200 | BSSC | M100.500 | SG | X | | | | <2 | 1 | |
| SV8-20' | 3 | 1520 | 8/29/22 | 16:51 | 16:54 | G-0484-17 | 200 | ZARAK | M100.501 | SG | X | | | | <2 | 1 | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Representative Signature: [signature] Printed Name: Brandon Page
Company: Dudek Date: 8/29/2022 Time: 17:20

Laboratory Signature: [signature] Printed Name: Madison Jones
Company: JONES ENVIRONMENTAL, INC. Date: 8/29/2022 Time: 17:20

Representative Signature: Printed Name:
Company: Date: Time:

Laboratory Signature: Printed Name:
Company: Date: Time:

7 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

# Appendix F

Hydrology and Hydraulics Report

PSOMAS

# HYDROLOGY AND HYDRAULICS REPORT

**For:**
**KAISER PERMANENTE — Baldwin Park Medical Center**
**Emergency Department Expansion**

**Psomas Project No: 2HMC020801**

**Prepared for:**
**Kaiser Permanente**
**Post Office Box 12916**
**National Facilities Services**
**Oakland, California 94604**

**Submitted by:**
**HMC Architects**
**3546 Concours Street**
**Ontario, California 91764**
**213-542-8300**

**Project Site Location/Address:**
**1011 Baldwin Park Boulevard**
**Baldwin Park, California 91706**

**LID Prepared by:**
PSOMAS
**5 Hutton Centre Drive, Suite 300**
**Santa Ana, California 92707**
**(714) 751-7373**
**(714) 545-8883 Fax**

**LID Preparation Date:**
**May 13, 2022**

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Hydrocalc Peak Flow Hydrologic Analysis - Volume and Flow Rate Calculations

Pipe Capacity Calculations

Grate Inlet Capacity Calculations

Appendix 4 Hydrology Map

# 1.0 Introduction

## 1.1 Project Background

The 1.76-acre project site is located along the southerly side of the Kaiser Permanente Baldwin Park Medical Center campus at 1011 Baldwin Park Boulevard in Baldwin Park, California. The existing site was previously being used as plaza area, a landscape berm with trees, a parking lot and an ambulance parking area and driveway. The proposed project will repurpose the existing plaza area and landscaped berm to construct a 22,000-square foot emergency department building expansion to the south and construct a new ambulance parking area along the east side, landscaping including bioretention BMPs along the south and west sides, and a new plaza area to the west side of the building expansion. The project also includes constructing a new ambulance drop-off along the east side of the existing emergency department and restriping and remodeling the adjacent east parking lot to incorporate ADA paths of travel from the public sidewalk along Baldwin Park Boulevard and the ADA parking spaces. The parking lot will also include a portion of AC pavement removal and replacement, AC overlay or slurry seal improvements, and will be restriped per City and ADA/CBC standards. The drainage from the new hardscape areas including the building expansion, plaza, ambulance drop-off and driveway, and the parking stalls will drain southerly into proposed bioretention BMPs in the new landscaped areas to the south adjacent to Baldwin Park Boulevard.

The proposed Emergency Department Expansion is not part of a larger planned development for the Kaiser Permanente Baldwin Park Medical Center campus. The total impervious area of new or altered improvements is approximately 37,730 SF (0.87 acres), which is approximately 3.5% of the entire 25-acre campus.

## 1.2 Purpose and Scope

The project falls under the jurisdiction of the City of Baldwin Park. The purpose of this Low Impact Development report is:

- To meet City of Baldwin Park and County of Los Angeles Hydrology Manual requirements in allowing final design and construction to proceed in a timely manner;
- To determine the proposed development's impact on existing hydrologic conditions;
- To provide sufficient detailed information to support detailed hydraulic design of storm drainage facilities.

# 2.0 Hydrology

## 2.1 General Approach

The analysis for the project site consists of the existing and proposed condition. The existing condition analyzes the surface drainage from the northeasterly corner to the southwesterly corner of the project site, where any drainage that does not infiltrate surfaces flows into the existing storm drain system and is ultimately discharged to Walnut Creek Channel. The proposed condition analyzes the surface drainage in the similar path as the existing condition, where it will connect the existing 24" RCP through 42" RCP private storm drain, which is routed to the west and northwest sides of the site, and discharge into the LACFCD 11'-wide x 12'-high RCB (box) and ultimately into Walnut Creek Channel. The LA County computer program, HydroCalc, was used to estimate the runoff flowrate for the 25-year storm event to calculate the peak flows and times of concentration for the overland portions of the analyses for both the existing and proposed conditions. These calculations are in accordance with LACDPW requirements.

## 2.2 Data Sources

The primary source of data is from the *LACDPW: Hydrology Manual* (January 2006). For this project, the 25-year storm, which in Los Angeles County is defined as the Urban Flood, was used to analyze the storm drain system.

## 2.3 Watershed Characteristics

Rainfall and soil characteristics for the Kaiser Permanente Baldwin Park Medical Center Emergency Department Expansion project are illustrated in the Baldwin Park quadrant of Hydrologic Map Figure LACDPW 1-H1.21 (*Appendix 1*). The 50-year and 25-year 24-hour rainfall isohyets nearest the project area are approximately 6.3 inches, and 5.53" (0.878x6.3"), respectively.

In addition to the isohyet data, the hydrologic map shows the classification of the soil type. The project site falls within soil classification area 006. The project area is 1.76 acres in size, although about 0.87 acres of this area will include building, AC pavement and concrete improvements. The remainder of the impervious surfaces within the project limits will not require removal and replacement (i.e. east parking lot). The total tributary watershed area to be studied is 2.6 acres in size and includes drainage from outside the project limits from the existing central plant building and driveway to the northeast.

The *LACDPW HydroCalc* program was used to calculate the times of concentration and peak flows for existing and proposed conditions. A Microsoft Excel (Manning's equation) spreadsheet was used to determine the full flow capacity in the proposed

storm drain system for the onsite condition. The hydrology peak flows and hydraulic calculations are provided in *Appendix 3*.

Due to the building expansion, the proposed redevelopment will increase the site imperviousness within the project limits from 64% in the existing condition to 80% in the proposed condition. However, because the existing site does not have any well-defined BMPs where runoff from impervious surfaces could flow into and infiltrate into the adjacent planter areas the effective imperviousness is approximately the same as the total imperviousness, whereas, in the proposed condition, almost all the impervious surfaces will drain into adjacent bioretention BMPs. In effect, the proposed design will decrease the effective imperviousness from 64% in the existing condition to approximately 2% in the proposed condition.

The existing site generally flows southerly directly into grate inlets along the south edge of the concrete plaza, and through curbs and gutters into a curb opening catch basin along the south edge of the east parking lot. The runoff from the landscaped berms along the Baldwin Park Boulevard frontage are split to drain northerly into these grates inlets or catch basin, or sheet flow southerly into Baldwin Park Boulevard. The drainage then flows into the existing 24” RCP public storm drain (aka Line “B”), which flows southerly and westerly along the south end of the site, and then northerly to the northwest area of the campus.

Line “B” receives drainage from the south half of the Baldwin Park Medical Center campus - beginning at the CUP and east parking lot, where it begins as a 15” RCP, flows westerly along the south side of the campus as a 24” RCP, and ending at the northwest side of the campus where it confluences with a 36” RCP storm drain Line “A”. From this junction structure, the 36” RCP main then flows westerly and northerly, increases to a 42” RCP, and confluences with the Los Angeles County Flood Control District Facility Project No. 1701, Unit 1, which is an 11’-wide x 12’-high RCB (box) storm drain. This RCB storm drain main is contained within a 20’-wide easement on the campus and flows southwesterly and southerly into Walnut Creek. Walnut Creek Channel, which is a trapezoidal channel with grouted rip-rap and concrete side walls and an ungrouted toe stone and earth bottom, flows westerly and confluences with the San Gabriel River just west of the 605 freeway. The San Gabriel River thence flows southwesterly and ultimately outlets into the Pacific Ocean adjacent to the Alamitos Bay entrance channel.

Drainage in the proposed condition surfaces flows to various bioretention areas to be treated. Overflow and treated flow from the bioretention BMPs is then conveyed from atrium drains and subdrains, respectively, through the 24” RCP on-site Line “B” storm drain system. A portion of this 24” RCP storm drain is being realigned around the south edge of the proposed building expansion and will have a slope of 0.48%.

The results from the 25-year storm hydrology calculations are summarized in the following table:

## Table 2.1: Hydrology Report Summary

| Description | Proposed Condition |
|---|---|
| Study drainage area | 2.60 Ac |
| 25-Year Peak Flow Rate through 24" RCP Storm Drain at downstream end of project | 6.4 CFS |
| 24" RCP Storm Drain Capacity | 16.0 CFS |
| Time of Concentration | 8.6 min. |

In conclusion, the proposed development impact on the existing hydrologic condition will be minimal. The peak flow from the project site and upstream areas will not significantly change. The existing and proposed re-routed 24" RCP private storm drain, which conveys the project drainage and the south portion of the campus is shown to provide adequate capacity though the project limits.

## 3.0 Limitations

This report was prepared to comply with the guidelines established by the City of Baldwin Park and the County of Los Angeles and their representatives. Evaluation of the appropriateness of these guidelines and the accuracy of the County data were beyond the scope of this work.

Usage of this report is limited to address the purpose and scope previously defined by the project owner. Psomas shall not be held responsible for any unauthorized application of this report and the contents therein.

The opinions represented in this report have been derived in accordance with current standards of civil engineering practice. No other warranty is expressed or implied.

## 4.0 References

County of Los Angeles, *Low Impact Development Standards Manual,* February 2014

Los Angeles County Department of Public Works, *Hydrology Manual and Appendices*, January 2006

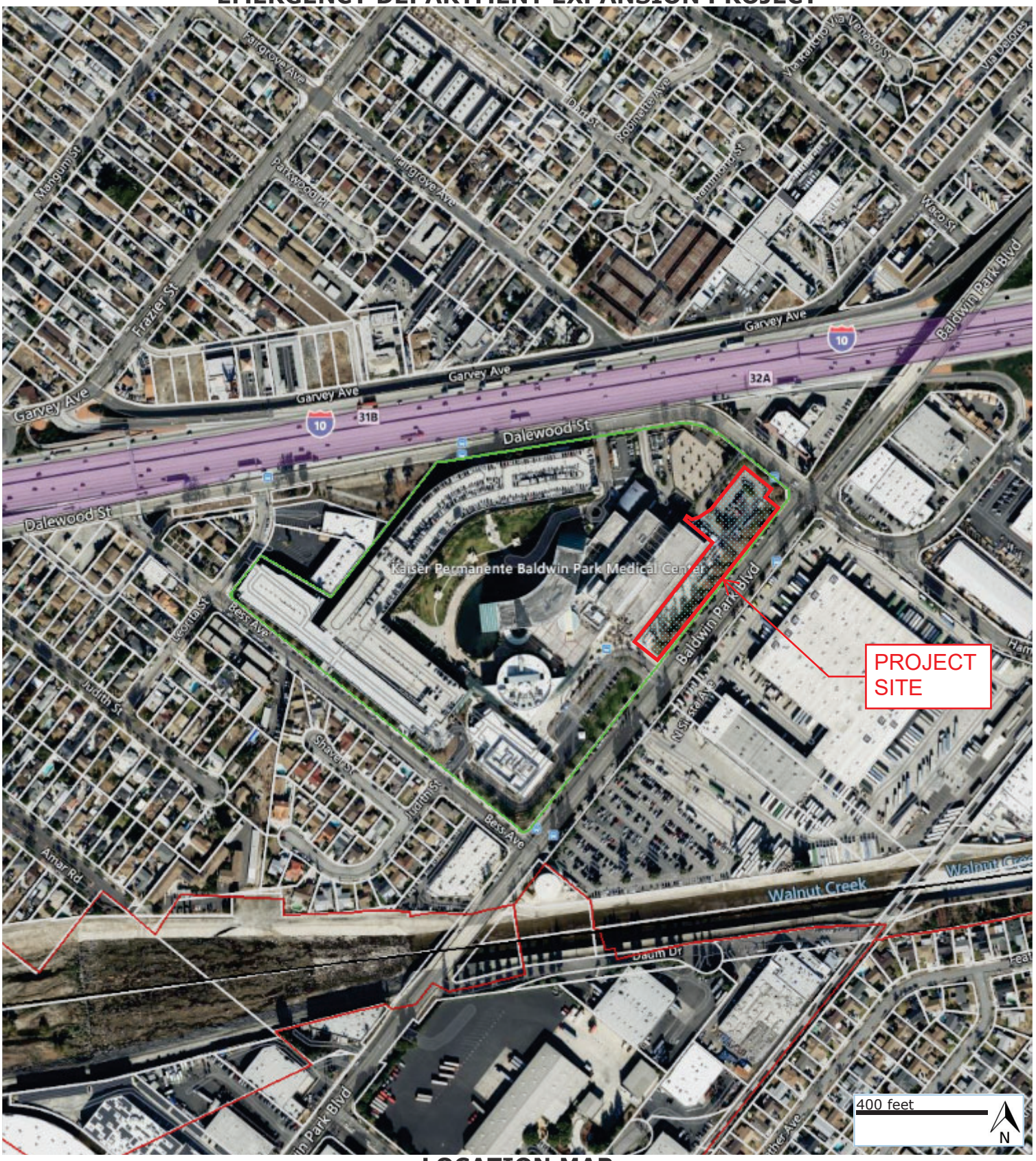
California Regional Water Quality Control Board Order No. R4-2012-0175

# 5.0 Appendices

## Appendix 1 Project Site

### Location and Vicinity Map

# KAISER PERMANENTE-BALDWIN PARK MEDICAL CENTER EMERGENCY DEPARTMENT EXPANSION PROJECT




## LOCATION MAP

PSOMAS

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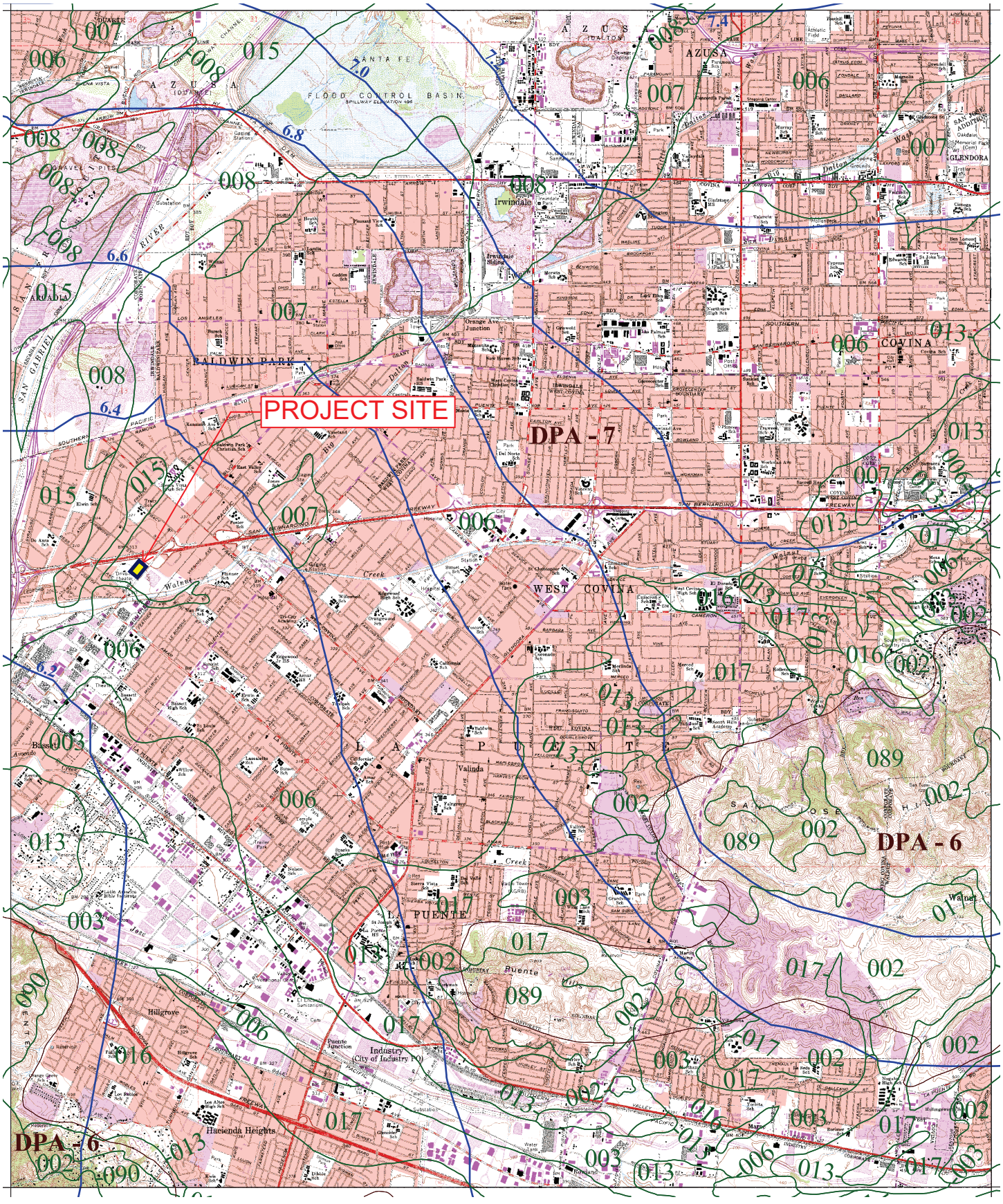
# Appendix 2 LACDPW Hydrology Data

## 50-Year 24-Hour Isohyet Map / Hydrologic Soil Classification Map – Baldwin Park

## Runoff Coefficient Curve – Soil Type 006

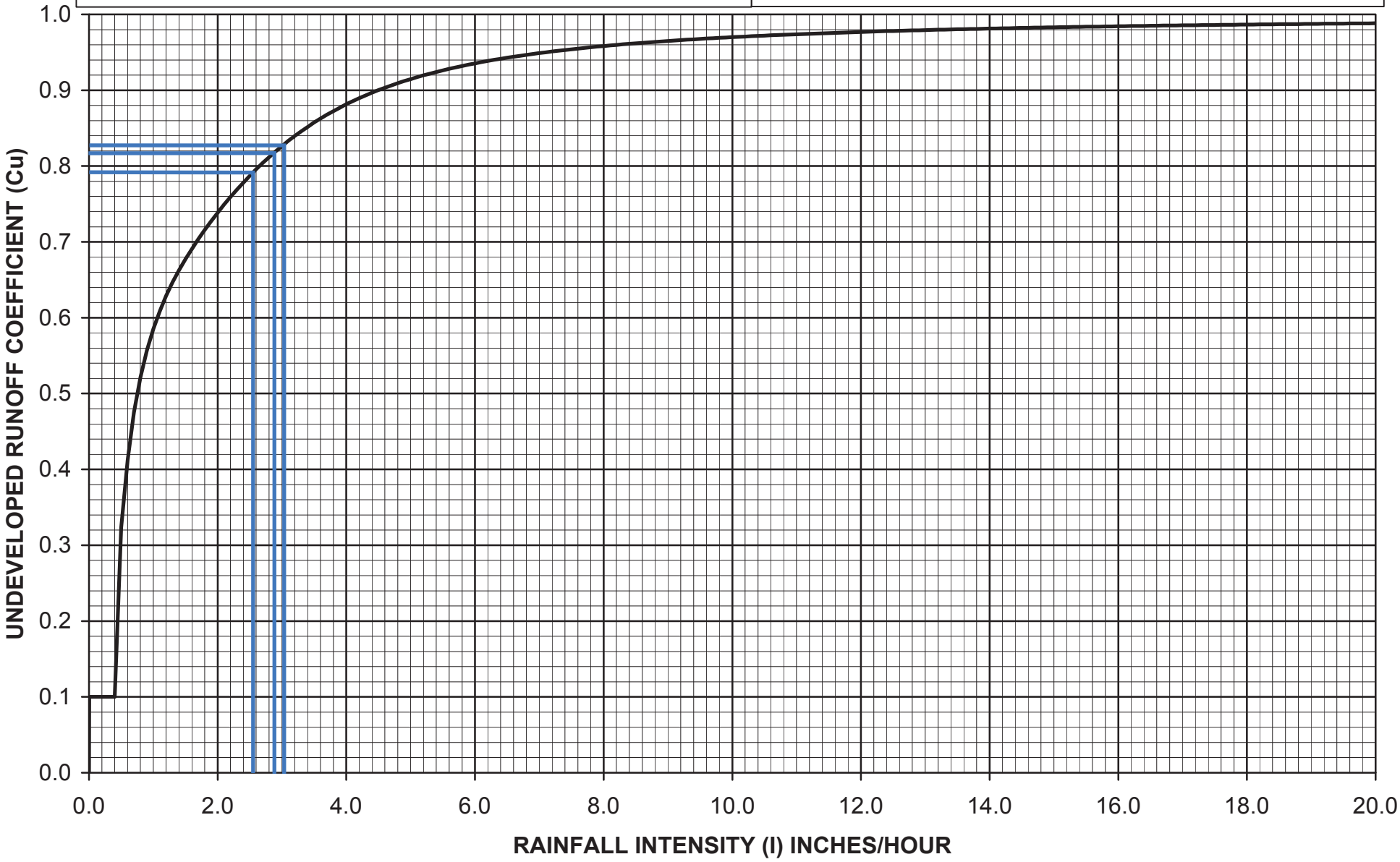

34° 07' 30"
AZUSA 1-H1.31
-118° 00' 00"
EL MONTE 1-H1.20
SAN DIMAS 1-H1.22
-117° 52' 30"
LA HABRA 1-H1.11
34° 00' 00"
PROJECT SITE
DPA - 7
DPA - 6
DPA - 6
AZUSA
BALDWIN PARK
COVINA
WEST COVINA
LA PUENTE
Irwindale
Valinda
Hacienda Heights
Industry
(City of Industry PO)
Hillgrove
Puente
FLOOD CONTROL BASIN
SANTA FE
SAN GABRIEL RIVER
Walnut Creek
SAN JOSE HILLS
SOUTHERN PACIFIC
SAN BERNARDINO FREEWAY
016
SOIL CLASSIFICATION AREA
7.2
INCHES OF RAINFALL
DPA - 6
DEBRIS POTENTIAL AREA
N
W
E
S
1 0 1 2 Miles
25-YEAR 24-HOUR ISOHYET REDUCTION FACTOR: 0.878
10-YEAR 24-HOUR ISOHYET REDUCTION FACTOR: 0.714
BALDWIN PARK
50-YEAR 24-HOUR ISOHYET
1-H1.21
LOS ANGELES COUNTY
PUBLIC WORKS
Public Service That Works

$C_D = (0.9 * IMP) + (1.0 - IMP) * C_U$

Where: $C_D$ = Developed Runoff Coefficient
IMP = Proportion Impervious
$C_U$ = Undeveloped runoff coefficient

Los Angeles County Department of Public Works

# RUNOFF COEFFICIENT CURVE
# SOIL TYPE NO. 006



# Appendix 3 Hydrology and Hydraulic Calculations

Hydrology Calculation Sheet

Hydrocalc Peak Flow Hydrologic Analysis - Volume and Flow Rate Calculations

Pipe Capacity Calculations

Grate Inlet capacity Calculations

## LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

### Hydrology Calculation Sheet

**PROJECT:** KP BPMC - EMERGENCY DEPT. EXPANSION | **CALCULATED BY:** SAB

**FREQUENCY:** 25-YEAR STORM | **CHECKED BY:** SAB

**50 & 25-YEAR 24-HOUR ISOHYETALS:** 6.3" & 5.53" | **DATE:** 5/13/2022

| DRAINAGE AREA | Soil & Development | A acres | I in./hr. | $C_D$ in./hr. | ΔQ CFS | ΣQ CFS | SLOPE ft./ft. | SECTION | V F.P.S. | L FT. | T MIN. | ΣT MIN. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STORM DRAIN LINE "B" | | | | | | | | | | | | | |
| | | | | | | | 0.010 | | | 407 | 6.0 | | Initial Area |
| 1A | 006-COMM | 0.59 | 3.03 | 0.90 | 1.6 | | | | | | | 6.0 | IMP = 96% |
| | | | | | | 1.6 | 0.005 | 15" RCP | 3.4 | 167 | 0.8 | | Pipe Flow |
| 2A | 006-COMM | 1.11 | 2.85 | 0.88 | 2.8 | | | | | | | 6.8 | IMP = 74% |
| | | | | | | 4.4 | 0.005 | 24" RCP | 4.3 | 472 | 1.8 | | Pipe Flow |
| 3A | 006-COMM | 0.90 | 2.55 | 0.89 | 2.0 | | | | | | | 8.6 | IMP =87% |
| | | | | | | 6.4 | 0.005 | 24" RCP | 4.8 | | | | |
| TOTAL | | 2.60 | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

$I_t = I_{1440} \times (1440/t)^{0.47} = (5.53 \text{ in}/24 \text{ hr}) \times (1440/t)^{0.47}$, where 50-year 24-hour depth $I_{1440}$ = 6.3" , and 25-year 24-hour depth $I_{1440}$ = 0.878 x 6.3" = 5.53"

$C_D = (0.9 * IMP) + (1.0 - IMP) * C_U$

$Q = C \times I \times A$

# Peak Flow Hydrologic Analysis

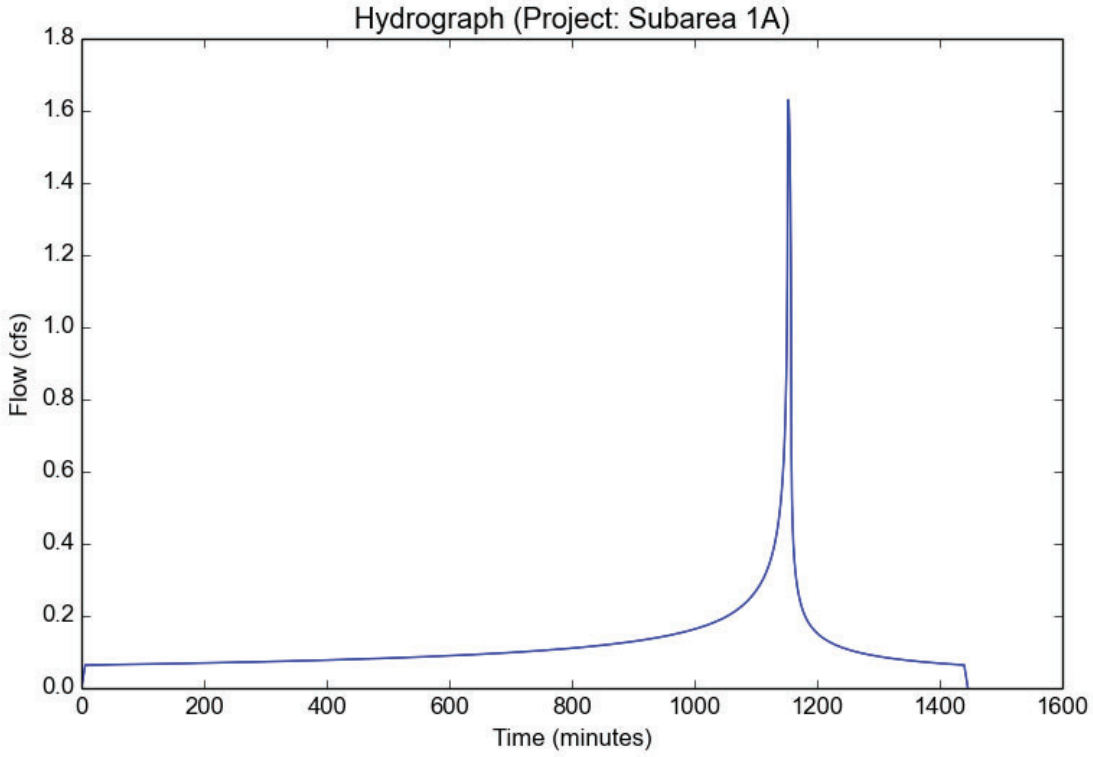
File location: M:/2HMC020801/ENGR/REPORTS/HYDR/Calculations/Hydrocalc/Project - Subarea 1A.pdf
Version: HydroCalc 1.0.3

## Input Parameters

| | |
|---|---|
| Project Name | Project |
| Subarea ID | Subarea 1A |
| Area (ac) | 0.6 |
| Flow Path Length (ft) | 407.0 |
| Flow Path Slope (vft/hft) | 0.01 |
| 50-yr Rainfall Depth (in) | 6.3 |
| Percent Impervious | 0.96 |
| Soil Type | 6 |
| Design Storm Frequency | 25-yr |
| Fire Factor | 0 |
| LID | False |

## Output Results

| | |
|---|---|
| Modeled (25-yr) Rainfall Depth (in) | 5.5314 |
| Peak Intensity (in/hr) | 3.0292 |
| Undeveloped Runoff Coefficient (Cu) | 0.8243 |
| Developed Runoff Coefficient (Cd) | 0.897 |
| Time of Concentration (min) | 6.0 |
| Clear Peak Flow Rate (cfs) | 1.6302 |
| Burned Peak Flow Rate (cfs) | 1.6302 |
| 24-Hr Clear Runoff Volume (ac-ft) | 0.2392 |
| 24-Hr Clear Runoff Volume (cu-ft) | 10421.2812 |



| ***LINE DESIGNATION*** | ***1A TO 2A*** | ***2A TO 3A*** | ***3A DOWN-STREAM*** | |
|---|---|---|---|---|
| ***FLOW REGIME*** | NORMAL | NORMAL | NORMAL | |
| ***DESIGN FLOW "Q" (cfs)*** | 1.60 cfs | 4.40 cfs | 6.40 cfs | |
| ***PIPE DIAMETER "d" (inches)*** | 15" | 24" | 24" | |
| ***PIPE MATERIAL*** | RCP | RCP | RCP | |
| ***MANNINGS "n" VALUE*** | 0.013 | 0.013 | 0.013 | |
| ***PIPE SLOPE "S" (feet/feet)*** | 0.0050 | 0.0048 | 0.0050 | |
| ***FRICTION SLOPE "$S_f$" (feet/feet)*** | 0.0050 | 0.0048 | 0.0050 | |
| ***DEPTH OF FLOW "D" (feet)*** | 0.51' | 0.72' | 0.88' | |
| ***FLOW VELOCITY "V" (feet/second)*** | 3.39 fps | 4.28 fps | 4.81 fps | |
| ***VELOCITY HEAD ($V^2/2G$) (feet)*** | 0.18' | 0.28' | 0.36' | |
| ***SPECIFIC ENERGY ($D+ V^2/2G$) (lb-ft/lb)*** | 0.69' | 1.01' | 1.24' | |
| ***FLOW CAPACITY DEPTH RATIO "D/d"*** | 1.00 | 1.00 | 1.00 | |
| ***PIPE FLOW CAPACITY (cfs)*** | 4.57 cfs | 15.67 cfs | 16.00 cfs | |

| ***SUBAREA*** | ***6" LATERAL*** | ***8" LATERAL*** | ***10" LATERAL*** | ***12" LATERAL*** |
|---|---|---|---|---|
| ***FLOW REGIME*** | FULL | FULL | FULL | FULL |
| ***DESIGN FLOW "Q" (cfs)*** | 0.81 cfs | 1.75 cfs | 3.16 cfs | 5.15 cfs |
| ***PIPE DIAMETER "d" (inches)*** | 6" | 8" | 10" | 12" |
| ***PIPE MATERIAL*** | PVC | PVC | PVC | PVC |
| ***MANNINGS "n" VALUE*** | 0.009 | 0.009 | 0.009 | 0.009 |
| ***PIPE SLOPE "S" (feet/feet)*** | 0.0100 | 0.0100 | 0.0100 | 0.0100 |
| ***FRICTION SLOPE "$S_f$" (feet/feet)*** | 0.0100 | 0.0100 | 0.0100 | 0.0100 |
| ***DEPTH OF FLOW "D" (feet)*** | 0.50' | 0.67' | 0.83' | 1.00' |
| ***FLOW VELOCITY "V" (feet/second)*** | 4.13 fps | 5.01 fps | 5.79 fps | 6.56 fps |
| ***VELOCITY HEAD ($V^2/2G$) (feet)*** | 0.26' | 0.39' | 0.52' | 0.67' |
| ***SPECIFIC ENERGY (D+ $V^2/2G$) (lb-ft/lb)*** | 0.76' | 1.06' | 1.35' | 1.67' |
| ***FLOW CAPACITY DEPTH RATIO "D/d"*** | 1.00 | 1.00 | 1.00 | 1.00 |
| ***PIPE FLOW CAPACITY (cfs)*** | 0.81 cfs | 1.75 cfs | 3.16 cfs | 5.15 cfs |
| ***MAX. DRAINAGE AREA @ 3 CFS/ACRE*** | 11768 sf | 25344 sf | 45953 sf | 74724 sf |

| ***GRATE SIZE*** | ***12"x12"*** | ***18"x18"*** | ***18" ATRIUM DRAIN*** | ***12" ATRIUM DRAIN*** |
|---|---|---|---|---|
| ***LENGTH / DIAMETER*** | *1.0* | *1.5* | *1.50* | *1.00* |
| ***WIDTH*** | *1.0* | *1.5* | | |
| ***EFFECTIVE PERIMETER (50% CLOGGING) (FT.)*** | 1.50 | 2.25 | 1.18 | 0.79 |
| ***EFFECTIVE AREA (50% CLOGGING) (SF)*** | 0.250 | 0.563 | 0.310 | 0.176 |
| ***DEPTH OF PONDING (FT.)*** | 0.50 | 0.50 | 0.50 | 0.50 |
| ***FLOW CAPACITY (CFS)*** | 1.59 | 2.39 | 1.25 | 0.83 |

# Appendix 4 Hydrology Map

If the sheet is not 30"x42", it is a reduced print. Scale Accordingly.

OWER
01
NPC: 2
N)

MRI

(E) HOSPITAL
BLD-02522

PROJECT BENCHMARK
PT. NO. 8005194
CTL/SURVEY
CONC. MONU.
ELEV. 306.29

EXISTING BLD-02521 CLINIC WING
BLDG 02 SPC: 3 / NPC: 2
(HCAI)

EXISTING
CENTRAL PLANT
*BLD-02519 BLDG*
*04 SPC: 5 / NPC: 3*

1A
0.59 Ac

EXISTING 8" PVC SD
S=0.007

EXISTING 12" PVC SD
S=0.007

EXISTING ROOF
DRAIN LATERAL (TYP)

EXISTING 12" PVC SD
S=0.007

*321.6 FS*
*314.9 INV*
*Q25=1.6 CFS*
*Tc=6.0 MIN*
1A

LIMIT OF WORK

EXISTING CURB
TO REMAIN

***EXISTING HOSPITAL***

EXISTING EMERGENCY
DEPARTMENT
19,040 S.F.
(HCAI)
(322.25) FF LEVEL 1
(306.25) FF BASEMENT

EXISTING
CANOPY

LIMIT OF WORK

EXISTING 24" RCP SD
S=0.010

*PARCEL 1*
*P.M. NO. 1433*
*P.M.B. 389/12-14*

LIMIT OF WORK

EXISTING ROOF
DRAIN LATERALS TO
BE REALIGNED (TYP)

2A
1.11 Ac

LIMIT OF WORK

EXISTING 15" RCP SD
S=0.005

EXISTING CATCH BASIN

*319.35 FL*
*314.1 INV*
*Q25=4.4 CFS*
*Tc=6.8 MIN*
2A

EXISTING CURB
& GUTTER TO
REMAIN

EXISTING 24" RCP SD
S=0.005

PROPOSED EMERGENCY DEPARTMENT EXPANSION
21,932 S.F. (HCAI)
322.25 FF
321.16 PAD

3A
0.90 Ac

ROOF DRAIN
DOWNSPOUT (TYP)

EXISTING 24" RCP SD
TO BE REMOVED AND
REPLACED WITH NEW SD

PROPOSED SD
LATERAL (TYP)

EXISTING GRATE
INLET TO BE
REMOVED (TYP)

RIDGE
LINE

EXISTING 24" RCP SD
S=0.005
ADJUST SDMH
TO GRADE

VEGETATED
SWALE

LIMIT OF WORK

*320.1 FG*
*311.8 INV*
*Q25= 6.4 CFS*
*Tc= 8.6 MIN*
3A

R/W

VEGETATED
SWALE

PROPOSED 24" RCP SD
S=0.0048

PROPOSED ATRIUM
DRAIN (TYP)

LIMIT OF WORK

*EASEMENT TO CITY OF*
*BALDWIN PARK FOR STREET,*
*ROAD OR HIGHWAY PURPOSES*

*EASEMENT TO CITY OF*
*BALDWIN PARK FOR STREET*
*AND MUNICIPAL PURPOSES*

LIMIT OF WORK

*N38°41'20"E 1299.85'*
*[N38°41'22"E 1299.82' PMB 389/12-14]*

PROPERTY LINE

FEE PARCEL LINE

CENTERLINE OF STREET

*N38°41'20"E 1374.84'*
*[N38°41'22"E 1374.81' PMB 389/12-14]*

BALDWIN PARK BOULEVD

DALEWOOD STREET

HYDROLOGY MAP | 1 | 1" = 20'-0"

N
TRUE NORTH

20' 10' 0' 20' 40'
GRAPHIC SCALE: 1"=20'

## LEGEND

| | |
|---|---|
| 100 FL / 95 INV | SURFACE/INVERT ELEVATIONS |
| (12A) | NODE NUMBER |
| 7A / 2.1 Ac | DRAINAGE AREA / ACREAGE |
| 006 | SOIL TYPE |
| 6.2" | 50-YR ISOHYET |
| 5.0 MIN. | TIME OF CONCENTRATION |
| | SUB-AREA BOUNDARY |
| | EXISTING STORM DRAIN |
| | EXISTING V-DITCH |
| | GRATE |
| | DIRECTION OF FLOW |
| | DRAINAGE FLOW DIRECTION |
| | WATER QUALITY BIO-RETENTION AREA |
| | ADDITIONAL LANDSCAPED PLANTER AREA WITHIN PROJECT LIMITS |

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KAISER PERMANENTE©

National Facilities Services
Post Office Box 12916
Oakland, California 94604

HMC Architects

1120-180-000

3546 CONCOURS STREET
ONTARIO, CA 91764


**ISSUE**

| Δ | DESCRIPTION | DATE |
|---|---|---|
| | CITY SUBMITTAL | 2022.05.13 |

811 Know what's **below.** **Call** before you dig.

**PROJECT ARCHITECT OF RECORD:**
a.) Is not the preparer of this document.
b.) Has reviewed this document and found it to be in general conformance with the design of the project.

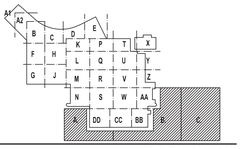
CONSULTANT:


PSOMAS
5 Hutton Centre Drive
Suite 300
Santa Ana, CA 92707
(714) 751-7373 Fax(714) 545-8883


REGISTERED PROFESSIONAL ENGINEER ROBERT A. TALAVERA No. 38832 CIVIL STATE OF CALIFORNIA

Consultant's Project No.: 2HMC020801

KEY PLAN:



**AGENCY APPROVAL:** **CITY SUBMITTAL**

The type of approval to be issued by
The Agency Having Jurisdiction
for this project is:
**CITY OF BALDWIN PARK PERMIT #**

FACILITY:
**KAISER PERMANENTE**

**BALDWIN PARK MEDICAL CENTER**
**1011 BALDWIN PARK BLVD,**
**BALDWIN PARK, CA 91706**

PROJECT:
**REMODEL HOSPITAL FIRST FLOOR FOR EXPANSION OF ED**

SHEET NAME:
**HYDROLOGY MAP**
**PROPOSED CONDITION**

**CONSTRUCTION DOCUMENTS**

FAC NO.: 17207 BLDG NO.: BLD-02521 / BLD-06586

DATE: 2022.05.13 CLIENT PROJ NO: L0094 - CAP015077

SHEET: 2 OF 2

**C1.91C**

# Appendix G
Noise Technical Memorandum

605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 F 760.632.0164

# MEMORANDUM

| | |
|---|---|
| **To:** | Kaiser Permanente |
| **From:** | Mark Storm, INCE Bd. Cert.; Cole Martin, INCE |
| **Subject:** | Noise Technical Memorandum for the Kaiser Baldwin Park Project Mitigated Negative Declaration |
| **Date:** | October 7, 2022 |
| **Attachments:** | Attachment A, Photographs of Measurement Locations and Field Notes<br>Attachment B, Construction Noise Prediction Model Worksheets<br>Attachment C, Traffic Noise Model Input/Output |

## Introduction

Dudek is pleased to submit this noise technical memorandum to assist Kaiser Permanente with the Mitigated Negative Declaration (MND) requirements for the proposed Kaiser Baldwin Park Project (Project). The Project is located at the Kaiser Baldwin Park Medical Campus in southern Baldwin Park, in Los Angeles County, CA. The entire Project site is approximately 26.02 acres and occurs primarily on Assessor's Parcel Number 8559-006-006, 8559-008-011, and 8559-008-005. In summary, Project components include the Emergency Department Expansion (EDE) and a new Medical Office Building (MOB) that would be concentrated at the northeastern (emergency department expansion) and northwestern (MOB) corners of the Project site, respectively. The Project site is bound by Dalewood Street to the north, Leorita Street to the west, Bess Avenue to the southwest, and Baldwin Park Boulevard to the southeast.

The Project site is currently developed, consisting of a 24.48 acre medical campus (APN 8559-006-006) and a 1.54 acre site that consists of an abandoned retail building, herein referred to as the "Broken Horn site" (APN 8559-008-011 and 8559-008-005). The Broken Horn site is located adjacent to the existing medical campus to the northwest. The Project site is zoned as Freeway Commercial (FC) and has a land use designation Commercial. Due to the developed nature of the site, the site features relatively flat topography.

The Project site is surrounded by existing development on all sides. The Interstate-10 (I-10) freeway is located just beyond Dalewood Street to the north of the Project site. Commercial uses are located south and east of the Project site, and residential uses are located south and west of the Project site.

Regional access to the Project site is provided by I-10, which runs east-west adjacent to the Project, and Interstate 605 (I-605) which runs north–south, allowing for vehicular and transit access to the larger Los Angeles region. The Project site is directly accessible via Dalewood Street, Leorita Street, and Baldwin Park Boulevard.

The first of two Project development phases is the construction of the EDE facility, which is a planned expansion to the emergency department that is part of an existing hospital tower on the south end of the Kaiser medical campus. The EDE would add approximately 23,000 square feet to the existing emergency department, expand the number of existing treatment bays from 38 to 60, add a new ambulance canopy, and include additional improvements to the existing emergency department.

The second phase of the Project would consist of demolishing the existing Broken Horn building, followed by construction and operation of an approximately 33,000 square foot (sf) MOB on the former site of the existing retail building. The proposed 3-story MOB would include parking and expand the existing medical campus to the northwest.

## Environmental Setting

Due to the technical nature of noise and vibration impacts, a brief overview of basic noise principles and descriptors is provided below, as well as a summary of the existing noise environment.

### Noise and Vibration Basics

Noise is defined as unwanted sound. Sound may be described in terms of level or amplitude (measured in decibels [dB]), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The dBA scale performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear. Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period ($L_{eq}$), the statistical sound level, the day–night average noise level ($L_{dn}$), and the Community Noise Equivalent Level (CNEL). Each of these descriptors uses units of dBA. Table 1 provides examples of A-weighted noise levels from common sounds. In general, human sound perception is such that a change in sound level of 3 dBA is barely noticeable, a change of 5 dBA is clearly noticeable, and a change of 10 dBA is perceived as doubling or halving the sound level.

Table 1. Typical Sound Levels in the Environment and Industry

| Common Outdoor Activities | Noise Level (dBA) | Common Indoor Activities |
|---|---|---|
| — | 110 | Rock band |
| Jet flyover at 300 meters (1,000 feet) | 100 | — |
| Gas lawn mower at 1 meter (3 feet) | 90 | — |
| Diesel truck at 15 meters (50 feet), at 80 kilometers per hour (50 mph) | 80 | Food blender at 1 meter (3 feet)<br>Garbage disposal at 1 meter (3 feet) |
| Noisy urban area, daytime<br>gas lawn mower at 30 meters (100 feet) | 70 | Vacuum cleaner at 3 meters (10 feet) |
| Commercial area<br>Heavy traffic at 90 meters (300 feet) | 60 | Normal speech at 1 meter (3 feet) |
| Quiet urban daytime | 50 | Large business office<br>Dishwasher, next room |
| Quiet urban nighttime | 40 | Theater, large conference room (background) |
| Quiet suburban nighttime | 30 | Library |
| Quiet rural nighttime | 20 | Bedroom at night, concert hall (background) |
| — | 10 | Broadcast/recording studio |
| Lowest threshold of human hearing | 0 | Lowest threshold of human hearing |

**Source:** Caltrans 2020.
**Note:** dBA = A-weighted decibel.

$L_{eq}$ is a sound energy level averaged over a specified period (typically no less than 15 minutes for environmental studies). $L_{eq}$ is a single numerical value that represents the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour $L_{eq}$ measurement would represent the average amount of energy contained in all the noise that occurred in that hour. $L_{eq}$ is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors.

Unlike the $L_{eq}$ metrics, $L_{dn}$ and CNEL metrics always represent 24-hour periods, usually on an annualized basis. $L_{dn}$ and CNEL also differ from $L_{eq}$ because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). "Time weighted" refers to the fact that $L_{dn}$ and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dB. $L_{dn}$ differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. $L_{dn}$ and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 dB to 1 dB and, as such, are often treated as equivalent to one another.

## Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major

roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

Several different methods are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration velocity signal. PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second (ips). The root mean square (rms) amplitude is most frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal with respect to a reference value, which is then commonly denoted as vibration decibels (VdB).

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

### Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise. Sensitive receptors in the vicinity of the project site consist of residential uses located to the west and southwest of the project site. These sensitive receptors represent the nearest sensitive land uses with the potential to be impacted by construction and/or operation of the project.

## Regulatory Setting

The following subsections summarize relevant laws, ordinances, regulations, policies, standards, and guidance that establish noise and vibration impact significance assessment criteria for the proposed project.

### Federal

There are no federal noise standards that would directly regulate environmental noise during construction and operation of the project. The following is provided because guidance summarized herein is used or pertains to the analysis.

#### Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment guidance manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dBA $L_{eq}$ over an 8-hour period (FTA 2018) when "detailed" construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such quantified limits at the state and local jurisdictional levels.

### Federal Interagency Committee on Noise

Some guidance regarding the determination of a substantial permanent increase in ambient noise levels in the project vicinity above existing levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON 1992), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of $L_{dn}$. The changes in noise exposure that are shown below are expected to result in equal changes in annoyance at sensitive land uses. Although the FICON recommendations were specifically developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to all transportation noise sources and permanent non-transportation noise sources.

- Outdoor ambient sound level without the project is less than 60 dBA $L_{dn}$, then a project-attributed increase of 5 dBA or more would be considered significant;
- Outdoor ambient sound level without the project is between 60 and 65 dBA $L_{dn}$, project-attributed increase of 3 dBA or more would be considered significant; and
- Outdoor ambient sound level without the project is greater than 65 dBA $L_{dn}$, then project-attributed increase of 2 dBA or more would be considered significant.

## State

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable”, “conditionally acceptable”, “normally unacceptable”, and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 dBA CNEL and “conditionally acceptable” up to 70 dBA CNEL. Multiple-family residential uses are “normally acceptable” up to dBA 65 CNEL and “conditionally acceptable” up to dBA 70 CNEL. Schools, libraries, and churches are “normally acceptable” up to 70 dBA CNEL, as are office buildings and business, commercial, and professional uses.

With regards to groundborne vibration, in its Transportation and Construction Vibration Guidance Manual (Caltrans 2013b), the California Department of Transportation (Caltrans) recommends 0.5 ips PPV as a threshold for the avoidance of structural damage to typical newer residential buildings exposed to continuous or frequent intermittent sources of groundborne vibration. For transient vibration events, such as blasting, the damage risk threshold would be 1.0 ips PPV (Caltrans 2013) at the same type of newer residential structures. For older structures, these guidance thresholds would be more stringent: 0.3 ips PPV for continuous/intermittent vibration sources, and 0.5 ips PPV for transient vibration events. With respect to human annoyance, Caltrans guidance indicates that building occupants exposed to continuous groundborne vibration in the range of 0.2-0.6 ips PPV would find it “unpleasant or “annoying” and thus a likely significant impact. Although these Caltrans guidance thresholds are not regulations, they can serve as quantified standards in the absence of such limits at the local jurisdictional level.

## Local

With the proposed project sited within the City of Baldwin Park, its relevant municipal code requirements and general plan policies and goals represent the primary source of impact assessment standards.

### City of Baldwin Park Municipal Code

#### Noise

Operational noise impacts for projects are governed by the City of Baldwin Park Municipal Code (BPMC), Title XIII, Sections 130.30 to Section 130.44. Section 130.34 Ambient Base Noise Levels (A) states noise which is received on property occupied by another person within the designated zone, in excess of the following levels found in Table 2, is unlawful:

**Table 2. Baldwin Park Ambient Noise Level Standards**

| Zone | Day<br>7:00 a.m - 10:00 p.m. | Night<br>10:00 p.m. - 7:00 a.m. |
|---|---|---|
| R-I | 55 dBA | 45 dBA |
| RG and R-3 | 60 dBA | 55 dBA |
| Commercial | 65 dBA | 60 dBA |
| Industrial | 70 dBA | 70 dBA |

Temporal allowances and source-related dB adjustments with respect to these 15-minute noise level limits (based on definition of "ambient noise" per BPMC 130.31) in Table 2 are as follows and reproduced from BPMC 130.34 (B):

- -5 dB (i.e., more stringent) for "Repetitive impulsive noise, pure tones and sound with cyclically varying amplitude" or a "steady whine, screech, or hum";
- +2 dB (more lenient) for "Noise occurring more than 5 but less than 15 minutes per hour";
- +5 dB for "Noise occurring more than 1 but less than 5 minutes per hour'; and
- +7 dB for "Noise occurring less than 1 minute per hour".

Noise sensitive land uses adjacent to the Project site include single-family residential (R-I) and residential garden (RG) land uses.

Additionally, the City has codified "Performance Standards" with respect to "all new construction, renovation and alteration of existing uses or structures in all zone districts" per BPMC 153.140.020. BPMC 153.140.070 Noise (2) states that increases in allowable exterior noise are permitted in accordance with Table 3, below.

Table 3. Baldwin Park Allowable Increases in Exterior Noise Levels

| Zone | Time | Allowable Noise Level (dBA) |
|---|---|---|
| Residential | 7 a.m. to 7 p.m. (day) | 55 |
| Residential | 7 p.m. to 10 p.m. (evening) | 50 |
| Residential | 10 p.m. to 7 a.m. (night) | 45 |
| Commercial | 7 a.m. to 10 p.m. (day and evening) | 65 |
| Commercial | 10 p.m. to 7 a.m. (night) | 55 |
| Industrial | anytime | 65 |

Permitted increases in noise level with respect to these noise level limits over a 24-hour period are as follows and reproduced from BPMC Table 153.140.070 (D):

- +5 dB for up to 15 cumulative minutes during a 24-hour period;
- +10 dB for up to 5 cumulative minutes during a 24-hour period;
- +15 dB for 1 cumulative minute during a 24-hour period; and
- +20 dB for less than 1 cumulative minute during a 24-hour period;

BPMC 153.140.070 (D), Interior Standards (1) states: "No person shall create or allow the creation of noise that causes the interior noise level when measured within any dwelling unit to exceed 45 dBA at any time." Part (2) states that allowable interior noise level increases may be permitted in accordance with Table 4, below, reproduced from BPMC Table 153.140.070 (F).

Table 4. Baldwin Park Allowable Increases in Interior Noise Levels

| Permitted Increase (dBA) | Duration (cumulative minutes per 24 hour period) |
|---|---|
| 5 | 1 |
| 10 | Less than 1 minute |

With respect to construction noise, BPMC 130.37 Special Noise Sources (E) prohibits construction in or within 500 feet of a residential zone between the hours of 7:00 p.m. of one day and 7:00 a.m. of the next day.

Finally, BPMC 130.44 (A) states: "No person shall operate, or permit operation of, any sound amplification system mounted or installed in any motor vehicle which can be heard from 50 or more feet…". However, part (B) of the same section exempts authorized emergency vehicles such as ambulances.

### Vibration

BPMC Section 153.140.090 Vibration states: "Vibration may disturb the conduct of certain activities and create discomfort for some individuals. To minimize the disturbance and inconvenience from vibrations, no person or use shall create, maintain or cause ground vibration that is discernable without the aid of instruments to a person of normal sensitivity at any point on a property that is adjacent to the property of the vibration source. The ground vibration caused by moving vehicles, trains, aircraft or temporary construction or demolition is exempted."

While not specifically quantified, for purposes of this assessment the phrase "discernable without the aid of instruments to a person of normal sensitivity" above shall be interpreted to mean a threshold of perception, which Caltrans and FTA guidance agree is 65 VdB or approximately 0.006 ips PPV.

### City of Baldwin Park General Plan Noise Element

The Noise Element of the City of Baldwin Park General Plan (City of Baldwin Park, 2002) establishes interior and exterior noise standards by land use. Table 5 contains a summary of the interior and exterior noise standards from the General Plan.

**Table 5. Baldwin Park General Plan Interior and Exterior Noise Standards**

| Land Use | Noise Standards[1] | |
|---|---|---|
| | Interior[2,3] | Exterior |
| Residential - Single family, multifamily, duplex, mobile home | CNEL 45 dB | CNEL 65 dB[4] |
| Residential - Transient lodging, hotels, motels, nursing homes, hospitals | CNEL 45 dB | CNEL 65 dB[4] |
| Private offices, church sanctuaries, libraries, board rooms, conference rooms, theaters, auditoriums, concert halls, meeting halls, etc. | Leq(12) 45 dBA | - |
| Schools | Leq(12) 45 dBA | Leq(12) 47 dBA |
| General offices, reception, clerical, etc. | Leq(12) 50 dBA | - |
| Bank, lobby, retail store, restaurant, typing pool, etc. | Leq(12) 55 dBA | - |
| Manufacturing, kitchen, warehousing, etc. | Leq(12) 65 dBA | - |
| Parks, playgrounds | - | CNEL 65 dB[4] |
| Golf course, outdoor spectator sports, amusement parks | - | CNEL 70 dB[4] |

The City of Baldwin Park General Plan includes the State Noise Insulation Standards (Title 24) which specifies that that combined indoor noise for multi-family living spaces shall not exceed 45 dB CNEL; a standard which must be implanted when the outdoor noise level exceeds 60 dB CNEL. The General Plan also includes goals and policies pertaining to noise and land use compatibility, including (but not limited to) the following:

- Goal 1.0 Incorporate noise considerations into land use planning decisions.
- Policy 1.1 Use the noise/land use compatibility standards… as a guide for future planning and development decisions.
- Policy 1.2 Require noise-reduction techniques in site planning, architectural design, and construction where noise reduction is necessary. Provide noise control measures such as berms, walls, and sound attenuating construction in areas of new construction.
- Policy 1.3 Promote acceptable noise levels near schools, hospitals, convalescent homes, and other noise-sensitive areas.
- Policy 1.4 Establish targeted limits of noise for various land uses throughout the community.

- Goal 2.0 Minimize noise spillover from commercial and industrial uses into nearby residential neighborhoods.
- Policy 2.1 Enforce the 65 dBA State standard for exterior noise levels for all commercial uses.
- Policy 2.2 Require that automobile and truck access to commercial properties located adjacent to residential parcels be located at the maximum practical distance from the residential parcel.
- Policy 2.3 Require that landscaped buffers be created between a commercial or mixed-use structure and an adjoining residential parcel.

## Existing Noise Conditions

Noise measurements were conducted at five (5) representative positions in the vicinity of the project site on August 19, 2022 to characterize the existing outdoor ambient noise levels. The noise measurement locations are shown in Figure 1. Table 6 provides a summary of the noise measurement results as well as the locations, dates, and times the noise level measurements were performed. As shown in Table 6, short-term (15 to 20 minutes duration) noise levels ranged from approximately 50 dBA $L_{eq}$ (at location ST3) to 83 dBA $L_{eq}$ (at location ST5). The measurements were conducted by an attending Dudek investigator with a SoftdB "Piccolo" model sound level meter equipped with a windscreen-protected, 0.5-inch diameter pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute (ANSI) standard for a Type 2 (General Use) sound level meter. The accuracy of the sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Table 6. Measured Outdoor Ambient Noise Levels

| Survey Location | Location (and noted sounds) | Date | Time | $L_{eq}$ (dBA) | $L_{max}$ (dBA) | $L_{min}$ (dBA) |
|---|---|---|---|---|---|---|
| ST1 | Across From 1019 Leorita St (nearby and distant traffic) | 8/19/2022 | 10:38 a.m. – 10:53 a.m. | 66.6 | 76.0 | 62.9 |
| ST2 | Across From 13101 Bess Ave (nearby and distant traffic, birds, distant conversations, yelling, rustling leaves, people entering cars, music from cars, skateboarder) | 8/19/2022 | 10:57 a.m.- 11:12 a.m. | 62.6 | 77.1 | 54.3 |
| ST3 | Across From 13157 Shaver St (nearby and distant traffic, distant conversations, yelling, rustling leaves, footsteps) | 8/19/2022 | 11:16 a.m – 11:31 a.m. | 64.3 | 76.2 | 49.5 |
| ST4 | Across From 13226 Bess Ave (nearby and distant traffic, birds,distant Industrial,rustling leaves, police sirens, footsteps, car radio) | 8/19/2022 | 11:36 a.m. – 11:51 a.m. | 65.2 | 82.2 | 52.0 |
| ST5 | Parking Garage Staff Entrance (nearby and distant traffic, footsteps) | 8/19/2022 | 12:04 p.m. – 12:19 p.m. | 69.8 | 83.3 | 63.5 |

**Notes:** $L_{eq}$ = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; $L_{max}$ = maximum sound level during the measurement interval; $L_{min}$ = minimum sound level during the measurement interval. See Figure 1 for measurement locations.

Attachment A provides sample digital photographs of the field noise level survey locations, followed by Dudek investigator field notes.

## Noise and Vibration Assessment

### Short-Term Construction Noise

Construction noise is considered a short-term impact and would be considered significant if construction activities exceed the allowable hours of operation as permitted by the FTA's advisory threshold of 80 dBA $L_{eq}$ over an 8-hour daytime period at a residential land use. Noise-sensitive land uses in the vicinity of the project include residences to the southwest of the EDE (approximately 800 feet from the construction boundary), and to the west of the new MOB (approximately 90 feet from the construction boundary). Although additional residences and other noise-sensitive receivers are further afield, the construction noise assessment focused on project-attributed noise exposure levels predicted to occur at these nearest existing residences. Construction noise levels at more distant receivers would be substantially lower, consistent with established acoustical principles of attenuation with geometric divergence and other factors.

Project-generated construction noise will vary depending on the construction process, the type of equipment involved, the location of the construction site with respect to sensitive receptors, the schedule proposed to carry

out each task (e.g., hours and days of the week), and the duration of the construction work. Using information provided by the project applicant as well as typical equipment identified by CalEEMod for this type and size of development, project construction noise per each of six distinct phases was calculated using a spreadsheet-based model emulating the Federal Highway Administration (FHWA) Roadway Construction Noise Model (FHWA 2008). Table 7 presents the equipment list used for the construction noise analysis.

Table 7. Construction Equipment Assumptions by Phase

| Potential Construction Phase Duration | One-Way Vehicle Trips | | | Equipment | | |
|---|---|---|---|---|---|---|
| | Average Daily Workers | Average Daily Vendor Trucks | Total Haul Trucks | Type | Quantity | Usage Hours |
| Demolition | 14 | 4 | 128 | Concrete/Industrial Saws | 1 | 8 |
| | | | | Rubber Tired Dozers | 1 | 8 |
| | | | | Tractors/Loaders/Backhoes | 3 | 8 |
| Site Preparation | 8 | 4 | 0 | Graders | 1 | 8 |
| | | | | Scrapers | 1 | 8 |
| | | | | Tractors/Loaders/Backhoes | 1 | 7 |
| Grading | 10 | 4 | 0 | Graders | 1 | 8 |
| | | | | Rubber Tired Dozers | 1 | 8 |
| | | | | Tractors/Loaders/Backhoes | 2 | 7 |
| Building Construction | 40 | 20 | 0 | Cranes | 1 | 8 |
| | | | | Forklifts | 2 | 7 |
| | | | | Generator Sets | 1 | 8 |
| | | | | Tractors/Loaders/Backhoes | 1 | 6 |
| | | | | Welders | 3 | 8 |
| Paving | 16 | 4 | 0 | Cement and Mortar Mixers | 1 | 8 |
| | | | | Pavers | 1 | 8 |
| | | | | Paving Equipment | 1 | 8 |
| | | | | Rollers | 2 | 8 |
| | | | | Tractors/Loaders/Backhoes | 1 | 8 |
| Architectural Coating | 8 | 4 | 0 | Air Compressors | 1 | 6 |

Using the provided construction information, prediction results are summarized in Table 7 at each of the two noise-sensitive receiver categories (i.e., southwest of the proposed EDE and west of the proposed MOB) for two calculation scenarios as follows:

- Usage of the shortest activity-to-receptor distance for the loudest equipment type and quantity associated with the studied construction phase, with less noisy equipment types at successive distance increments of 50 feet; and
- An “acoustic centroid” approach, akin to the FTA general assessment technique for estimating construction noise, whereby all listed equipment for a construction phases is represented by a common location at the geographic center of the studied construction zone or area.

The first of these methods is considered a conservative approach to assess what might be characterized as a peak exposure level, applicable to not more than approximately 10%–15% of the total construction period and when the studied construction activity is taking place with loudest equipment along the property boundary closest to these nearest off-site receivers. The second approach utilizes the acoustic centroid technique to represent a time-averaged location for the phase equipment and activity, thereby yielding average noise levels to represent overall noise exposure as experienced for adjacent receivers over the duration of each construction phase.

Attachment B displays the construction noise model worksheets for each of these analysis approaches. Although the quantities and types of equipment per construction phase are the same in each of the two approaches, due primarily to the differences in source-to-receptor distance variables, Table 8 shows that prediction results of both scenarios yield predicted 8-hour daytime $L_{eq}$ values exceed the aforesaid FTA guidance threshold of 80 dBA.

**Table 8. Construction Noise Modeling Results**

| Receiver Location (distance [ft] to loudest construction equipment) | Construction Noise Level (8-hour dBA Leq) by Construction Phase | | | | | | |
|---|---|---|---|---|---|---|---|
| | Land Use | Demolition | Site Preparation | Grading | Building Construction | Paving | Architectural Coating |
| *Closest Distance* from EDE to Southwest Receptor (~725 feet) | Residential | 58 | 56 | 57 | 53 | 55 | 44 |
| *Closest Distance* from MOB to West Receptor (~60 feet) | Residential | 82 | 80 | 80 | 77 | 78 | 71 |
| *Acoustic Center* from EDE to Southwest Receptor (~935 feet) | Residential | 56 | 54 | 55 | 52 | 53 | 42 |
| *Acoustic Center* from MOB to West Receptor (~210 feet) | Residential | 71 | 68 | 69 | 66 | 68 | 56 |

**Source:** Attachment B.

As previously discussed, the City's Noise Ordinance does not establish quantitative construction noise standards; however, Section 130.37 Special Noise Sources (E) of the City's Municipal Code restricts noise-generating construction activities to the hours from 7:00 a.m. to 7:00 p.m. The construction contractor would thus be required to comply with these noise regulations prescribing the hours allowed for construction activity. Were the FTA guidance limit of 80 dBA $L_{eq}$ to be applied as a standard, Table 8 informs that the predicted noise level exposure at the offsite receptor closest to the MOB construction boundary (i.e., a distance of only 60 feet) is 82 dBA and exceed this standard by 2 dB. Hence, despite construction activity hours complying with City regulations, project construction noise impacts could be less than significant with mitigation such as the following measure:

**MM-NOI-1** The applicant and/or project contractor shall implement the following measures:

- All construction equipment must have appropriate sound muffling devices, which shall be properly maintained and used at all times such equipment is in operation.
- The project contractor shall place stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the Project site during the construction period.

- All noise producing construction activities, including warming-up or servicing equipment and any preparation for construction, shall be limited to the hours between 7:00 a.m. and 7:00 p.m.

One or more of the following noise-reducing practices shall be incorporated into the project's construction program:

- Administrative controls (e.g., reduce operating time of equipment and/or prohibit usage of equipment type[s] within certain distances).
- Engineering controls (upgrade noise controls, such as install better engine exhaust mufflers).
- Install noise abatement on the site boundary fencing (or within, as practical and appropriate) in the form of sound blankets or comparable temporary barriers (e.g., stacked sheets of plywood supported with framing) to occlude construction noise emission between the site (or specific equipment operation as the situation may define) and offsite noise-sensitive receptor(s) of concern.
- At the outset of a project construction activity, an unattended noise level monitor might be deployed onsite to measure and document that noise exposure levels attributed to project construction activity at adjacent offsite sensitive receptors are in conformance with the 80 dBA 8 hour $L_{eq}$ threshold.

With the needed noise reduction quantity being only 2 dB (i.e., the arithmetic difference of 82 dBA and 80 dBA), **MM-NOI-1** offers the project Applicant (or its construction contractors) flexible and practical options to implement it successfully and yield compliant noise exposure levels. For example, installation of a temporary barrier that blocks line-of-sight between a noise source and a receptor should yield a minimum 3 dB noise reduction. Separately, and independent of any barrier-based sound path occlusion, reducing operation time of a piece of steady noise-producing equipment by 50% would also yield a 3 dB reduction.

### Long-Term Operational Noise

Operation of the project would result in the generation of noise both on and off site. Consistent with similar land uses, operations supported by the project would primarily be conducted within the enclosed buildings, except for traffic movement, parking, and ambulance activities such as emergency sirens to, from, and around the hospital, as well as loading and unloading of patients and equipment at the ambulance bay. As such, on-site operational noise sources are expected to include roof-top air conditioning units, parking lot activity, and ambulance bay activity. Off-site noise could be generated by vehicles accessing the project site and contributing to vehicular roadway noise, as well as the ambulance emergency sirens. As detailed below, these operational project activities would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

#### *On-Site Operational Noise*

Implementation of the project would result in changes to existing noise levels on and around the project site by developing new stationary sources of noise, including introduction of additional outdoor HVAC equipment. These sources may affect noise-sensitive vicinity land uses off the project site.

### *Rooftop HVAC*

*EDE Sound Sources*

Based on the available architectural and mechanical roof plans and other design information for the proposed EDE, there is a seven-foot barrier raised 18" off the roof deck surrounding a single custom air-handling unit (AHU) and four (4) exhaust fans. Rooftop AHU fan and exhaust fan reference sound levels were available from the EDE design plans and "product data" information submittals.

*MOB Sound Sources*

For the analysis of noise emission from outdoor-exposed HVAC equipment operating on the roof of the proposed MOB, net building cooling load and minimum air infiltration was calculated with an estimation technique (Storm 2018) using the gross square footage (GSF) and expected functions or usage of the interior building spaces. With these inputs, net refrigeration tonnage and minimum outside air volume was calculated and then used to size and quantify a number of air handling unit return air fans and air-cooled chillers, for which online manufacturer data was consulted to quantify reference sound emission levels for this anticipated MOB rooftop equipment.

*Sound Propagation Prediction*

The aggregate noise emission from these EDE and MOB outdoor-exposed HVAC sound sources has been predicted with the Datakustik CadnaA sound propagation program. CadnaA is a commercially available software program for the calculation, presentation, assessment, and prediction of environmental noise based on algorithms and reference data per International Organization of Standardization (ISO) Standard 9613-2, "Attenuation of Sound During Propagation Outdoors, Part 2: General Method of Calculation" (ISO 1996). The CadnaA computer software allows one to position sources of sound emission in a simulated three-dimensional (3-D) space atop rendered "blocks" of project building masses having heights and footprints consistent with project architectural plans and elevations. In addition to the above-mentioned sound source inputs and building-block structures that define the three-dimensional sound propagation model space, the following assumptions and parameters are included in this CadnaA-supported stationary noise source assessment:

- Ground effect acoustical absorption coefficient equal to 0.1, which intends to represent an average or blending of ground covers that are characterized largely by hard reflective pavements and existing building surfaces across the Project site and the surroundings;
- Reflection order of 1, which allows for a single reflection of sound paths on encountered structural surfaces such as the modeled building masses;
- Off-site residential structures and the commercial buildings have not been rendered in the model;
- Calm meteorological conditions (i.e., no wind) with 68 degrees Fahrenheit and 50% relative humidity; and
- All of the modeled HVAC equipment is operating concurrently and continuously for a minimum period of 1 hour.

Details of these CadnaA modeling input parameters (e.g., sources and buildings) and calculations for estimating equipment sound levels can be found in Appendix D. Table 9 presents the predicted aggregate noise level exposures from these operating EDE and MOB HVAC systems at each of four (4) nearby offsite noise-sensitive receptors (i.e., existing residences). Predicted levels shown in Table 9 range between 9 to 40 dBA hourly $L_{eq}$, which is below the City's noise standard of 45 dBA $L_{eq}$ for single-family residential properties. Figure 2 displays the location of the studied noise-sensitive receptors and noise contours.

Table 9. Stationary Operations Noise Modeling Results

| Studied Noise-Sensitive Receptor (approximate address) | Predicted Project-Attributed Noise Exposure Level at Nearby Noise-Sensitive Receptors |
|---|---|
| | Project HVAC (dBA hourly $L_{eq}$) |
| R1 (13226 Bess Avenue) | 18.3 |
| R2 (13101 Bess Avenue) | 9.4 |
| R3 (1019 Leorita Street) | 30.8 |
| R4 (Proposed EDE Façade) | 39.8 |

Note: $L_{eq}$ = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; HVAC = heating, ventilating, and air-conditioning. See Figure 2 for locations of studied noise-sensitive receptors.

*Parking Lot Activity*

A comprehensive study of noise levels associated with surface parking lots was published in the Journal of Environmental Engineering and Landscape Management (Baltrënas et al. 2004). The study found that average noise levels during the peak period of use of the parking lot (generally in the morning with arrival of commuters, and in the evening with the departure of commuters), was 47 dBA at 1 meter (3.3 feet) from the outside boundary of the parking lot. The project employee parking spaces for the proposed EDE would be within the existing parking garage for the hospital. The project employee parking spaces for the proposed MOB are proposed surrounding the new building.

Accounting for sound attenuation due to additional distance travelled, the MOB parking lot noise contribution logarithmically combined with the project's HVAC-only predicted noise levels appearing in Table 9 would still be well below the City's noise standard of 45 dBA $L_{eq}$ at the studied nearest noise-sensitive residential properties (R3). It is also well below the ambient noise level range of 63 to 70 dBA $L_{eq}$ measured adjacent to the project as exhibited in Table 6.

*Project-Generated Off-Site Traffic Noise*

The project is expected to generate a total of -340 trips to the roadway system, primarily due to the removal of the apparel store that currently exists where the proposed MOB would be constructed. As shown in Table 2-1 of the project's Transportation Technical Memorandum, during the PM peak-hour, approximately nine passenger vehicles are estimated to enter or exit the project site. Utilizing this information, as well as additional traffic data shown in Attachment C, an emulator based on the FHWA's Highway Traffic Noise Prediction Model RD-77-108 was used to estimate potential noise impacts at adjacent noise-sensitive uses. Information used in the model included posted traffic speeds, truck mix percentage (for urban streets, found in the U.S. Environmental Protection Agency's Background Document for Medium and Heavy Truck Noise Emission Regulations, 1976), and expected level-of-service C traffic volumes (for urban streets, found in the Transportation Research Board's Highway Capacity Manual, 2000). Consistent with Caltrans guidance (Caltrans, 2013), this analysis assumes 80% of the ADT occurs during daytime hours (7:00 a.m. to 7:00 p.m.), 5% during the evening (7:00 p.m. to 10:00 p.m.), and 15% during the nighttime (10:00 p.m. to 7:00 a.m.).

The change in roadway noise levels was predicted for two conditions: existing and existing plus project. Traffic noise levels found in Table 10 are calculated for roadway segments bounded by intersections within the project area and are listed as follows:

Baldwin Park Boulevard – From Amar Road to Dalewood Street,

Bess Avenue – From Frazier Street to Baldwin Park Boulevard,

Leorita Street – From Bess Avenue to Dalewood Street, and

Dalewood Street – From Frazier Street to Baldwin Park Boulevard.

**Table 10. Predicted Roadway Noise Change – Existing plus Project**

| Modeled Roadway Segment | Existing Noise Level (dBA CNEL) | Existing Plus Project Noise Level (dBA CNEL) | Project-Related Noise Level Increase (dBA) |
|---|---|---|---|
| Baldwin Park Blvd.: Amar Rd. – Dalewood St. | 71.9 | 71.9 | 0.0 |
| Bess Ave.: Frazier St. – Baldwin Park Blvd. | 63.8 | 63.8 | 0.0 |
| Leorita St.: Bess Ave. – Dalewood St. | 63.0 | 63.0 | 0.0 |
| Dalewood St.: Frazier St. – Baldwin Park Blvd. | 67.5 | 67.5 | 0.0 |

**Source:** Attachment C.

As shown in Table 10, none of the roadways is predicted to receive an increase in noise levels as a result of the additional project traffic. In the context of community noise (i.e., outside of a controlled environment) a change in noise levels of less than 3 dBA is not perceptible to the average human listener. Additionally, based upon the FICON thresholds presented in Section 3.1.2, an increase of less than 5 dBA when the ambient sound level is less than 60 dBA $L_{dn}$/CNEL, less than 3 dBA when the ambient sound level is less than between 60 and 65 dBA $L_{dn}$/CNEL, or less than 2 dBA when the ambient sound level is greater than 65 dBA $L_{dn}$/CNEL would not be substantial. Therefore, impacts associated with off-site project-generated traffic noise would be less than significant.

*Ground-borne Vibration*

The main concern associated with ground-borne vibration is annoyance; however, in extreme cases, vibration can cause damage to buildings, particularly those that are old or otherwise fragile. Some common sources of ground-borne vibration are trains, and construction activities such as blasting, pile-driving, and heavy earth-moving equipment. The primary source of ground-borne vibration occurring as part of the project is construction activity.

Ground-borne vibration information related to construction/heavy equipment activities has been collected by Caltrans. Information from Caltrans indicates that transient vibrations (such as from construction activity) with approximately 0.035 inches per second PPV may be characterized as barely perceptible, and vibration levels of 0.24 inches per second PPV may be characterized as distinctly perceptible (Caltrans 2020). The heavier pieces of construction equipment, such as large bulldozers or hoe rams, would register up to approximately 0.089 inches

per second PPV at a distance of 25 feet, and a clam shovel drop would measure up to approximately 0.202 inches per second PPV at a distance of 25 feet (FTA 2018).

According to Caltrans, D-8 and D-9 Caterpillars, earthmovers, and trucks have not exceeded 0.10 inches/second PPV at 10 feet (Caltrans 2020). Since the closest off-site residence is located approximately 90 feet away from likely heavy construction equipment, vibration from construction activities at the closest sensitive receiver would not exceed the significance threshold of 0.20 inches/second PPV. Moreover, because the offsite residential homes feature wood-frame construction on foundation pads or footings, FTA guidance indicates that a "coupling loss" of -5 VdB can be applied to the groundborne vibration received by the structure and thus result in an attenuated VdB level of 65 that is compatible with the afore-mentioned interpretation of the City's vibration standards (i.e., perception unaided by instruments).

As for existing onsite Kaiser Baldwin Park structures, vibration impacts attributed to project construction are not anticipated to be significant for the following reasons:

- Vibration-sensitive instruments and operations (e.g., operation rooms and medical imaging [i.e., MRI] facilities) are sufficiently distant from expected project construction areas, so that propagated groundborne vibration will attenuate with distance—or be impeded or dissipated by intervening masses such as existing structural foundations and multi-story building masses. Distance sufficiency in this context would be a minimum of 36 feet between—for purposes of illustration—an operating large bulldozer or comparable engine-driven heavy construction equipment and a potentially sensitive receptor, assuming a threshold of 72 VdB (for operating rooms, per FTA guidance [FTA 2018]) and applying a coupling loss of -10 VdB due to existing onsite structures being representative of multi-story "large masonry" buildings. The construction area of the new MOB to be implemented by the project meets this criterion, and is physically separated from the campus vibration-sensitive buildings by the extensive pre-existing parking structures.
- Where the project involves renovation and new construction within this 36-foot distance, such as the vicinity of the EDE, the architectural plans indicate that the project will implement careful "phasing" of construction that involves temporary relocation of existing potentially vibration-sensitive activities, processes, and receptors to other onsite campus areas that are more distant from or would otherwise be protected from the adverse effects of excessive vibration attributed to the project.

Based on these predictive calculations and findings, project construction would not result in a significant impact associated with ground-borne vibration.

### *Airport Noise*

The San Gabriel Valley Airport (SGVA) is located approximately 2.85 miles northwest of the project site. The project site is located outside of the Airport Influence Area as shown in the Los Angeles County Airport Influence Area map. Therefore, no impact would occur.

## References Cited

Baltrėnas, P., D. Kazlauskas, & E. Petraitis. 2004. Testing on noise level prevailing at motor vehicle parking lots and numeral simulation of its dispersion, Journal of Environmental Engineering and Landscape Management, 12:2, 63-70

Caltrans. 2013. Technical Noise Supplement. September, 2013. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf

Caltrans. 2020. Transportation and Construction Vibration Guidance Manual. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. Sacramento, California. April.

City of Baldwin Park. 2002. General Plan. November, 2002. https://www.baldwinpark.com/docssidemenu/community-development/planning/general-plan-individual-elements

City of Baldwin Park, California. 2020. Code of Ordinances. https://codelibrary.amlegal.com/codes/baldwinpark/latest/baldwinpark_ca/0-0-0-1

County of Los Angeles. 2020. Airport Influence Area. https://egis-lacounty.hub.arcgis.com/datasets/lacounty::airport-influence-area-1/explore?location=34.073493%2C-118.011282%2C13.00

FHWA. 2008. Roadway Construction Noise Model (RCNM), Software Version 1.1. U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division.

FICON. 1992. Federal Agency Review of Selected Airport Noise Analysis Issues. Federal Interagency Committee on Noise. August 1992.

FTA (Federal Transit Administration). 2018. Transit Noise and Vibration Impact Assessment Manual. September 2018.

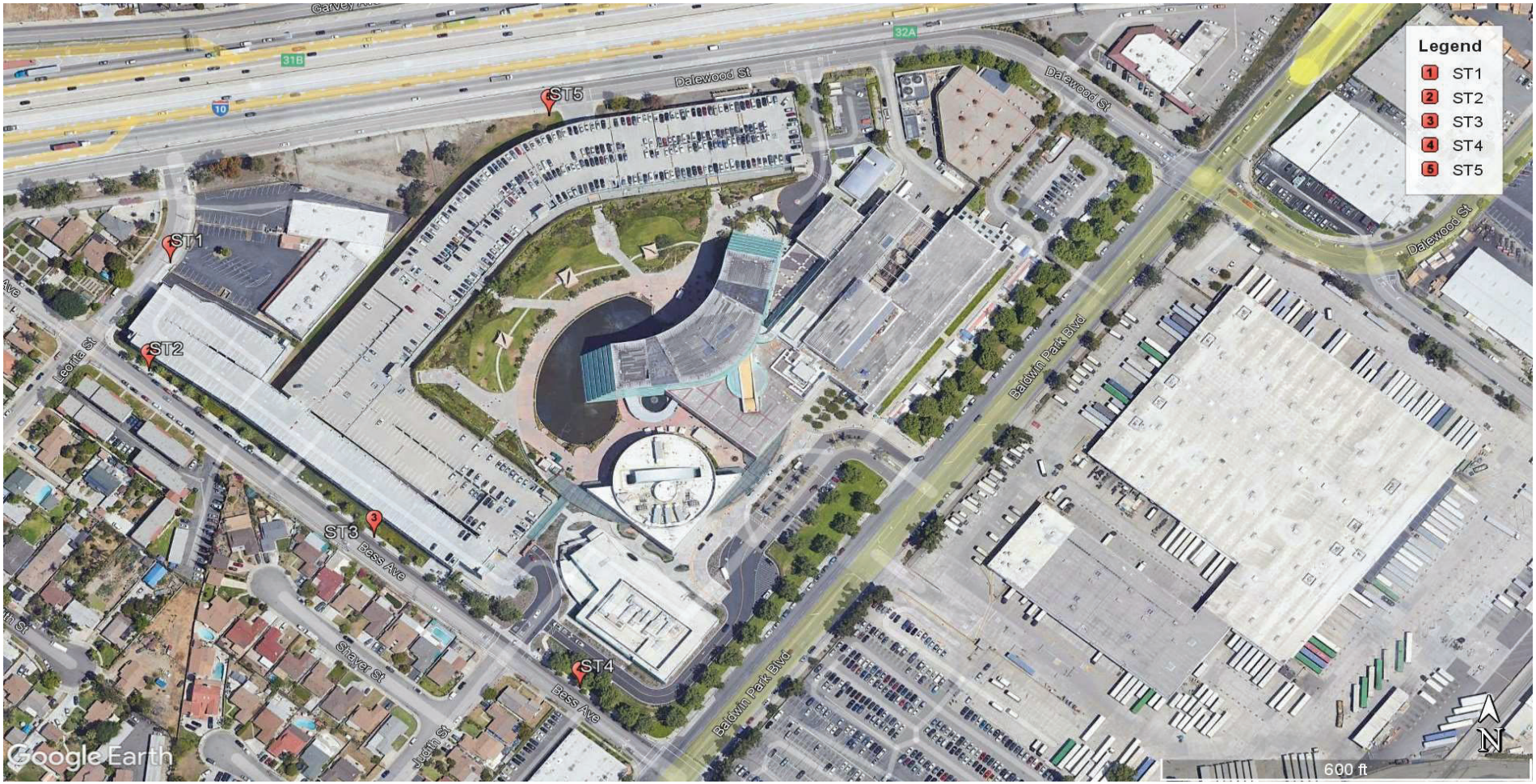
Storm, Mark. 2018. Screening Noise Analysis with Preliminary Building Project Information. Inter-noise Conference 2018. August 2018.

Transportation Research Board. 2000. Highway Capacity Manual. https://sjnavarro.files.wordpress.com/2008/08/highway_capacital_manual.pdf

U.S. Environmental Protection Agency. 1976. Background Document for Medium and Heavy Truck Noise Emission Regulations. https://books.google.com/books?id=ApE5AE--CXAC&pg=PR19&lpg=PR19&dq=urban+street+truck+traffic+mix&source=bl&ots=fSYXyJHJ68&sig=ACfU3U0xiWG7E6RGjVEzSZH9oGHqOCVgNw&hl=en&sa=X&ved=2ahUKEwidoZe84qb6AhV0IX0KHbqgAnwQ6AF6BAgpEAM#v=onepage&q=urban%20street%20truck%20traffic%20mix&f=false

York (Johnson Controls Unitary Products). 2011. Technical Guide. 251933-YTG-Q-0511. https://www.master.ca/documents/York_XP36_60_TechGuide_0511.pdf

# Figures




SOURCE: Microsoft 2022; Sandpiper BESS LLC 2022; Dudek 2022

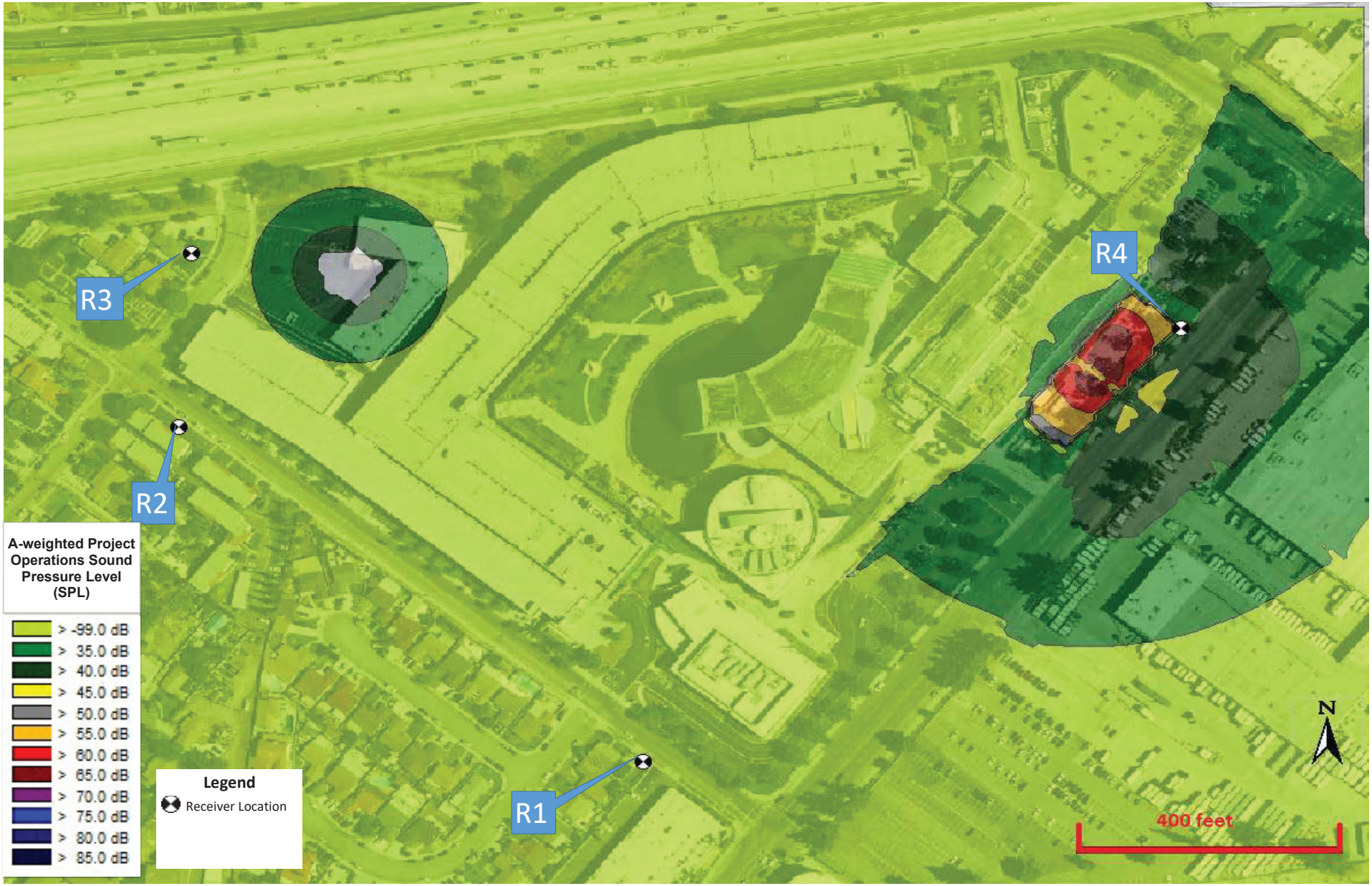
DUDEK

0 104.5 209 Feet

**FIGURE 1**

**Short-Term Noise Measurement Locations**

Kaiser Baldwin Park Project




SOURCE: Microsoft 2022; Sandpiper BESS LLC 2022; Dudek 2022

DUDEK

0 86.5 173 Feet

**FIGURE 2**

**Stationary Operations Noise Receptor Locations and Contours**

Kaiser Baldwin Park Project

# Attachment A

## Photographs of Measurement Locations and Field Notes

FORMS FIELD DATA REPORT

# Field Noise Measurement Data

| Record: 1453 | |
|---|---|
| Project Name | Kaiser Baldwin Park |
| Observer(s) | |
| Date | 2022-08-19 |

| Meteorological Conditions | |
|---|---|
| Temp (F) | 85 |
| Humidity % (R.H.) | 50 |
| Wind | Calm |
| Wind Speed (MPH) | 2 |
| Wind Direction | South West |
| Sky | Sunny |

| Instrument and Calibrator Information | |
|---|---|
| Instrument Name List | Piccolo #1897 |
| Instrument Name | Piccolo #1897 |
| Instrument Name Lookup Key | Piccolo #1897 |
| Manufacturer | Soft dB inc. |
| Model | Piccolo |
| Serial Number | P0222050202 |
| Calibration Date | 22/05/02 |
| Calibrator Name | (SB) LD CAL200 |
| Calibrator Name | (SB) LD CAL200 |
| Calibrator Name Lookup Key | (SB) LD CAL200 |
| Calibrator Manufacturer | Larson Davis |
| Calibrator Model | LD CAL200 |
| Calibrator Serial # | 19952 |
| GPS Assistance Used | No |
| Pre-Test (dBA SPL) | 94 |
| Post-Test (dBA SPL) | 94 |
| Windscreen | Yes |
| Weighting? | A-WTD |
| Slow/Fast? | Slow |
| ANSI? | Yes |

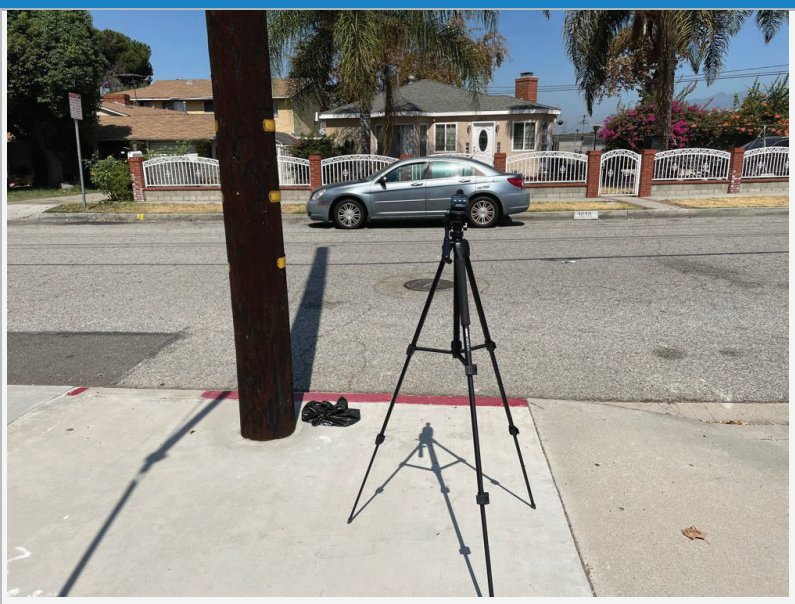
| Monitoring | |
|---|---|
| Record # | 1 |
| Site ID | ST1 |
| Site Location Lat/Long | 34.065802, -117.988739 |
| Begin (Time) | 10:38:00 |
| End (Time) | 10:53:00 |
| Other Lx (Specify Metric) | L |
| Primary Noise Source | Traffic |
| Other Noise Sources (Background) | Distant Traffic |
| Is the same instrument and calibrator being used as previously noted? | Yes |
| Are the meteorological conditions the same as previously noted? | Yes |

# FORMS FIELD DATA REPORT

| Source Info and Traffic Counts | |
|---|---|
| Number of Lanes | 2 |
| Lane Width (feet) | 10 |
| Roadway Width (feet) | 20 |
| Roadway Width (m) | 6.1 |
| Distance to Roadway (feet) | 4 |
| Distance to Roadway (m) | 1.2 |
| Distance Measured to Centerline or Edge of Pavement? | Edge of Pavement |
| Roadway Type | Street |
| Estimated Vehicle Speed (MPH) | 25 |
| Speeds Estimated by: | Driving the Pace |
| Posted Speed Limit Sign (MPH) | 20 |

| Traffic Counts | |
|---|---|
| Vehicle Count Summary | A 23, MT 0, HT 0, B 0, MC 0 |
| Select Method for Recording Count Duration | Enter Manually |
| Counting Both Directions? | Yes |
| Count Duration (minutes) | 15 |
| Vehicle Count Tally | |
| Select Method for Vehicle Counts | Use Counter (+/-) |
| Number of Vehicles - Autos | 23 |
| Number of Vehicles - Medium Trucks | 0 |
| Number of Vehicles - Heavy Trucks | 0 |
| Number of Vehicles - Buses | 0 |
| Number of Vehicles - Motorcyles | 0 |

| Description / Photos | |
|---|---|
| Terrain | Hard |

| Site Photos | |
|---|---|
| Photo |  |
| Comments / Description | ST1 North |

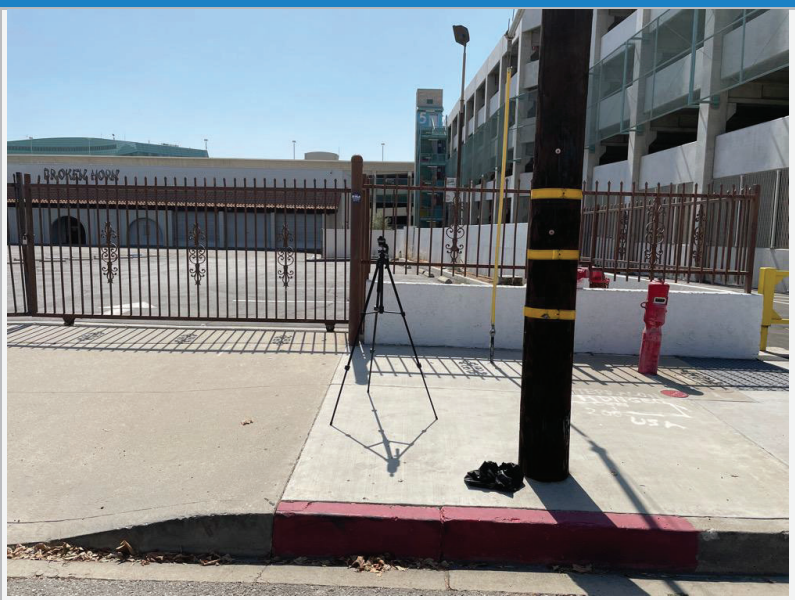
## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST1 West* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST1 East* |

## Site Photos

| Photo | |
|---|---|
| |  |
| **Comments / Description** | *ST1 South* |

## Monitoring

| | |
|---|---|
| **Record #** | *2* |
| **Site ID** | *ST2* |
| **Site Location Lat/Long** | *34.065313, -117.988912* |
| **Begin (Time)** | *10:57:00* |
| **End (Time)** | *11:12:00* |
| **Other Lx (Specify Metric)** | *L* |
| **Primary Noise Source** | *Traffic* |
| **Other Noise Sources (Background)** | *Birds, Distant Conversations / Yelling, Distant Traffic, Rustling Leaves* |
| **Other Noise Sources Additional Description** | *People entering their cars, music playing from a car, skateboarder* |
| **Is the same instrument and calibrator being used as previously noted?** | *Yes* |
| **Are the meteorological conditions the same as previously noted?** | *Yes* |

## Source Info and Traffic Counts

| | |
|---|---|
| **Number of Lanes** | *2* |
| **Lane Width (feet)** | *10* |
| **Roadway Width (feet)** | *20* |
| **Roadway Width (m)** | *6.1* |
| **Distance to Roadway (feet)** | *2* |
| **Distance to Roadway (m)** | *0.6* |
| **Distance Measured to Centerline or Edge of Pavement?** | *Edge of Pavement* |
| **Roadway Type** | *Avenue* |
| **Estimated Vehicle Speed (MPH)** | *30* |
| **Speeds Estimated by:** | *Driving the Pace* |
| **Posted Speed Limit Sign (MPH)** | *30* |

## Traffic Counts

| | |
|---|---|
| **Vehicle Count Summary** | *A 84, MT 2, HT 0, B 2, MC 0* |
| **Select Method for Recording Count Duration** | *Enter Manually* |
| **Counting Both Directions?** | *Yes* |
| **Count Duration (minutes)** | *15* |
| **Vehicle Count Tally** | |
| **Select Method for Vehicle Counts** | *Use Counter (+/-)* |
| **Number of Vehicles - Autos** | *84* |
| **Number of Vehicles - Medium Trucks** | *2* |
| **Number of Vehicles - Heavy Trucks** | *0* |
| **Number of Vehicles - Buses** | *2* |
| **Number of Vehicles - Motorcyles** | *0* |

## Description / Photos

| | |
|---|---|
| **Terrain** | *Hard* |

## Site Photos

| | |
|---|---|
| **Photo** | |
| **Comments / Description** | *ST2 North* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST2 West* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST2 East* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST2 South* |

## Monitoring

| | |
|---|---|
| **Record #** | *3* |
| **Site ID** | *ST3* |
| **Site Location Lat/Long** | *34.064469, -117.987585* |
| **Begin (Time)** | *11:16:00* |
| **End (Time)** | *11:31:00* |
| **Other Lx (Specify Metric)** | *L* |
| **Primary Noise Source** | *Traffic* |
| **Other Noise Sources (Background)** | *Distant Conversations / Yelling, Distant Traffic, Rustling Leaves* |
| **Other Noise Sources Additional Description** | *Footsteps* |
| **Is the same instrument and calibrator being used as previously noted?** | *Yes* |
| **Are the meteorological conditions the same as previously noted?** | *Yes* |

## Description / Photos

| | |
|---|---|
| **Terrain** | *Hard* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST3 North* |

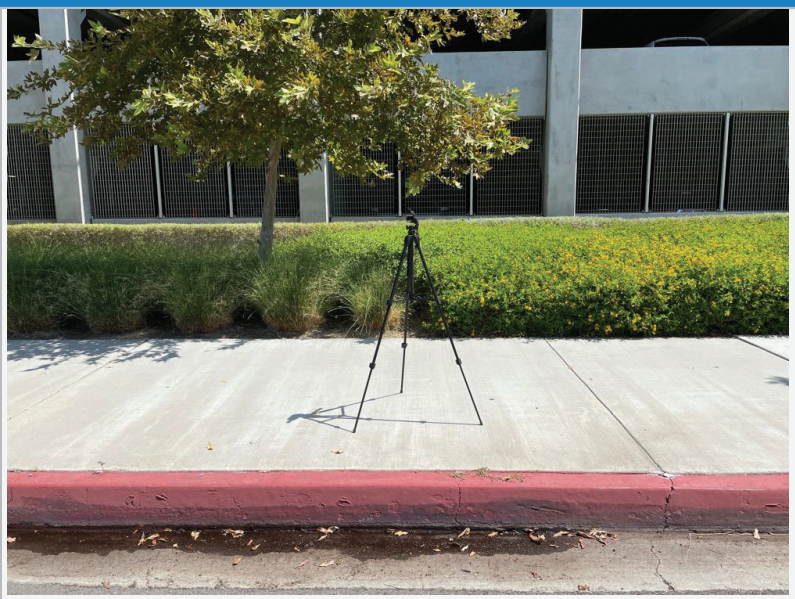
## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST3 West* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST3 East* |

## Site Photos

| Photo | |
|---|---|
| |  |
| **Comments / Description** | *ST3 South* |

| Monitoring | |
|---|---|
| Record # | 4 |
| Site ID | ST4 |
| Site Location Lat/Long | 34.063711, -117.986481 |
| Begin (Time) | 11:36:00 |
| End (Time) | 11:51:00 |
| Other Lx (Specify Metric) | L |
| Primary Noise Source | Traffic |
| Other Noise Sources (Background) | Birds, Distant Industrial, Distant Traffic, Rustling Leaves |
| Other Noise Sources Additional Description | 11:37 police sirens, footsteps, car radio |
| Is the same instrument and calibrator being used as previously noted? | Yes |
| Are the meteorological conditions the same as previously noted? | Yes |

| Source Info and Traffic Counts | |
|---|---|
| Number of Lanes | 2 |
| Lane Width (feet) | 10 |
| Roadway Width (feet) | 20 |
| Roadway Width (m) | 6.1 |
| Distance to Roadway (feet) | 2 |
| Distance to Roadway (m) | 0.6 |
| Distance Measured to Centerline or Edge of Pavement? | Edge of Pavement |
| Roadway Type | Avenue |
| Estimated Vehicle Speed (MPH) | 30 |
| Speeds Estimated by: | Driving the Pace |
| Posted Speed Limit Sign (MPH) | 30 |

| Traffic Counts | |
|---|---|
| Vehicle Count Summary | A 219, MT 0, HT 0, B 1, MC 0 |
| Select Method for Recording Count Duration | Enter Manually |
| Counting Both Directions? | Yes |
| Count Duration (minutes) | 15 |
| Vehicle Count Tally | |
| Select Method for Vehicle Counts | Enter Manually |
| Number of Vehicles - Autos | 219 |
| Number of Vehicles - Medium Trucks | 0 |
| Number of Vehicles - Heavy Trucks | 0 |
| Number of Vehicles - Buses | 1 |
| Number of Vehicles - Motorcyles | 0 |

| Description / Photos | |
|---|---|
| Terrain | Hard |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST4 North* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST4 East* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST4 South* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST4 West* |

| Monitoring | |
|---|---|
| **Record #** | *5* |
| **Site ID** | *ST5* |
| **Site Location Lat/Long** | *34.066548, -117.986682* |
| **Begin (Time)** | *12:04:00* |
| **End (Time)** | *12:19:00* |
| **Other Lx (Specify Metric)** | *L* |
| **Primary Noise Source** | *Traffic* |
| **Other Noise Sources (Background)** | *Distant Traffic* |
| **Other Noise Sources Additional Description** | *Footsteps* |
| **Is the same instrument and calibrator being used as previously noted?** | *Yes* |
| **Are the meteorological conditions the same as previously noted?** | *Yes* |

| Description / Photos | |
|---|---|
| **Terrain** | *Mixed* |

| Site Photos | |
|---|---|
| **Photo** | |
| **Comments / Description** | *ST5 North* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST5 East* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST5 West* |

## Site Photos

| Photo | |
|---|---|
| | |
| **Comments / Description** | *ST5 South* |

# Attachment B

## Construction Noise Prediction Model Worksheets

*To User: bordered cells are inputs, unbordered cells have formulae*

noise level limit for construction phase at residential land use, per FTA guidance = 80
allowable hours over which Leq is to be averaged = 8

= temporary barrier (TB) of input height inserted between source and receptor

| Construction Activity | Equipment | Total Equipment Qty | AUF % (from FHWA RCNM) | Reference Lmax @ 50 ft. from FHWA RCNM | Client Equipment Description, Data Source and/or Notes | Source to NSR Distance (ft.) | *Temporary Barrier Insertion Loss (dB)* | *Additional Noise Reduction* | Distance-Adjusted Lmax | Allowable Operation Time (hours) | Allowable Operation Time (minutes) | Predicted 8-hour Leq | Source Elevation (ft) | Receiver Elevation (ft) | Barrier Height (ft) | Source to Barr. ("A") Horiz. (ft) | Rcvr. to Barr. ("B") Horiz. (ft) | Source to Rcvr. ("C") Horiz. (ft) | "A" (ft) | "B" (ft) | "C" (ft) | Path Length Diff. "P" (ft) | Abarr (dB) | Heff (with barrier) | Heff (wout barrier) | G (with barrier) | G (without barrier) | lLbarr (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | Concrete Saw | 1 | 20 | 90 | Concrete/Industrial Saws | 725 | 0.1 | | 61.4 | 8 | 480 | 54 | 5 | 5 | 0 | 720 | 5 | 725 | 720.0 | 7.1 | 725.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Dozer | 1 | 40 | 82 | Rubber Tired Dozers | 825 | 0.1 | | 52.2 | 8 | 480 | 48 | 5 | 5 | 0 | 820 | 5 | 825 | 820.0 | 7.1 | 825.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 3 | 40 | 84 | Tractors/Loaders/Backhoes | 775 | 0.1 | | 54.8 | 8 | 480 | 56 | 5 | 5 | 0 | 770 | 5 | 775 | 770.0 | 7.1 | 775.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Demolition Phase: | | | | **58.5** | | | | | | | | | | | | | | | | |
| Site Preparation | Grader | 1 | 40 | 85 | Graders | 725 | 0.1 | | 56.4 | 8 | 480 | 52 | 5 | 5 | 0 | 720 | 5 | 725 | 720.0 | 7.1 | 725.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Scraper | 1 | 40 | 84 | Scrapers | 775 | 0.1 | | 54.8 | 8 | 480 | 51 | 5 | 5 | 0 | 770 | 5 | 775 | 770.0 | 7.1 | 775.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 825 | 0.1 | | 54.2 | 7 | 420 | 50 | 5 | 5 | 0 | 820 | 5 | 825 | 820.0 | 7.1 | 825.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Site Preparation Phase: | | | | **55.9** | | | | | | | | | | | | | | | | |
| Grading | Grader | 1 | 40 | 85 | Graders | 725 | 0.1 | | 56.4 | 8 | 480 | 52 | 5 | 5 | 0 | 720 | 5 | 725 | 720.0 | 7.1 | 725.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Dozer | 1 | 40 | 82 | Rubber Tired Dozers | 825 | 0.1 | | 52.2 | 8 | 480 | 48 | 5 | 5 | 0 | 820 | 5 | 825 | 820.0 | 7.1 | 825.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 2 | 40 | 84 | Tractors/Loaders/Backhoes | 775 | 0.1 | | 54.8 | 7 | 420 | 53 | 5 | 5 | 0 | 770 | 5 | 775 | 770.0 | 7.1 | 775.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Grading Phase: | | | | **56.6** | | | | | | | | | | | | | | | | |
| Building Construction | Crane | 1 | 16 | 81 | Cranes | 775 | 0.1 | | 51.8 | 8 | 480 | 44 | 5 | 5 | 0 | 770 | 5 | 775 | 770.0 | 7.1 | 775.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| Forklift replacement | Front End Loader | 2 | 40 | 79 | Forklifts | 825 | 0.1 | | 49.2 | 7 | 420 | 48 | 5 | 5 | 0 | 820 | 5 | 825 | 820.0 | 7.1 | 825.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Generator | 1 | 50 | 72 | Generator Sets | 925 | 0.1 | | 41.1 | 8 | 480 | 38 | 5 | 5 | 0 | 920 | 5 | 925 | 920.0 | 7.1 | 925.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 725 | 0.1 | | 55.4 | 6 | 360 | 50 | 5 | 5 | 0 | 720 | 5 | 725 | 720.0 | 7.1 | 725.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Welder / Torch | 3 | 40 | 73 | Welders | 875 | 0.1 | | 42.6 | 8 | 480 | 43 | 5 | 5 | 0 | 870 | 5 | 875 | 870.0 | 7.1 | 875.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Building Construction Phase: | | | | **53.3** | | | | | | | | | | | | | | | | |
| Paving | Drum Mixer | 1 | 50 | 80 | Cement and Mortar Mixers | 825 | 0.1 | | 50.2 | 8 | 480 | 47 | 5 | 5 | 0 | 820 | 5 | 825 | 820.0 | 7.1 | 825.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Paver | 1 | 50 | 77 | Pavers | 925 | 0.1 | | 46.1 | 8 | 480 | 43 | 5 | 5 | 0 | 920 | 5 | 925 | 920.0 | 7.1 | 925.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Pavement Scarafier | 1 | 20 | 85 | Paving Equipment | 725 | 0.1 | | 56.4 | 8 | 480 | 49 | 5 | 5 | 0 | 720 | 5 | 725 | 720.0 | 7.1 | 725.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Roller | 2 | 20 | 80 | Rollers | 875 | 0.1 | | 49.6 | 8 | 480 | 46 | 5 | 5 | 0 | 870 | 5 | 875 | 870.0 | 7.1 | 875.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 775 | 0.1 | | 54.8 | 8 | 480 | 51 | 5 | 5 | 0 | 770 | 5 | 775 | 770.0 | 7.1 | 775.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Paving Phase: | | | | **55.0** | | | | | | | | | | | | | | | | |

*To User: bordered cells are inputs, unbordered cells have formulae*

noise level limit for construction phase at residential land use, per FTA guidance = 80
allowable hours over which Leq is to be averaged = 8

= temporary barrier (TB) of input height inserted between source and receptor

| Construction Activity | Equipment | Total Equipment Qty | AUF % (from FHWA RCNM) | Reference Lmax @ 50 ft. from FHWA RCNM | Client Equipment Description, Data Source and/or Notes | Source to NSR Distance (ft.) | *Temporary Barrier Insertion Loss (dB)* | *Additional Noise Reduction* | Distance-Adjusted Lmax | Allowable Operation Time (hours) | Allowable Operation Time (minutes) | Predicted 8-hour Leq | Source Elevation (ft) | Receiver Elevation (ft) | Barrier Height (ft) | Source to Barr. ("A") Horiz. (ft) | Rcvr. to Barr. ("B") Horiz. (ft) | Source to Rcvr. ("C") Horiz. (ft) | "A" (ft) | "B" (ft) | "C" (ft) | Path Length Diff. "P" (ft) | Abarr (dB) | Heff (with barrier) | Heff (wout barrier) | G (with barrier) | G (without barrier) | lLbarr (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | Concrete Saw | 1 | 20 | 90 | Concrete/Industrial Saws | 60 | 0.1 | | 88.3 | 8 | 480 | 81 | 5 | 5 | 0 | 55 | 5 | 60 | 55.2 | 7.1 | 60.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Dozer | 1 | 40 | 82 | Rubber Tired Dozers | 160 | 0.1 | | 68.3 | 8 | 480 | 64 | 5 | 5 | 0 | 155 | 5 | 160 | 155.1 | 7.1 | 160.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 3 | 40 | 84 | Tractors/Loaders/Backhoes | 110 | 0.1 | | 74.5 | 8 | 480 | 75 | 5 | 5 | 0 | 105 | 5 | 110 | 105.1 | 7.1 | 110.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Demolition Phase: | | | | **82.4** | | | | | | | | | | | | | | | | |
| Site Preparation | Grader | 1 | 40 | 85 | Graders | 60 | 0.1 | | 83.3 | 8 | 480 | 79 | 5 | 5 | 0 | 55 | 5 | 60 | 55.2 | 7.1 | 60.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Scraper | 1 | 40 | 84 | Scrapers | 110 | 0.1 | | 74.5 | 8 | 480 | 71 | 5 | 5 | 0 | 105 | 5 | 110 | 105.1 | 7.1 | 110.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 160 | 0.1 | | 70.3 | 7 | 420 | 66 | 5 | 5 | 0 | 155 | 5 | 160 | 155.1 | 7.1 | 160.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Site Preparation Phase: | | | | **80.0** | | | | | | | | | | | | | | | | |
| Grading | Grader | 1 | 40 | 85 | Graders | 60 | 0.1 | | 83.3 | 8 | 480 | 79 | 5 | 5 | 0 | 55 | 5 | 60 | 55.2 | 7.1 | 60.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Dozer | 1 | 40 | 82 | Rubber Tired Dozers | 160 | 0.1 | | 68.3 | 8 | 480 | 64 | 5 | 5 | 0 | 155 | 5 | 160 | 155.1 | 7.1 | 160.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 2 | 40 | 84 | Tractors/Loaders/Backhoes | 110 | 0.1 | | 74.5 | 7 | 420 | 73 | 5 | 5 | 0 | 105 | 5 | 110 | 105.1 | 7.1 | 110.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Grading Phase: | | | | **80.3** | | | | | | | | | | | | | | | | |
| Building Construction | Crane | 1 | 16 | 81 | Cranes | 110 | 0.1 | | 71.5 | 8 | 480 | 64 | 5 | 5 | 0 | 105 | 5 | 110 | 105.1 | 7.1 | 110.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| Forklift replacement | Front End Loader | 2 | 40 | 79 | Forklifts | 160 | 0.1 | | 65.3 | 7 | 420 | 64 | 5 | 5 | 0 | 155 | 5 | 160 | 155.1 | 7.1 | 160.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Generator | 1 | 50 | 72 | Generator Sets | 260 | 0.1 | | 53.4 | 8 | 480 | 50 | 5 | 5 | 0 | 255 | 5 | 260 | 255.0 | 7.1 | 260.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 60 | 0.1 | | 82.3 | 6 | 360 | 77 | 5 | 5 | 0 | 55 | 5 | 60 | 55.2 | 7.1 | 60.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Welder / Torch | 3 | 40 | 73 | Welders | 210 | 0.1 | | 56.5 | 8 | 480 | 57 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Building Construction Phase: | | | | **77.5** | | | | | | | | | | | | | | | | |
| Paving | Drum Mixer | 1 | 50 | 80 | Cement and Mortar Mixers | 160 | 0.1 | | 66.3 | 8 | 480 | 63 | 5 | 5 | 0 | 155 | 5 | 160 | 155.1 | 7.1 | 160.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Paver | 1 | 50 | 77 | Pavers | 260 | 0.1 | | 58.4 | 8 | 480 | 55 | 5 | 5 | 0 | 255 | 5 | 260 | 255.0 | 7.1 | 260.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Pavement Scarafier | 1 | 20 | 85 | Paving Equipment | 60 | 0.1 | | 83.3 | 8 | 480 | 76 | 5 | 5 | 0 | 55 | 5 | 60 | 55.2 | 7.1 | 60.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Roller | 2 | 20 | 80 | Rollers | 210 | 0.1 | | 63.5 | 8 | 480 | 60 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 110 | 0.1 | | 74.5 | 8 | 480 | 71 | 5 | 5 | 0 | 105 | 5 | 110 | 105.1 | 7.1 | 110.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Paving Phase: | | | | **77.6** | | | | | | | | | | | | | | | | |

*To User: bordered cells are inputs, unbordered cells have formulae*

noise level limit for construction phase at residential land use, per FTA guidance = 80
allowable hours over which Leq is to be averaged = 8

= temporary barrier (TB) of input height inserted between source and receptor

| Construction Activity | Equipment | Total Equipment Qty | AUF % (from FHWA RCNM) | Reference Lmax @ 50 ft. from FHWA RCNM | Client Equipment Description, Data Source and/or Notes | Source to NSR Distance (ft.) | *Temporary Barrier Insertion Loss (dB)* | *Additional Noise Reduction* | Distance-Adjusted Lmax | Allowable Operation Time (hours) | Allowable Operation Time (minutes) | Predicted 8-hour Leq | Source Elevation (ft) | Receiver Elevation (ft) | Barrier Height (ft) | Source to Barr. ("A") Horiz. (ft) | Rcvr. to Barr. ("B") Horiz. (ft) | Source to Rcvr. ("C") Horiz. (ft) | "A" (ft) | "B" (ft) | "C" (ft) | Path Length Diff. "P" (ft) | Abarr (dB) | Heff (with barrier) | Heff (wout barrier) | G (with barrier) | G (without barrier) | lLbarr (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | Concrete Saw | 1 | 20 | 90 | Concrete/Industrial Saws | 935 | 0.1 | | 59.0 | 8 | 480 | 52 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Dozer | 1 | 40 | 82 | Rubber Tired Dozers | 935 | 0.1 | | 51.0 | 8 | 480 | 47 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 3 | 40 | 84 | Tractors/Loaders/Backhoes | 935 | 0.1 | | 53.0 | 8 | 480 | 54 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | | Total for Demolition Phase: | | | **56.5** | | | | | | | | | | | | | | | |
| Site Preparation | Grader | 1 | 40 | 85 | Graders | 935 | 0.1 | | 54.0 | 8 | 480 | 50 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Scraper | 1 | 40 | 84 | Scrapers | 935 | 0.1 | | 53.0 | 8 | 480 | 49 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 935 | 0.1 | | 53.0 | 7 | 420 | 48 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | | Total for Site Preparation Phase: | | | **53.9** | | | | | | | | | | | | | | | |
| Grading | Grader | 1 | 40 | 85 | Graders | 935 | 0.1 | | 54.0 | 8 | 480 | 50 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Dozer | 1 | 40 | 82 | Rubber Tired Dozers | 935 | 0.1 | | 51.0 | 8 | 480 | 47 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 2 | 40 | 84 | Tractors/Loaders/Backhoes | 935 | 0.1 | | 53.0 | 7 | 420 | 51 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | | Total for Grading Phase: | | | **54.6** | | | | | | | | | | | | | | | |
| Building Construction | Crane | 1 | 16 | 81 | Cranes | 935 | 0.1 | | 50.0 | 8 | 480 | 42 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| Forklift replacement | Front End Loader | 2 | 40 | 79 | Forklifts | 935 | 0.1 | | 48.0 | 7 | 420 | 46 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Generator | 1 | 50 | 72 | Generator Sets | 935 | 0.1 | | 41.0 | 8 | 480 | 38 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 935 | 0.1 | | 53.0 | 6 | 360 | 48 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Welder / Torch | 3 | 40 | 73 | Welders | 935 | 0.1 | | 42.0 | 8 | 480 | 43 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | | Total for Building Construction Phase: | | | **51.6** | | | | | | | | | | | | | | | |
| Paving | Drum Mixer | 1 | 50 | 80 | Cement and Mortar Mixers | 935 | 0.1 | | 49.0 | 8 | 480 | 46 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Paver | 1 | 50 | 77 | Pavers | 935 | 0.1 | | 46.0 | 8 | 480 | 43 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Pavement Scarafier | 1 | 20 | 85 | Paving Equipment | 935 | 0.1 | | 54.0 | 8 | 480 | 47 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Roller | 2 | 20 | 80 | Rollers | 935 | 0.1 | | 49.0 | 8 | 480 | 45 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 935 | 0.1 | | 53.0 | 8 | 480 | 49 | 5 | 5 | 0 | 930 | 5 | 935 | 930.0 | 7.1 | 935.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | | Total for Paving Phase: | | | **53.4** | | | | | | | | | | | | | | | |

*To User: bordered cells are inputs, unbordered cells have formulae*

noise level limit for construction phase at residential land use, per FTA guidance = 80
allowable hours over which Leq is to be averaged = 8

= temporary barrier (TB) of input height inserted between source and receptor

| Construction Activity | Equipment | Total Equipment Qty | AUF % (from FHWA RCNM) | Reference Lmax @ 50 ft. from FHWA RCNM | Client Equipment Description, Data Source and/or Notes | Source to NSR Distance (ft.) | *Temporary Barrier Insertion Loss (dB)* | *Additional Noise Reduction* | Distance-Adjusted Lmax | Allowable Operation Time (hours) | Allowable Operation Time (minutes) | Predicted 8-hour Leq | Source Elevation (ft) | Receiver Elevation (ft) | Barrier Height (ft) | Source to Barr. ("A") Horiz. (ft) | Rcvr. to Barr. ("B") Horiz. (ft) | Source to Rcvr. ("C") Horiz. (ft) | "A" (ft) | "B" (ft) | "C" (ft) | Path Length Diff. "P" (ft) | Abarr (dB) | Heff (with barrier) | Heff (wout barrier) | G (with barrier) | G (without barrier) | lLbarr (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | Concrete Saw | 1 | 20 | 90 | Concrete/Industrial Saws | 210 | 0.1 | | 73.5 | 8 | 480 | 67 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Dozer | 1 | 40 | 82 | Rubber Tired Dozers | 210 | 0.1 | | 65.5 | 8 | 480 | 62 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 3 | 40 | 84 | Tractors/Loaders/Backhoes | 210 | 0.1 | | 67.5 | 8 | 480 | 68 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Demolition Phase: | | | | **71.0** | | | | | | | | | | | | | | | | |
| Site Preparation | Grader | 1 | 40 | 85 | Graders | 210 | 0.1 | | 68.5 | 8 | 480 | 65 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Scraper | 1 | 40 | 84 | Scrapers | 210 | 0.1 | | 67.5 | 8 | 480 | 64 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 210 | 0.1 | | 67.5 | 7 | 420 | 63 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Site Preparation Phase: | | | | **68.5** | | | | | | | | | | | | | | | | |
| Grading | Grader | 1 | 40 | 85 | Graders | 210 | 0.1 | | 68.5 | 8 | 480 | 65 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Dozer | 1 | 40 | 82 | Rubber Tired Dozers | 210 | 0.1 | | 65.5 | 8 | 480 | 62 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 2 | 40 | 84 | Tractors/Loaders/Backhoes | 210 | 0.1 | | 67.5 | 7 | 420 | 66 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Grading Phase: | | | | **69.1** | | | | | | | | | | | | | | | | |
| Building Construction | Crane | 1 | 16 | 81 | Cranes | 210 | 0.1 | | 64.5 | 8 | 480 | 57 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| Forklift replacement | Front End Loader | 2 | 40 | 79 | Forklifts | 210 | 0.1 | | 62.5 | 7 | 420 | 61 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Generator | 1 | 50 | 72 | Generator Sets | 210 | 0.1 | | 55.5 | 8 | 480 | 52 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 210 | 0.1 | | 67.5 | 6 | 360 | 62 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Welder / Torch | 3 | 40 | 73 | Welders | 210 | 0.1 | | 56.5 | 8 | 480 | 57 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Building Construction Phase: | | | | **66.1** | | | | | | | | | | | | | | | | |
| Paving | Drum Mixer | 1 | 50 | 80 | Cement and Mortar Mixers | 210 | 0.1 | | 63.5 | 8 | 480 | 60 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Paver | 1 | 50 | 77 | Pavers | 210 | 0.1 | | 60.5 | 8 | 480 | 57 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Pavement Scarafier | 1 | 20 | 85 | Paving Equipment | 210 | 0.1 | | 68.5 | 8 | 480 | 62 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Roller | 2 | 20 | 80 | Rollers | 210 | 0.1 | | 63.5 | 8 | 480 | 60 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | Tractor | 1 | 40 | 84 | Tractors/Loaders/Backhoes | 210 | 0.1 | | 67.5 | 8 | 480 | 64 | 5 | 5 | 0 | 205 | 5 | 210 | 205.1 | 7.1 | 210.0 | 0.00 | 0.1 | 5.0 | 5.0 | 0.7 | 0.7 | 0.1 |
| | | | | | | | | Total for Paving Phase: | | | | **67.9** | | | | | | | | | | | | | | | | |

# Attachment C

## Traffic Noise Model Input/Output

## Appendix 2C

### Traffic Noise Modeling Calculations - Summary

**Project:** **14416 Kaiser Baldwin Park**

| Number | Name | Segment Description and Location From | To | Existing | Existing + Project | Δ Existing – Existing + Project |
|---|---|---|---|---|---|---|
| **Summary of Net Changes** | | | | | | |
| 1 | Baldwin Park Boulevard | Amar Road | Dalewood Street | 71.9 | 71.9 | 0.0 |
| 2 | Bess Avenue | Frazier Street | Baldwin Park Avenue | 63.8 | 63.8 | 0.0 |
| 3 | Leorita Street | Bess Avenue | Dalewood Street | 63.0 | 63.0 | 0.0 |
| 4 | Dalewood Street | Frazier Street | Baldwin Park Avenue | 67.5 | 67.5 | 0.0 |

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise lev

# Appendix 2C - 1

## Traffic Noise Model Calculations

**Project:** 14416 Kaiser Baldwin Park

**Noise Level Descriptor:** CNEL
**Site Conditions:** Hard
**Traffic Input:** Peak
**Traffic K-Factor:** 10

| | Segment Description and Location | | | Input | | | | | | | | | | Output | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Distance to Directional Centerline, (feet)[4] | | Traffic Distribution Characteristics | | | | | | CNEL, | Distance to Contour, (feet)[3] | | | |
| Number | Name | From | To | Peak Hour Volume | Speed (mph) | Near | Far | % Auto | % Med | % Hvy | % Day | % Eve | % Night | (dBA)[5,6,7] | 70 dBA | 65 dBA | 60 dBA | 55 dBA |
| **Existing Conditions** | | | | | | | | | | | | | | | | | | |
| 1 | Baldwin Park Boulevard | Amar Road | Dalewood Street | 2,580 | 40 | 43 | 84 | 93.0% | 6.0% | 1.0% | 80.0% | 5.0% | 15.0% | 71.9 | 93 | 293 | 925 | 2925 |
| 2 | Bess Avenue | Frazier Street | Baldwin Park Avenue | 540 | 30 | 31 | 50 | 93.0% | 6.0% | 1.0% | 80.0% | 5.0% | 15.0% | 63.8 | 9 | 30 | 95 | 300 |
| 3 | Leorita Street | Bess Avenue | Dalewood Street | 540 | 25 | 27 | 42 | 93.0% | 6.0% | 1.0% | 80.0% | 5.0% | 15.0% | 63.0 | 7 | 21 | 68 | 215 |
| 4 | Dalewood Street | Frazier Street | Baldwin Park Avenue | 1,200 | 35 | 46 | 58 | 93.0% | 6.0% | 1.0% | 80.0% | 5.0% | 15.0% | 67.5 | 29 | 92 | 292 | 924 |

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

# Appendix 2C - 2

## Traffic Noise Model Calculations

**Project:** **14416 Kaiser Baldwin Park**

**Noise Level Descriptor:** CNEL
**Site Conditions:** Hard
**Traffic Input:** Peak
**Traffic K-Factor:** 10

| | Segment Description and Location | | | Input | | | | | | | | | | Output | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Distance to Directional Centerline, (feet)[4] | | Traffic Distribution Characteristics | | | | | | CNEL, | Distance to Contour, (feet)[3] | | | |
| Number | Name | From | To | Peak Hour Volume | Speed (mph) | Near | Far | % Auto | % Med | % Hvy | % Day | % Eve | % Night | (dBA)[5,6,7] | 70 dBA | 65 dBA | 60 dBA | 55 dBA |
| **Existing + Project Conditions** | | | | | | | | | | | | | | | | | | |
| 1 | Baldwin Park Boulevard | Amar Road | Dalewood Street | 2,580 | 40 | 43 | 84 | 93.0% | 6.0% | 1.0% | 80.0% | 5.0% | 15.0% | 71.9 | 93 | 293 | 925 | 2925 |
| 2 | Bess Avenue | Frazier Street | Baldwin Park Avenue | 540 | 30 | 31 | 50 | 93.0% | 6.0% | 1.0% | 80.0% | 5.0% | 15.0% | 63.8 | 9 | 30 | 95 | 300 |
| 3 | Leorita Street | Bess Avenue | Dalewood Street | 540 | 25 | 27 | 42 | 93.0% | 6.0% | 1.0% | 80.0% | 5.0% | 15.0% | 63.0 | 7 | 21 | 68 | 215 |
| 4 | Dalewood Street | Frazier Street | Baldwin Park Avenue | 1,191 | 35 | 46 | 58 | 93.0% | 6.0% | 1.0% | 80.0% | 5.0% | 15.0% | 67.5 | 29 | 92 | 290 | 917 |

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

# Appendix H

Transportation Assessment Report

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San Diego

# TRANSPORTATION ASSESSMENT REPORT

# KAISER PERMANENTE BALDWIN PARK MEDICAL CENTER PROJECT

**City of Baldwin Park, California**
**October 7, 2022**

*Prepared for:*

**Kaiser Foundation Health Plan, Inc.**
National Facilities Services, Southern California
393 East Walnut Street, 4th Floor 043W03
Pasadena, California 91188

LLG Ref. 1-14-4109-3

*Prepared by:*

Francesca S. Bravo
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Senior Transportation Engineer

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**TRANSPORTATION ASSESSMENT REPORT**

# KAISER PERMANENTE BALDWIN PARK MEDICAL CENTER PROJECT

**City of Baldwin Park, California**
**October 7, 2022**

## 1.0 INTRODUCTION

### 1.1 Transportation Assessment Overview

This transportation assessment report has been prepared to identify and evaluate the potential transportation impacts of the proposed Kaiser Permanente Baldwin Park Medical Center (BPMC) project ("proposed project"). The Kaiser Permanente BPMC campus is located at 1011 Baldwin Park Boulevard in the City of Baldwin Park, California. The Kaiser Permanente BPMC campus is generally bounded by Dalewood Street and I-10 Freeway to the north, Bess Avenue to the south, Baldwin Park Boulevard to the east, and Leorita Street to the west. The proposed Kaiser Permanente BPMC MOB project and general vicinity are shown in ***Figure 1-1***.

The transportation impact analysis follows the *City of Baldwin Park Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment*[1] ("Guidelines"). The City Guidelines are focused on transportation metrics that promote: the reduction of greenhouse gas emissions, the development of multimodal networks and access to diverse land uses, as well as safety, sustainability and smart growth. In compliance with the California Environmental Quality Act (CEQA), the City Guidelines identify vehicle miles traveled (VMT) as the primary metric for evaluating a project's transportation impacts. In addition, the City requires non-CEQA intersection Level of Service (LOS) analysis evaluating potential project-related effects at key intersections in the vicinity of the project site.

This assessment report (i) presents the proposed project's existing transportation network context, (ii) forecasts project-generated traffic, (iii) presents a CEQA assessment of project-related VMT, (iv) provides a non-CEQA evaluation of project access and circulation, and (v) recommends VMT-reducing measures or other transportation network improvement measures, where necessary.

### 1.2 Study Methodology

The CEQA and non-CEQA analysis criteria for this transportation assessment were identified in consultation with the City of Baldwin Park staff. The analysis criteria were determined based on the City's Guidelines, the proposed project description and location, and the characteristics of the surrounding transportation system. A total of two study intersections have been identified for evaluation during the weekday morning and afternoon peak hours. The study intersections provide

[1] *City of Baldwin Park Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment,"* September 2020.

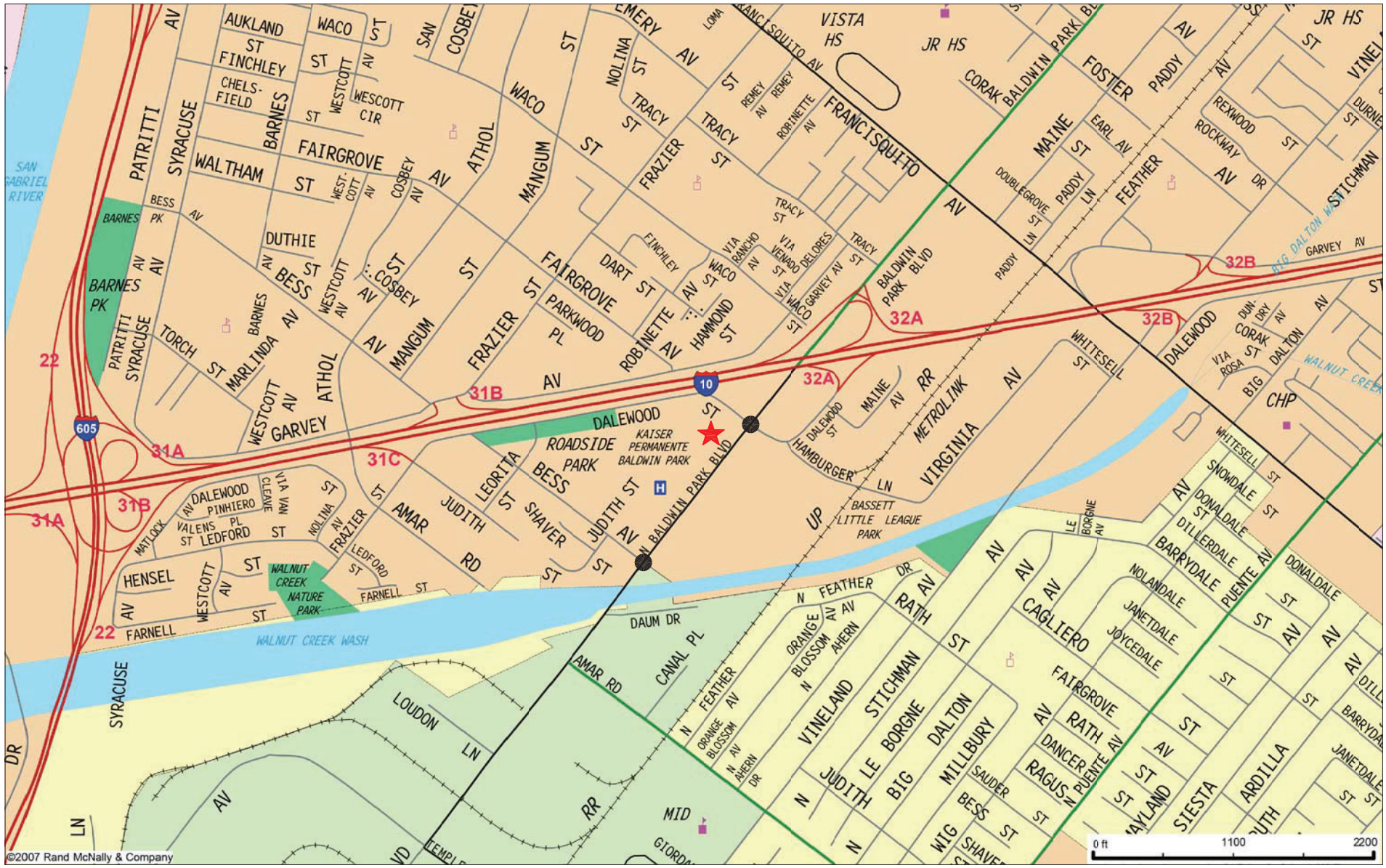


Figure 1-1
Vicinity Map

Kaiser Permanente Baldwin Park Medical Center Project

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local access to the study area and define the extent of the boundaries for this transportation impact analysis.

## 1.3 Los Angeles County Congestion Management Program Status

The Los Angeles County Congestion Management Program (CMP) was previously a state-mandated program that was enacted by the California State Legislature with the passage of Proposition 111 in 1990 that primarily utilized a level of service (LOS) performance metric. Pursuant to California Government Code §65088.3, local jurisdictions may opt out of the CMP requirement without penalty if a majority of the local jurisdictions representing a majority of the County's population formally adopt resolutions requesting to opt out of the program. As stated in a letter from the Los Angeles County Metropolitan Transportation Authority (Metro)[2], by August 28, 2019 fifty-seven local jurisdictions, which in total represent 8.5 million in population, had adopted resolutions electing to be exempt from the CMP. With the Los Angeles County region having reached the statutorily required threshold, the provisions of the CMP are no longer applicable to any of the 89 local jurisdictions within Los Angeles County, regardless of whether or not a jurisdiction adopted an opt-out resolution. Therefore, CMP Traffic Impact Analysis is no longer required.

[2] Kalieh Honish, Los Angeles County Metropolitan Transportation Authority, to Seleta Reynolds, City of Los Angeles Department of Transportation, "Re: Dissolution of the Congestion Management Program in Los Angeles County", August 28, 2019.

# 2.0 PROJECT DESCRIPTION

## 2.1 Existing Kaiser Permanente BPMC Campus

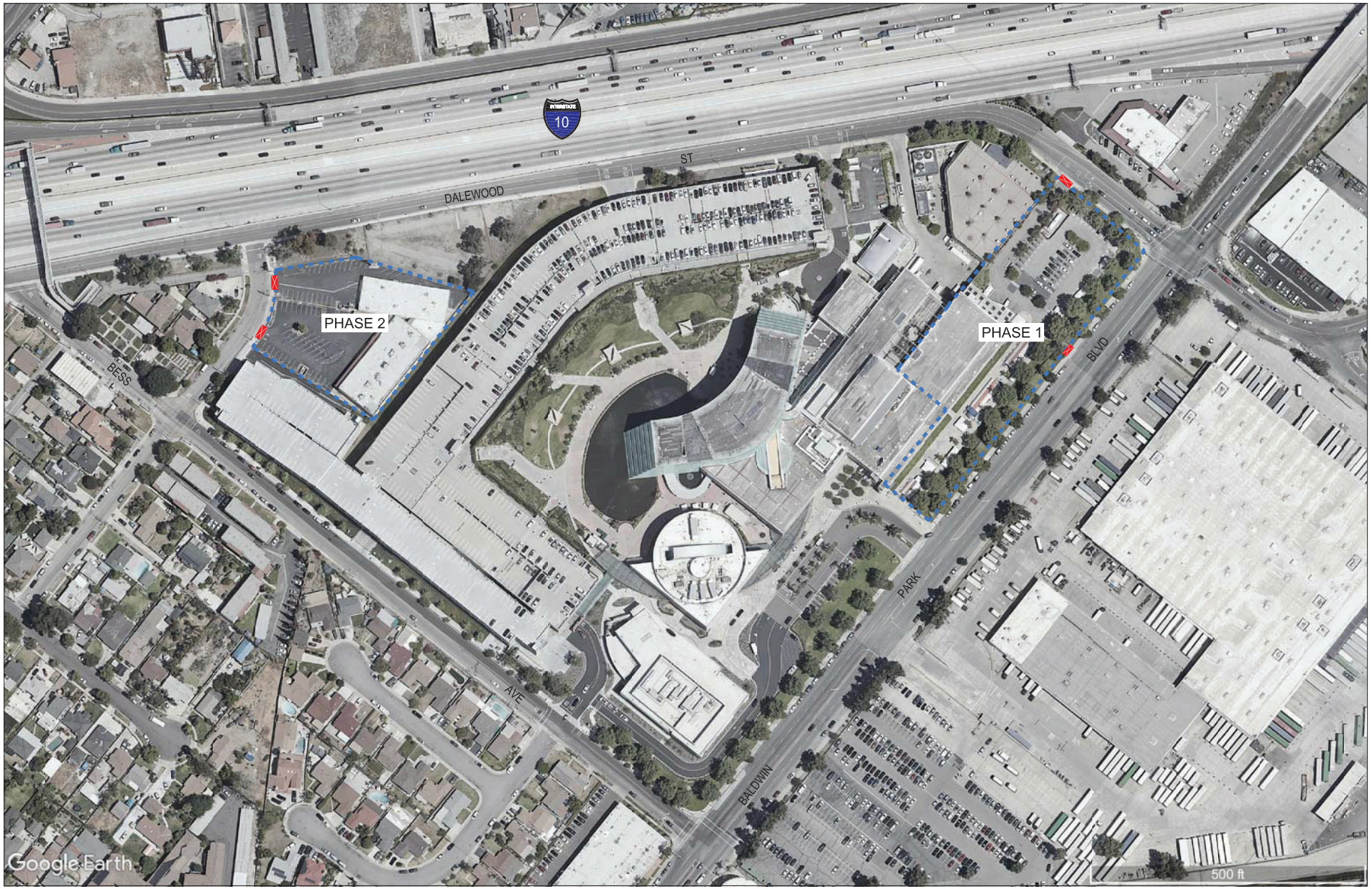
The Kaiser Permanente BPMC campus is located at 1011 Baldwin Park Boulevard. The Kaiser Permanente BPMC campus is generally bounded by Dalewood Street and I-10 Freeway to the north, Bess Avenue to the south, Baldwin Park Boulevard to the east, and Leorita Street to the west. The proposed Kaiser Permanente BPMC MOB project and general vicinity are shown in *Figure 1-1*.

The Kaiser Permanente BPMC is a major medical center that provides medical and health care service on a local and regional basis. It includes an emergency department, inpatient care, outpatient treatment, and other medical center facilities. The BPMC campus is owned and operated by Kaiser Permanente, one of the nation's largest not-for-profit health plans, currently serving approximately 10 million members, with headquarters in Oakland, California. The Kaiser Permanente BPMC campus currently consists of a 272-bed hospital, approximately 419,000 square feet of medical office, and associated surface and structured parking. The Kaiser Permanente BPMC campus including hospital/medical-related buildings and parking facilities are highlighted in the aerial photograph presented in ***Figure 2-1***.

## 2.2 Proposed Project Description

The proposed project consists of the development of a two-phased project at the existing Kaiser Permanente BPMC campus. The first phase (Phase 1) is the construction of an expansion to the existing hospital emergency department (ED) located on the northeast portion of the Kaiser campus. Expansion of the emergency department would add approximately 23,000 square feet resulting in a total square footage of approximately 40,000 square feet, expand the number of existing treatment bays from 38 to 60, a new ambulance canopy with four ambulance parking spaces, and tenant improvements within the existing emergency department. This addition will not add hospital bed licenses under the California Department of Health Care Access and Information (HCAI), formerly the Office of Statewide Health Planning and Development (OSHPD). The expansion and improvement of the emergency department would allow better functionality within the emergency department and eliminate existing and projected treatment bay deficits in compliance with current OSHPD space requirements and standards. A total of 37 additional full-time employees are estimated as part of the expansion. The Phase 1 project would also include the demolition of existing structures at 1022 Leorita Street (referred to as the "Broken Horn" site) with existing 68 parking spaces to remain. The "Broken Horn" site will remain gated until such time that the Phase 2 project construction will commence. Construction of the Phase 1 project is expected to commence in year 2023 with occupancy in the year 2026.

The second phase of the project (Phase 2) would consist of the construction of an approximately 33,000 square foot medical office building (MOB). This component would expand the boundary of the medical campus to include the adjacent parcel to the northwest of the campus located at 1022 Leorita Street. The development of this site (the "Broken Horn" site) would require the demolition of the existing 23,040 square foot retail building under the Phase 1 project. A total of 80 parking




N

MAP SOURCE: GOOGLE EARTH PRO

Project Site

Existing Driveway

LINSCOTT LAW & GREENSPAN engineers

Figure 2-1
Aerial Photograph of the Existing Project Site

Kaiser Permanente Baldwin Park Medical Center Project

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spaces is planned to be provided at this site upon completion. Construction of the Phase 2 project is expected to commence in year 2028 with occupancy in the year 2029. The proposed campus site plan is illustrated in ***Figure 2-2***.

## 2.3 Project Site Access

### 2.3.1 *Vehicular Site Access*

Vehicular access to the Kaiser Permanente BPMC campus is primarily provided via four roadways: Baldwin Park Boulevard, Dalewood Street, Bess Avenue, and Leorita Street. As noted in *Figure 2-1*, campus driveways (i.e., BPMC driveways on bordering roadways) are provided on all four adjoining roadways. All of the campus driveways provide access to parking facilities and hospital/medical office buildings that are situated within the BPMC campus. There are no changes to the BPMC campus key access intersections and driveways planned as part of the proposed Kaiser Permanente BPMC project. Brief descriptions of the site access for the ED and the Leorita site are provided in the following paragraphs.

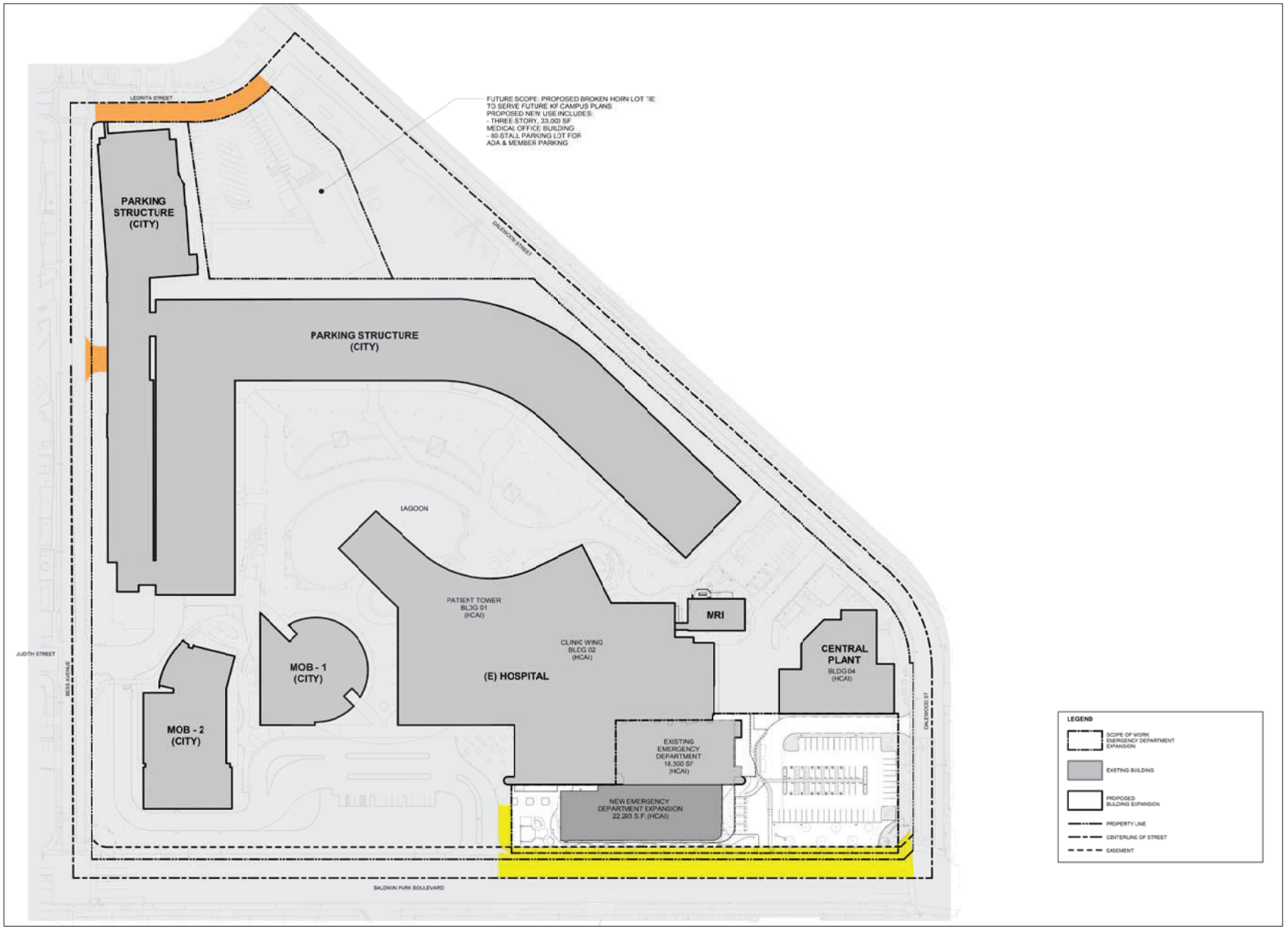
- Emergency Department Vehicular Access. Main vehicular access to the Emergency Department for patients and visitors will continue to be provided via two driveways: one entrance only driveway on Baldwin Park Boulevard and one driveway on Dalewood Street. The existing Baldwin Park ED driveway is located along the north side of Baldwin Park Boulevard and will continue to accommodate left-turn and right-turn ingress movements. The existing Dalewood Street driveway is located along the west side of Dalewood Street and will continue to accommodate full access (i.e., left-turn and right-turn ingress and egress movements). ED staff will continue to park at the designated parking spaces within the existing parking structure.

  Ambulance access will also be provided via the existing Baldwin Park Boulevard ED driveway. As noted previously, a new ambulance canopy with four ambulance parking spaces will be constructed as part of the Phase 1 project.

- Leorita Street Site Vehicular Access. Main vehicular access to the Leorita Street site will continue to be provided via two driveways on Leorita Street. The existing Leorita Street Driveways are located along the south side of Leorita Street and will continue to accommodate full access (i.e., right-turn and left-turn ingress and egress turning movements). It is anticipated that patients and staff will have access to the existing campus parking structure.

### 2.3.2 *Non-Vehicular Site Access*

Pedestrian access to the project site will be accommodated via the existing public sidewalks and pedestrian facilities provided along Baldwin Park Boulevard, Dalewood Street, and Leorita Street. Pedestrian pathways will be constructed on-site and will connect to the existing pedestrian facilities along Baldwin Park Boulevard, Dalewood Street, and Leorita Street. Pedestrian access within the project site will be accommodated by walkways that will connect the building entrances to the public




MAP SOURCE: HMC ARCHITECTS

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Figure 2-2
Site Plan

right-of-way. This walkway will provide exclusive pedestrian and bicycle access from the public sidewalks to the proposed project, thus minimizing the extent of pedestrian and bicycle interaction with vehicles at the site and providing a comfortable, convenient, and safe environment for pedestrians and bicyclists to access the proposed project from the public right-of-way. Pedestrian access to and from the project site as well as within the project is illustrated in *Figure 2-2*.

## 2.4 Project Trip Generation and Distribution

### 2.4.1 *Project Trip Generation Forecast*

Traffic trip generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Traffic volumes to be generated by the proposed project were forecast for the weekday AM and PM peak hours, and over a 24-hour period. Trip generation rates provided in the ITE's *Trip Generation Manual*[3] were utilized to forecast project traffic generation for the proposed project. Traffic volumes expected to be generated by the project's hospital and medical office components were based upon the following ITE trip generation average rates:

- ITE Land Use Code 610: Hospital
- ITE Land Use Code 720: Medical-Dental Office Building

In addition to the proposed project trip generation forecasts, forecasts also were made for the existing retail land use located on the 1022 Leorita Street development site (Phase 2) which will be demolished as part of the project. ITE Land Use Code 822 (Strip Retail Plaza) trip generation average rates were used to forecast the traffic volumes expected to be generated by the existing retail use during the weekday AM and PM peak hours.

### 2.4.2 *Phase 1 Project Trip Generation*

The trip generation rates and forecast of the vehicular trips anticipated to be generated by the Phase 1 project are presented in ***Table 2-1***. As summarized in *Table 2-1*, the Phase 1 project is expected to generate 10 vehicle trips (7 inbound trips and 3 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Phase 1 project is expected to generate 10 vehicle trips (3 inbound trips and 7 outbound trips). Over a 24-hour period, the Phase 1 project is forecast to generate 139 vehicle trips (70 inbound trips and 70 outbound trips) during a typical weekday.

### 2.4.3 *Phase 2 Project Trip Generation*

The trip generation rates and forecast of the vehicular trips anticipated to be generated by the Phase 2 project are also presented in *Table 2-1*. As summarized in *Table 2-1*, the Phase 2 project is expected to generate a net increase of 34 trips (39 inbound trips and 5 fewer outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Phase 2 project is expected to generate a net decrease of 58 trips (52 fewer inbound trips and 6 fewer outbound trips). Over a 24-

[3] Institute of Transportation Engineers *Trip Generation Manual*, 11th Edition, Washington, D.C., 2021.

**Table 2-1**
**PROJECT TRIP GENERATION [1]**

| LAND USE | SIZE | DAILY TRIP ENDS [2] VOLUMES | AM PEAK HOUR VOLUMES [2] IN | AM PEAK HOUR VOLUMES [2] OUT | AM PEAK HOUR VOLUMES [2] TOTAL | PM PEAK HOUR VOLUMES [2] IN | PM PEAK HOUR VOLUMES [2] OUT | PM PEAK HOUR VOLUMES [2] TOTAL |
|---|---|---|---|---|---|---|---|---|
| ***Phase 1 Project*** | | | | | | | | |
| Hospital [3] | 37 Employees | 139 | 7 | 3 | 10 | 3 | 7 | 10 |
| ***Subtotal Phase 1 Project*** | | **139** | **7** | **3** | **10** | **3** | **7** | **10** |
| ***Phase 2 Project*** | | | | | | | | |
| Medical Office Building [4] | 33,000 GSF | 1,051 | 71 | 17 | 88 | 24 | 70 | 94 |
| ***Less Existing Use*** | | | | | | | | |
| Retail [5] | (23,040) GSF | (1,255) | (32) | (22) | (54) | (76) | (76) | (152) |
| ***Subtotal Phase 2 Project*** | | **(204)** | **39** | **(5)** | **34** | **(52)** | **(6)** | **(58)** |
| | | | | | | | | |
| **TOTAL TRIPS (Phases 1 and 2)** | | **(65)** | **46** | **(2)** | **44** | **(49)** | **1** | **(48)** |

[1] Source: ITE "Trip Generation Manual", 11th Edition, 2021.

[2] Trips are one-way traffic movements, entering or leaving.

[3] ITE Land Use Code 610 (Hospital) trip generation average rates.
- Daily Trip Rate: 3.77 trips/employee; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.28 trips/employee; 72% inbound/28% outbound
- PM Peak Hour Trip Rate: 0.28 trips/employee; 30% inbound/70% outbound

[4] ITE Land Use Code 720 (Medical-Dental Office Building) trip generation average rates.
- Daily Trip Rate: 31.86 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 2.68 trips/1,000 SF of floor area; 81% inbound/19% outbound
- PM Peak Hour Trip Rate: 2.84 trips/1,000 SF of floor area; 25% inbound/75% outbound

[5] ITE Land Use Code 822 (Strip Retail Plaza) trip generation average rates.
- Daily Trip Rate: 54.45 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 2.36 trips/1,000 SF of floor area; 60% inbound/40% outbound
- PM Peak Hour Trip Rate: 6.59 trips/1,000 SF of floor area; 50% inbound/50% outbound

hour period, the Phase 2 project is forecast to generate a net decrease of 204 trips (102 fewer inbound trips and 102 fewer outbound trips) during a typical weekday.

### 2.4.4 *Project Build-out Trip Generation*

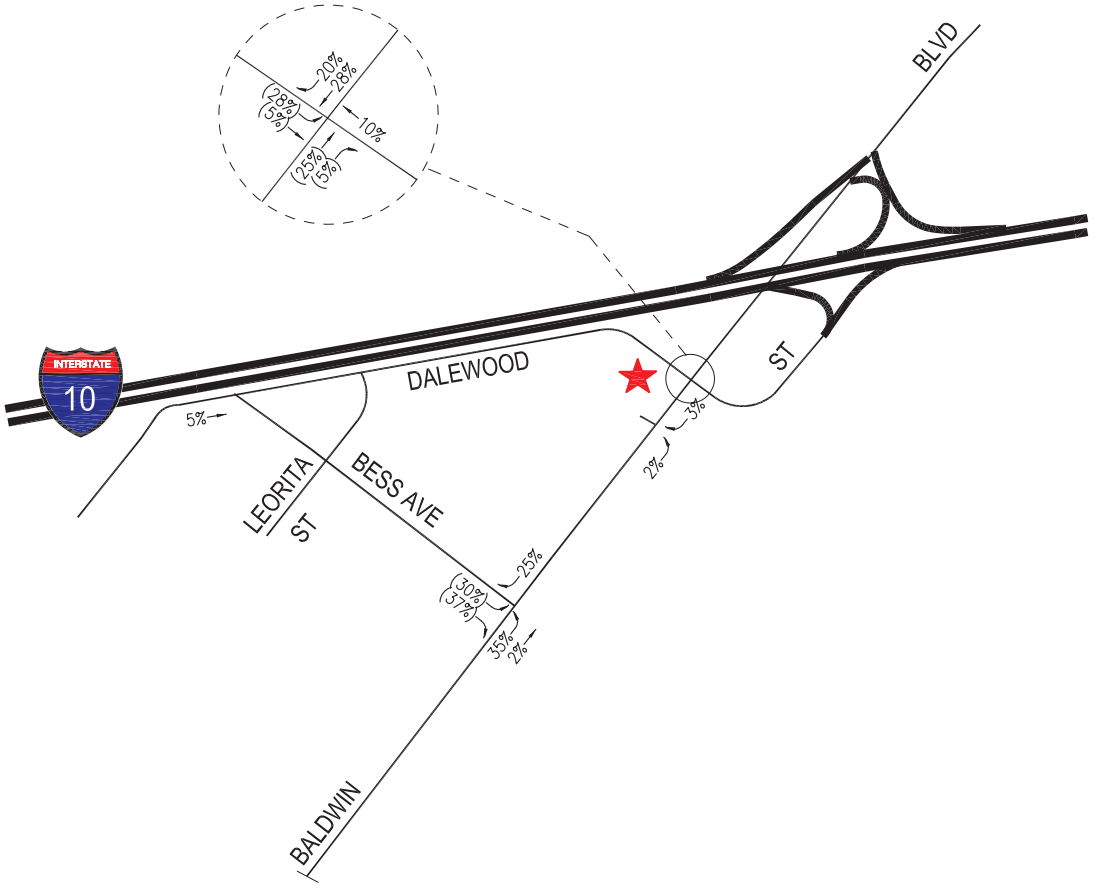
As also shown in *Table 2-1*, the proposed project at build-out is forecast to generate a net increase of 44 trips (46 inbound trips and 2 fewer outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project at build-out is expected to generate a net decrease of 48 trips (49 fewer inbound trips and 1 outbound trip). Over a 24-hour period, the proposed project is forecast to generate a net decrease of 65 trips (33 fewer inbound trips and 33 fewer outbound trips) during a typical weekday.

### 2.4.5 *Project Trip Distribution and Assignment*

Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- The site's proximity to major traffic corridors (i.e., I-10 Freeway and Baldwin Park Boulevard, etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Existing BPMC campus site access ingress/egress schemes; and
- Nearby population and employment centers.

The general, directional traffic distribution pattern for the Phase 1 project is presented in ***Figure 2-3***. The general, directional traffic distribution pattern for the Phase 2 project is presented in ***Figure 2-4***. The forecast net weekday AM and PM peak hour project traffic volumes at the study intersections associated with the proposed project at build-out are presented in ***Figures 2-5*** and ***2-6***, respectively. The traffic volume assignments presented in *Figures 2-5* and *2-6* reflect the traffic distribution characteristics shown in *Figures 2-3* and *2-4* and the project trip generation forecasts presented in *Table 2-1*.

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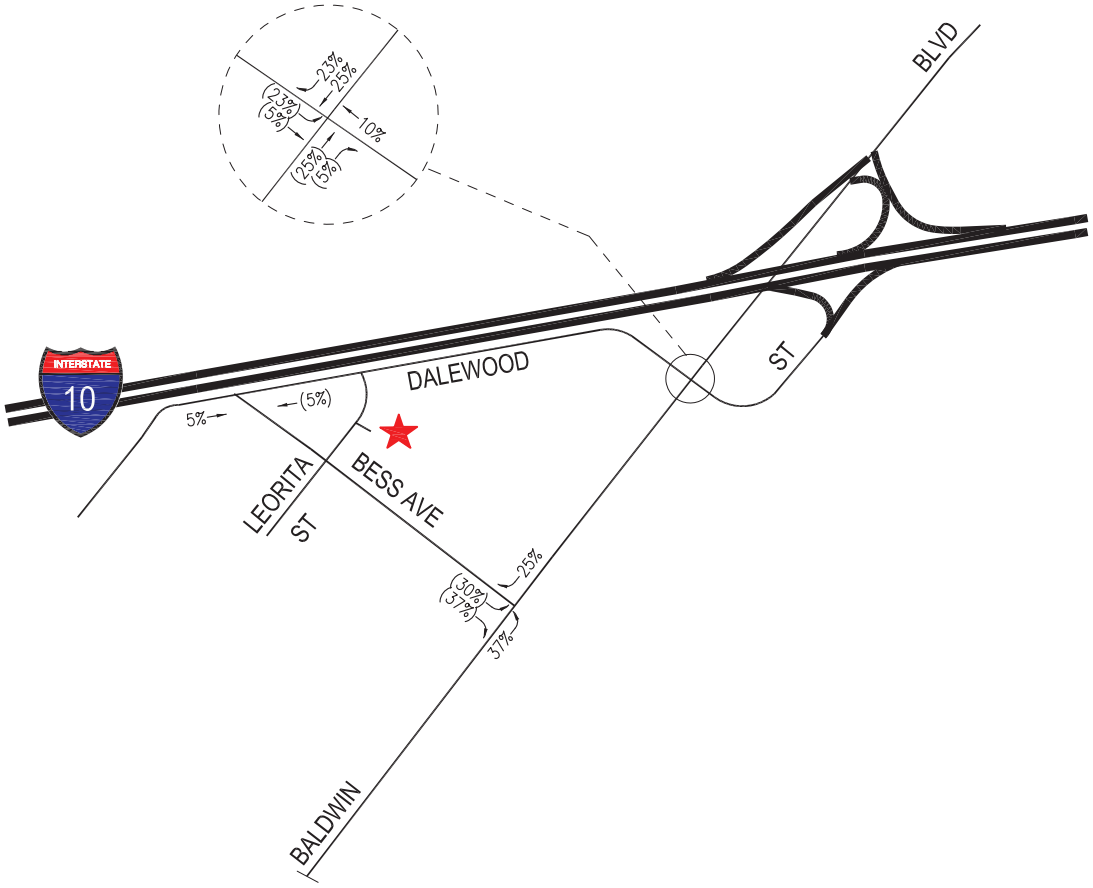
Project Site

XX = Inbound Percentage

(XX) = Outbound Percentage

Figure 2-3
Phase 1 Project Trip Distribution

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Project Site

XX = Inbound Percentage

(XX) = Outbound Percentage

Figure 2-4
Phase 2 Project Trip Distribution

Kaiser Permanente Baldwin Park Medical Center Project



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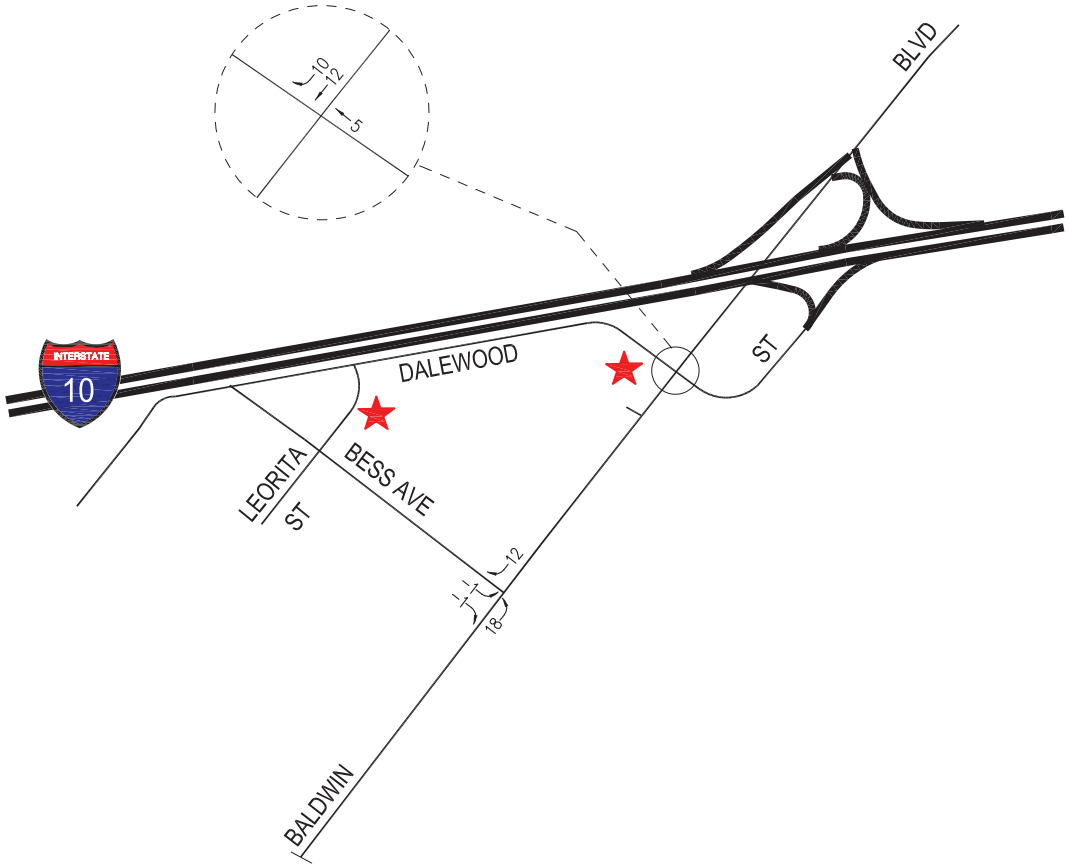


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Project Site

Figure 2-5
Net New Project Traffic Volumes
Weekday AM Peak Hour
Kaiser Permanente Baldwin Park Medical Center Project

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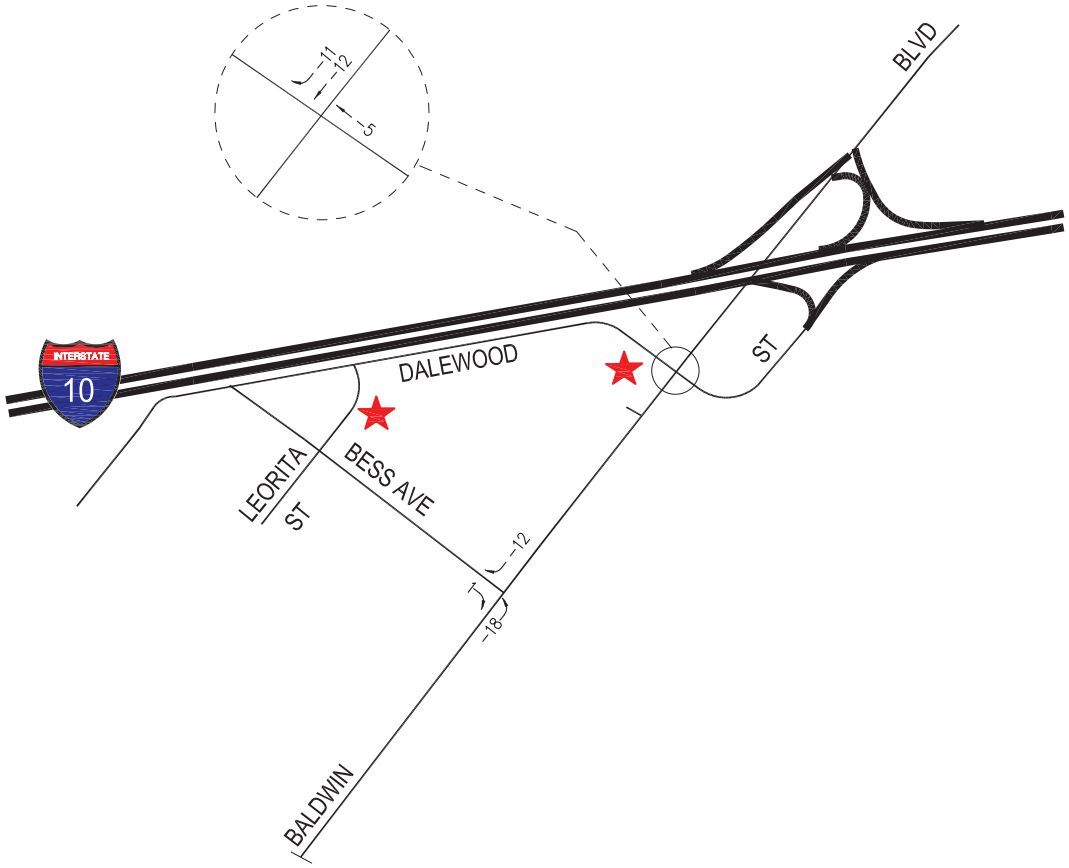


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Project Site

Figure 2-6
Net New Project Traffic Volumes
Weekday PM Peak Hour
Kaiser Permanente Baldwin Park Medical Center Project

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# 3.0 PROJECT SITE CONTEXT

The following sections provide an overview of the transportation infrastructure in the vicinity of the proposed project, including infrastructure which supports both motorized and non-motorized transportation modes.

## 3.1 Non-Vehicle Network

Non-vehicular transportation generally encompasses walking, biking, and other active transportation modes. Distinct facilities are often provided for these non-vehicular modes. Most prominently, paved sidewalks are typically provided to facilitate pedestrian travel outside of the roadway. In some cases, bicycle facilities such as painted bike lanes or separated bike paths are provided within the roadway in order to separate bike traffic from vehicular traffic. Roadways which are designed to prioritize non-vehicular transportation modes utilize complimentary non-vehicular infrastructure in order to promote comfortable, safe travel for both pedestrians and bicyclists. A review of the pedestrian and bicycle infrastructure provided in the vicinity of the project site is provided below.

### 3.1.1 *Pedestrian System*

Public sidewalks and pedestrian facilities are provided on all streets within the project vicinity. ***Figure 3-1*** shows the existing pedestrian and transit facilities near the project site. The proposed project is designed to encourage pedestrian activity and walking as a transportation mode with a Walkability score for the project site of approximately 54 (Somewhat Walkable) out of 100.[4] As indicated in *Figure 2–2*, walkways are planned within the proposed project which will connect to adjacent sidewalks in a manner that promotes walkability. Walkability is a term for the extent to which walking is readily available as a safe, connected, accessible and pleasant mode of transport. There are several criteria that are widely accepted as key aspects of the walkability of urban areas that should be satisfied. The underlying principle is that pedestrians should not be delayed, diverted, or placed in danger. The widely accepted characteristics of walkability are as follows:

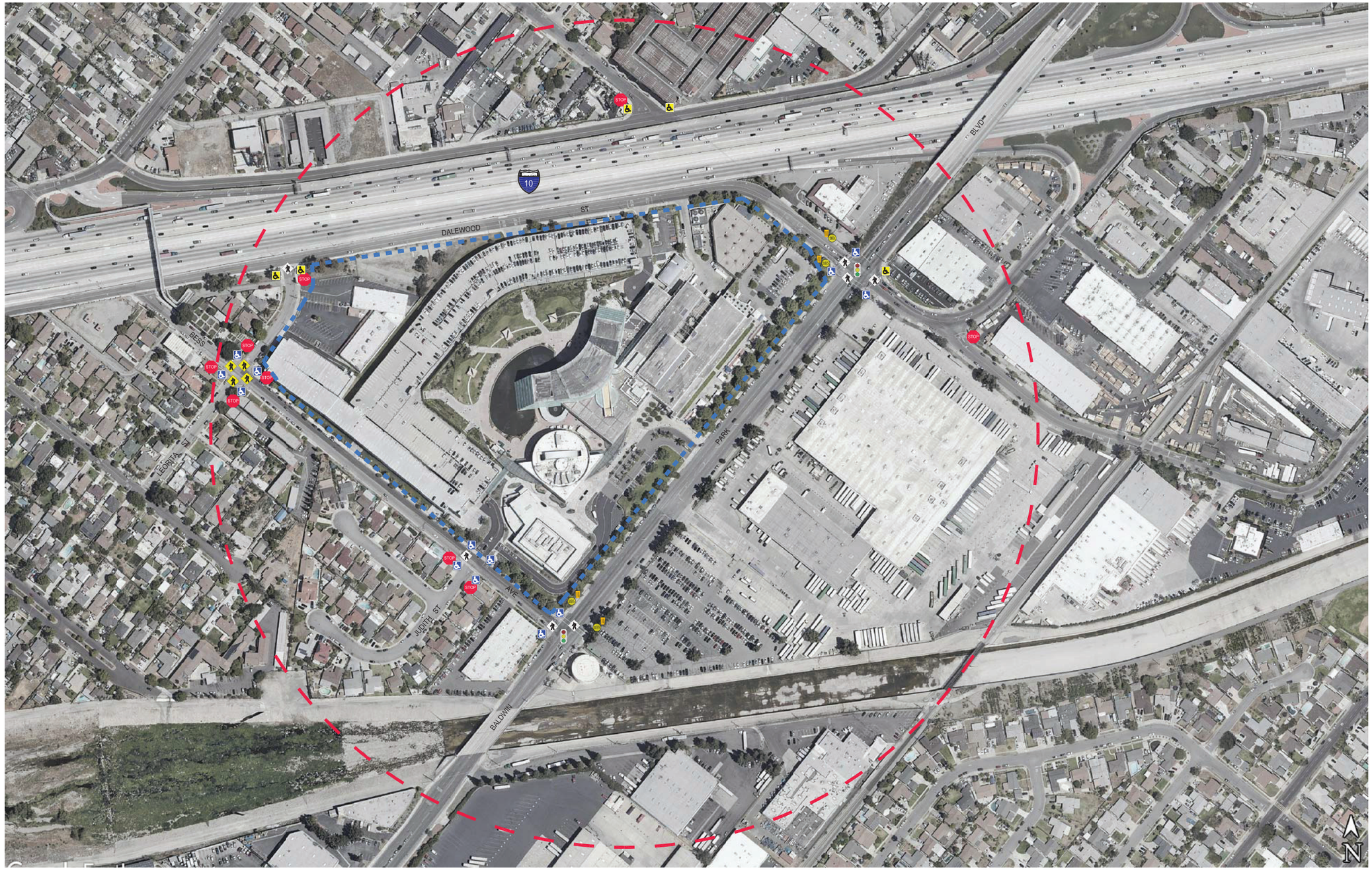
- Connectivity: People can walk from one place to another without encountering major obstacles, obstructions, or loss of connectivity.

- Convivial: Pedestrian routes are friendly and attractive, and are perceived as such by pedestrians.

- Conspicuous: Suitable levels of lighting, visibility and surveillance over its entire length, with high quality delineation and signage.

- Comfortable: High quality and well-maintained footpaths of suitable widths, attractive landscaping and architecture, shelter and rest spaces, and a suitable allocation of roadspace to pedestrians.

[4] Refer to http://www.walkscore.com/, which generates the walkability score for the project site. Walk Score calculates the walkability of an address by locating nearby stores, restaurants, schools, parks, etc. Walk Score measures how easy it is to live a car-lite lifestyle.

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NO SCALE

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- SITE
- SIGNAL
- STOP SIGN
- 0.25 MILE RADIUS FROM PROJECT SITE
- ADA
- ADA YELLOW TRUNCATED DOME
- CROSSWALK
- CROSSWALK YELLOW
- BENCH
- BIKE RACK
- BUS STOP
- BUS STOP WITH BUS BENCH
- BUS STOP WITH BUS BENCH & SHELTER
- BIKE ROUTE/LANE
- MAIL BOX
- TRASH

Figure 3-1
Existing Nearby Pedestrian & Transit Facilities

Kaiser Permanente Baldwin Park Medical Center Project



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- Convenient: Walking is a realistic travel choice, partly because of the impact of the other criteria set forth above, but also because walking routes are of a suitable length as a result of land use planning with minimal delays.

A review of the proposed project pedestrian walkways indicates that these primary characteristics are accommodated within the project. Proposed project features would include landscaped pedestrian walkways connecting facilities within the site, as well as connections with the adjacent public sidewalks on the Baldwin Park Boulevard, Dalewood Street and Leorita Street project frontages for access to nearby pedestrian and transit facilities. In addition, project signage could include general ground level and wayfinding pedestrian signage around the perimeter of the project site, building identification signs, and other sign types. Wayfinding signs would be located at access points to the on-site amenities and facilities, and parking areas.

### 3.1.2 *Bicycle System*

Bicycle infrastructure consists of both facilities within the roadway as well as public bicycle parking spaces. The Federal and State transportation systems recognize three primary bikeway facilities: Bicycle Paths (Class I), Bicycle Lanes (Class II), and Bicycle Routes (Class III). Bicycle Paths (Class I) are exclusive car-free facilities that are typically not located within a roadway area. Bicycle Lanes (Class II) are part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Bicycle Routes (Class III) are preferably located on collector and lower volume arterial streets.

Bicycle access to the project site will be facilitated by the City's bicycle roadway network. Walk Score calculates a bike score based on the topography, number and proximity of bike lanes, etc., and generates a bike score for the project site of approximately 49 (Somewhat Bikeable) out of 100[5] Proposed bicycle facilities (e.g., Class I Bicycle Path, Class II Bicycle Lanes, Class III Bicycle Routes, etc.) identified in the City's General Plan Circulation Element[6] will be located within the project study area. The location of the proposed bicycle lane network for the City in close proximity to the project site and in the surrounding area is illustrated in ***Figure 3-2***. As shown in *Figure 3-2*, a Class III Bicycle Route is proposed for Baldwin Park Boulevard between Ramona Boulevard and City Limits.

## 3.2 Transit Network

Public bus and rail transit service within the project study area is currently provided by Foothill Transit, Baldwin Park Transit and Metrolink. The existing public transit routes in the project site vicinity are illustrated in ***Figure 3–3***. A summary of the existing transit service, including the transit route, destinations and peak hour headways is presented in ***Table 3–1***. As summarized in *Table 3-1*, a total of four public transit routes provide service near the project site.

[5] Refer to http://www.walkscore.com/, which generates a bike score for the project site. Walk Score calculates the bike score of an address by locating nearby bicycling facilities as well as connections to bus/rail transit routes and stops. Walk Score measures how easy it is to live a car-lite lifestyle.
[6] City of Baldwin Park 2020 Non-Motorized Transportation Plan, September 2020.

MAP SOURCE: SAN GABRIEL VALLEY REGIONAL BICYCLE MASTER PLAN, NOVEMBER 2014

★ Project Site

Figure 3-2
Existing and Proposed Bicycle Network

Kaiser Permanente Baldwin Park Medical Center Project

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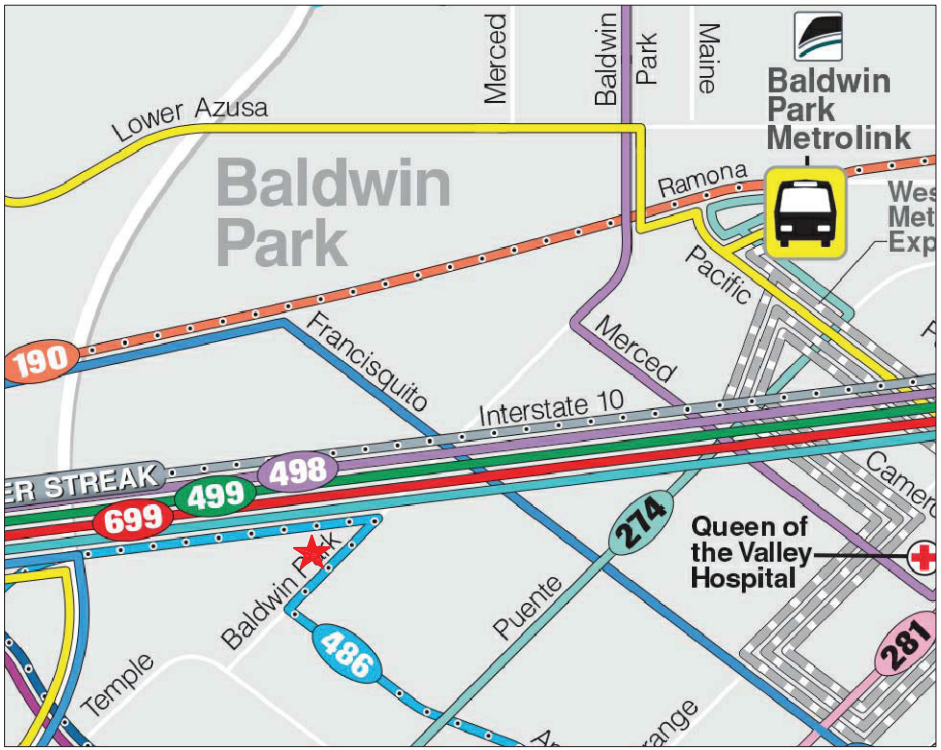
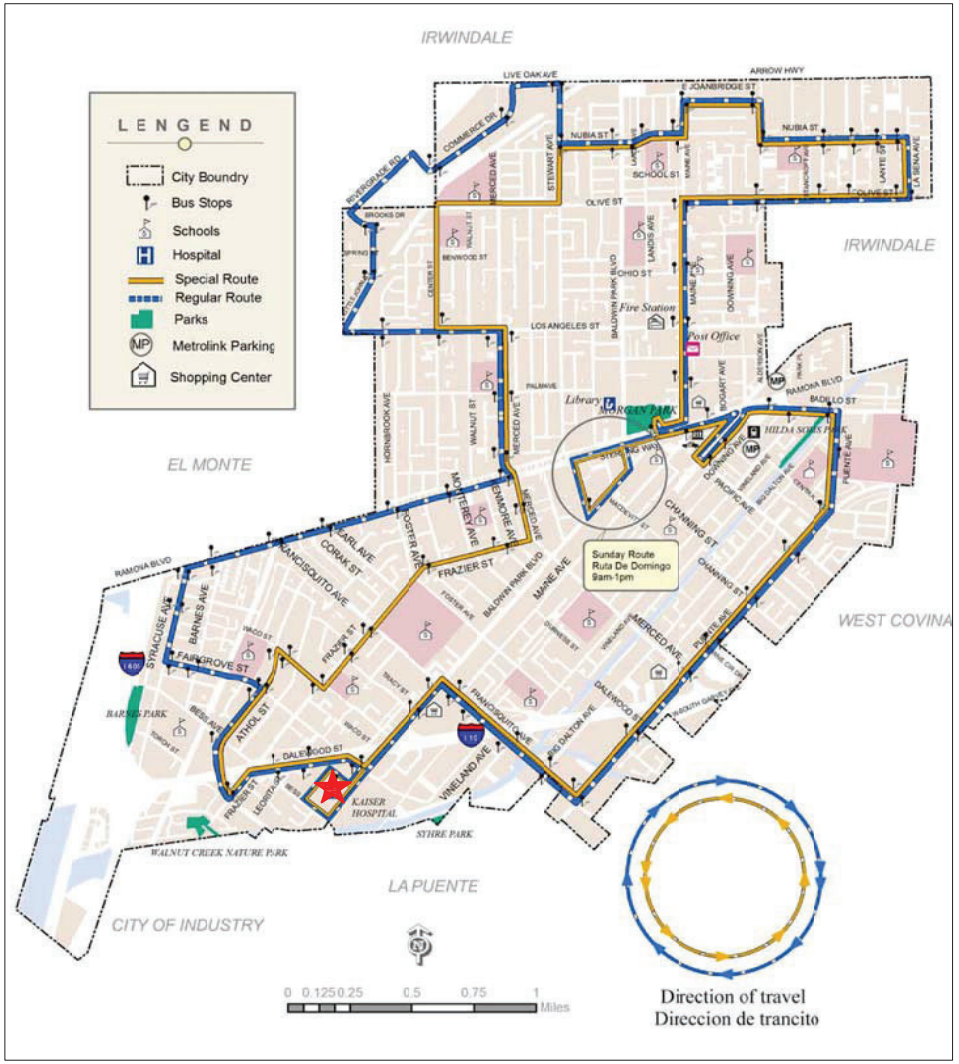



MAP SOURCE: FOOTHILL TRANSIT




MAP SOURCE: CITY OF BALDWIN PARK

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Project Site

# Figure 3-3
# Existing Transit Routes

Kaiser Permanente Baldwin Park Medical Center Project

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**Table 3-1**
**EXISTING TRANSIT ROUTES [1]**

| ROUTE | DESTINATIONS | ROADWAY(S) NEAR SITE | NO. OF BUSES DURING PEAK HOUR | | |
|---|---|---|---|---|---|
| | | | DIR | AM | PM |
| FT 486 | El Monte Station to Pomona via Baldwin Park, Valinda, La Puente, Walnut | Baldwin Park Boulevard, Bess Avenue | EB<br>WB | 4<br>8 | 3<br>3 |
| BP Express | Kaiser Hospital to Metrolink Station | Dalewood Street, Baldwin Park Boulevard, Bess Avenue | NB<br>SB | 4<br>4 | 3<br>2 |
| BP Teal Line | Circular Metrolink Station to Kaiser Hospital to north Baldwin Park | Dalewood Street, Baldwin Park Boulevard, Bess Avenue | NB<br>SB | 2<br>0 | 1<br>0 |
| BP Pumpkin Line | Circular Metrolink Station to Kaiser Hospital to north Baldwin Park | Dalewood Street, Baldwin Park Boulevard, Bess Avenue | NB<br>SB | 0<br>2 | 0<br>1 |
| **TOTAL** | | | | 24 | 13 |

[1] Sources: City of Baldwin Park Transit, Express and Foothill Transit websites, 2022.

The Metrolink is a regional rail system that serves Southern California. The Metrolink San Bernardino Line, located west of the project site, runs from downtown Los Angeles to San Bernardino. The Metrolink Baldwin Park station is located approximately two miles from the Kaiser Permanente BPMC campus. During the AM and PM peak hours, the Metrolink San Bernardino Line provides one train per hour in the eastbound and westbound directions.

## 3.3 Vehicle Network

### 3.3.1 *Roadway Classifications*

The City of Baldwin Park utilizes the roadway categories recognized by regional, state and federal transportation agencies. There are four (4) categories in the roadway hierarchy, ranging from freeways with the highest capacity to two-lane undivided roadways with the lowest capacity. The roadway categories are summarized as follows:

- *Freeways* are limited-access and high speed travel ways included in the state and federal highway systems. Their purpose is to carry regional through-traffic. Access is provided by interchanges with typical spacing of one mile or greater. No local access is provided to adjacent land uses.

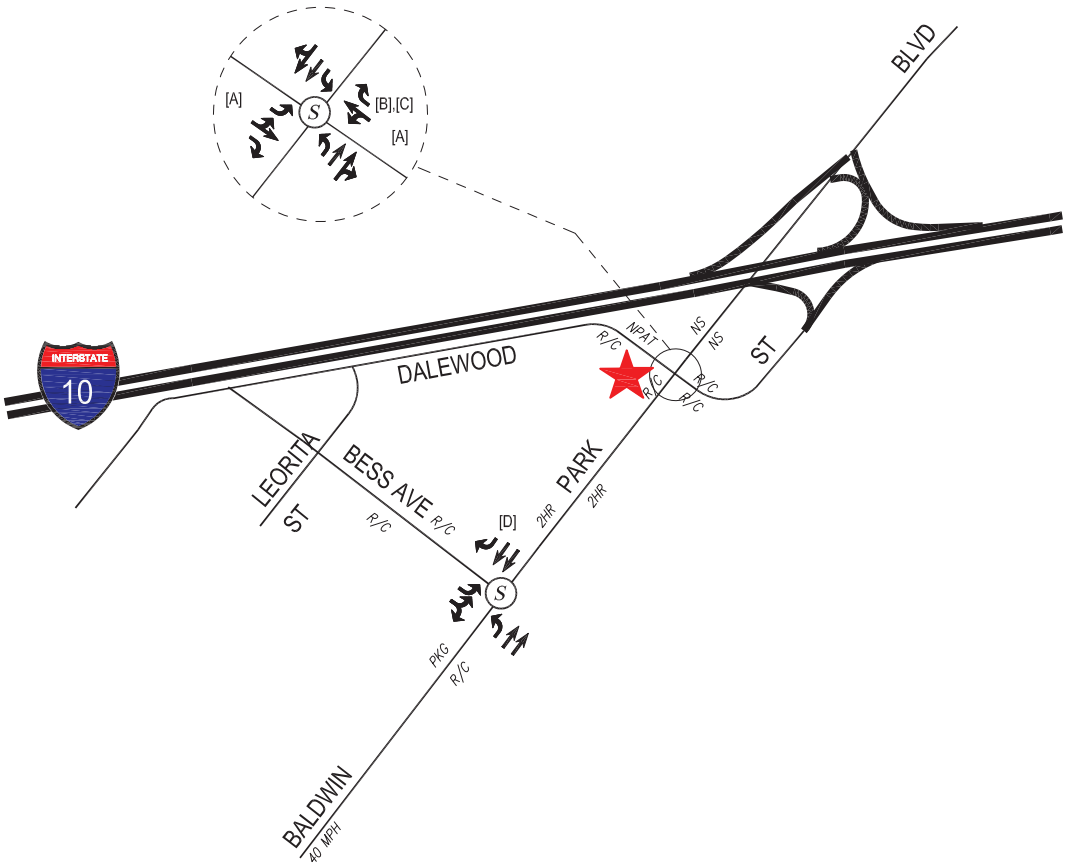
- *Arterial* roadways are major streets that primarily serve through-traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with two to six travel lanes and their major intersections are signalized. This roadway type is divided into two categories: principal and minor arterials. Principal arterials are typically four-or-more lane roadways and serve both local and regional through-traffic. Minor arterials are typically two-to-four lane streets that service local and commuter traffic.

- *Collector* roadways are streets that provide access and traffic circulation within residential and non-residential (e.g., commercial and industrial) areas. Collector roadways connect local streets to arterials and are typically designed with two through travel lanes (i.e., one through travel lane in each direction) that may accommodate on-street parking. They may also provide access to abutting properties.

- *Local* roadways distribute traffic within a neighborhood, or similar adjacent neighborhoods, and are not intended for use as a through-street or a link between higher capacity facilities such as collector or arterial roadways. Local streets are fronted by residential uses and do not typically serve commercial uses.

### 3.3.2 *Roadway Descriptions*

Immediate access to the project site is provided via Baldwin Park Boulevard and Dalewood Street. The existing roadway configurations and intersection controls at the study intersections are displayed in ***Figure 3-4*** and descriptions of the existing roadways (e.g., roadway classifications, number of travel lanes, median type, speed limit, etc.) are provided in ***Table 3-2***.




S Signalized Intersection

[A] = Split Phase Operation

[B] = No Right-Turn On Red

[C] = Overlap Phase

[D] = Functional Right-Turn Only Lane

PKG = Parking

R/C = Red Curb

2HR = 2 Hour Parking

NPAT = No Parking Anytime

NS = No Stopping Anytime

N

Project Site

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# Figure 3-4
# Existing Street System

Kaiser Permanente Baldwin Park Medical Center Project



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**Table 3-2**
**EXISTING ROADWAY DESCRIPTIONS**

| ROADWAY | CLASSIFICATION [1] | TRAVEL LANES | | MEDIAN | SPEED |
|---|---|---|---|---|---|
| | | DIRECTION [2] | NO. LANES [3] | TYPES [4] | LIMIT |
| Baldwin Park Boulevard | | | | | |
| -North of Dalewood Street | Major Highway | NB-SB | 4 [5] | N/A | 40 |
| -South of Dalewood Street | Major Highway | NB-SB | 5 [6] | 2WLT | 40 |
| Dalewood Street | Local Street | EB-WB | 2 [7] | N/A | 30 |
| Bess Avenue | Local Street | EB-WB | 2 | N/A | 30 |

Notes:
[1] Roadway classifications obtained from the *County of Los Angeles Master Plan of Highways* , current as of March 9, 2016.
[2] Direction of roadways in the project area: NB-SB = northbound and southbound; and EB-WB = eastbound and westbound.
[3] Number of lanes in both directions on the roadway. Variations in number of travel lanes due to time restricted on-street parallel parking are noted below.
[4] Median type of the road: RMI = Raised Median Island; 2WLT = 2-Way Left-Turn Lane; and N/A = Not Applicable.
[5] No Stopping
[6] 2-Hour Parking
[7] No Parking Anytime

## 3.4 Traffic Count Data

Manual counts of vehicular turning movements were conducted at each of the study intersections during the weekday morning (AM) and afternoon (PM) commute periods to determine the peak hour traffic volumes. The manual counts were conducted by an independent traffic count subconsultant (The Traffic Solution) at the study intersections from 7:00 to 9:00 AM to determine the weekday AM peak commute hour, and from 4:00 to 6:00 PM to determine the weekday PM peak commute hour. In conjunction with the manual turning movement vehicle counts, a count of bicycle and pedestrian volumes were also collected during the peak periods. Traffic volumes at the study intersections show the typical peak periods between 7:00 to 9:00 AM and 4:00 to 6:00 PM generally associated with metropolitan Los Angeles area weekday peak commute hours.

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are shown in ***Figures 3-5*** and ***3-6***, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in ***Appendix A***.

## 3.5 Cumulative Development Projects

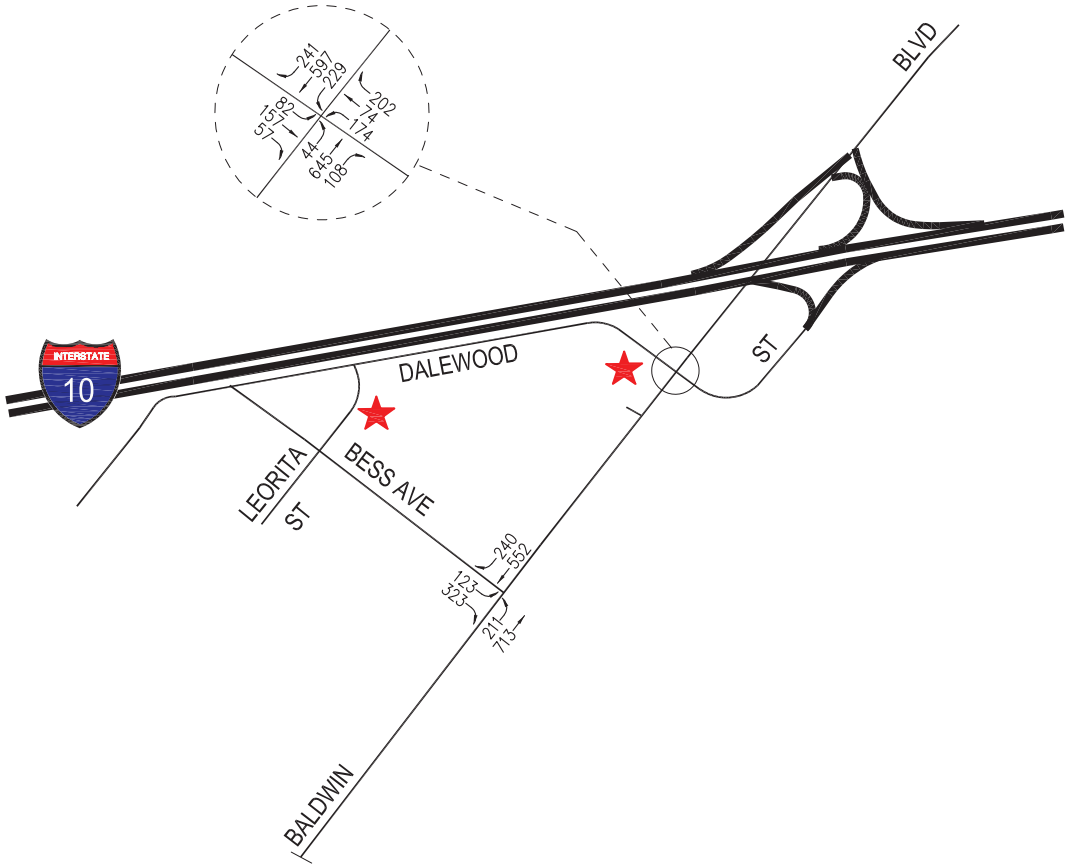
The forecast of future pre-project conditions was prepared in accordance to procedures outlined in Section 15130 of the CEQA Guidelines. Specifically, the CEQA Guidelines provide two (2) options for developing the future traffic volume forecast:

> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or
>
> (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency."

Although the CEQA Guidelines do not strictly apply to the local transportation assessment required by the City of Baldwin Park, this transportation analysis provides a highly conservative estimate of future pre-project traffic volumes as it incorporates both the "A" and "B" options outlined in the CEQA Guidelines for purposes of developing the forecast.

### 3.5.1 *Related Projects*

A forecast of on-street traffic conditions prior to occupancy of the proposed project was prepared by incorporating the potential trips associated with other known development projects (related projects)

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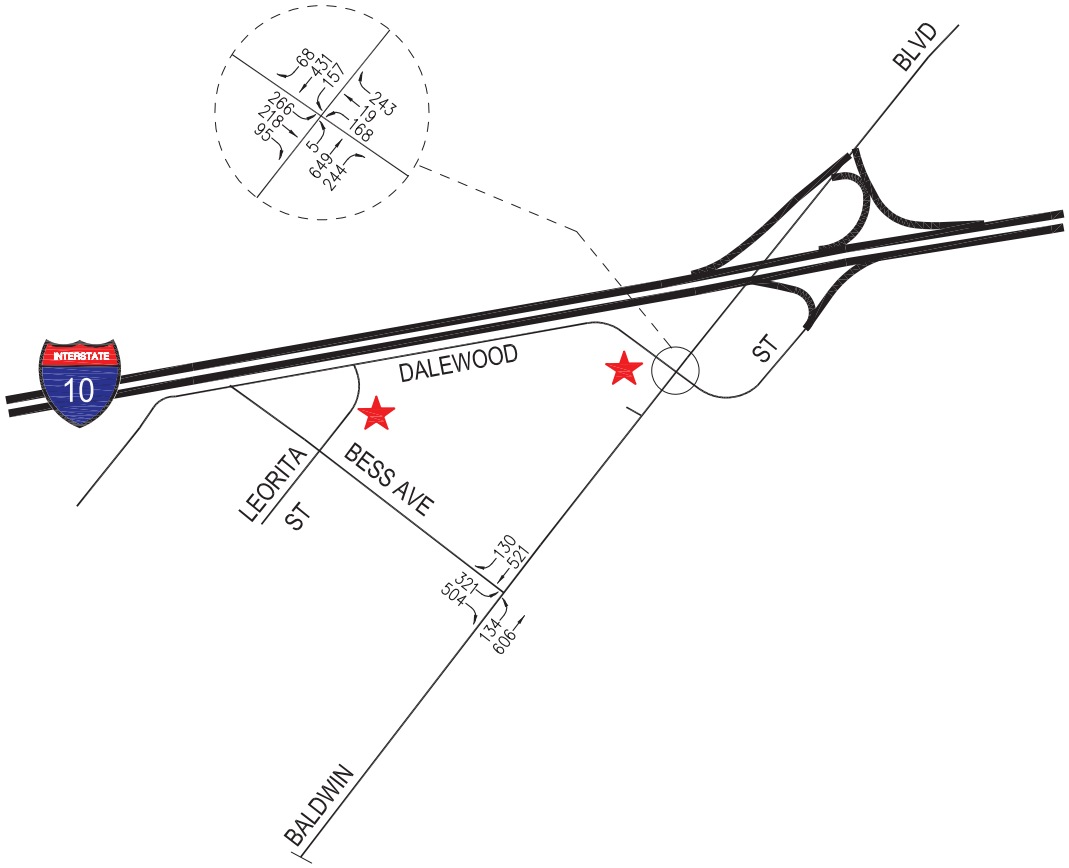
Project Site

Figure 3-5
Existing Traffic Volumes
Weekday AM Peak Hour
Kaiser Permanente Baldwin Park Medical Center Project




N

Project Site

Figure 3-6
Existing Traffic Volumes
Weekday PM Peak Hour
Kaiser Permanente Baldwin Park Medical Center Project

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in the area (i.e., within an approximate 0.50-mile radius from the project site). With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impacts of all ongoing development. The related projects research was based on information on file with the City of Baldwin Park. The list of related projects in the project site area is presented in ***Table 3-3***. The location of the related projects is shown in ***Figure 3-7***.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 3-3*. The related projects traffic volumes were distributed and assigned to the street system based on the projects' locations in relation to the study intersections, their proximity to major traffic corridors, proposed land uses, nearby population and employment centers, etc.

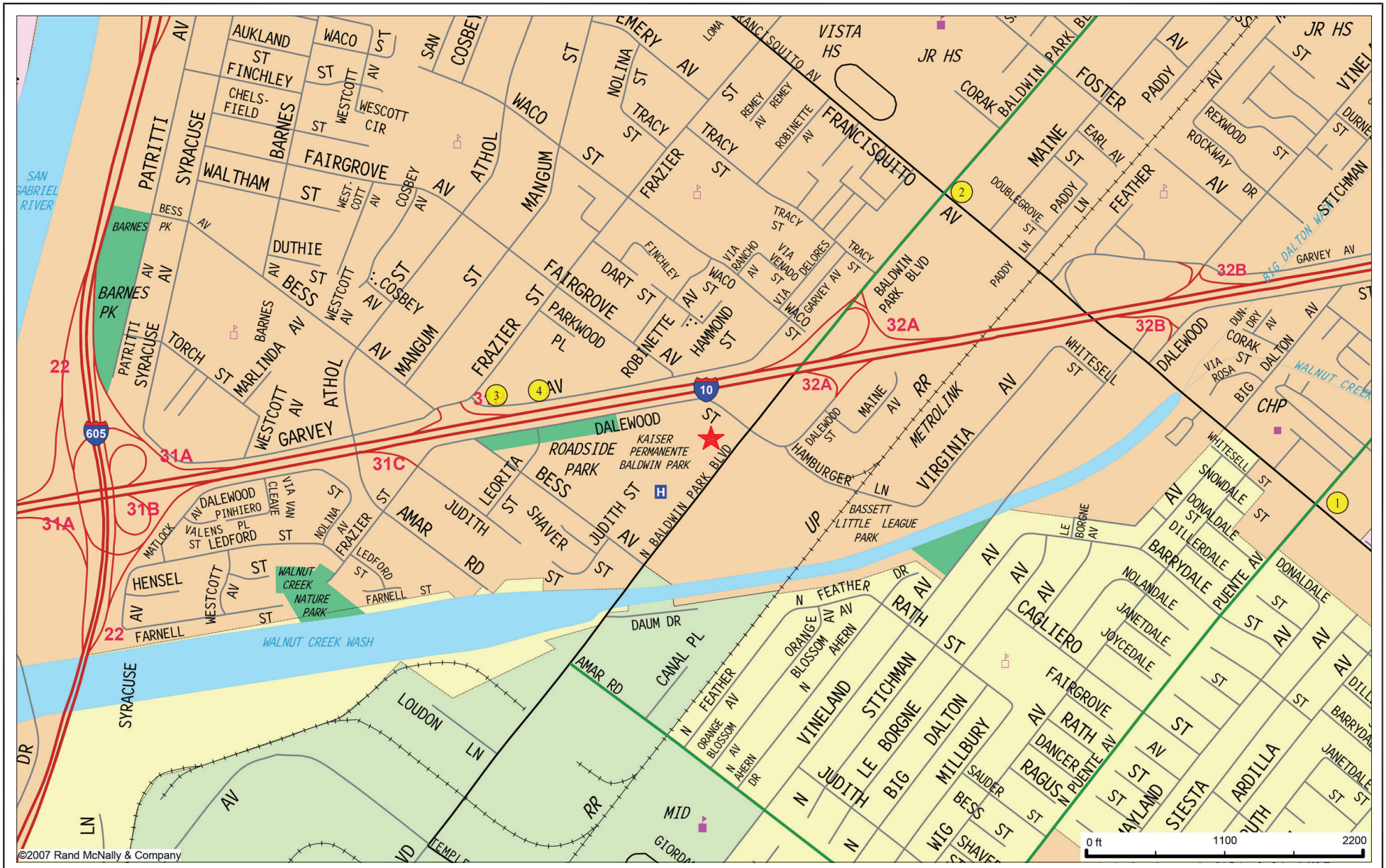
### 3.5.2 *Ambient Traffic Growth Factor*

Horizon year, background traffic growth estimates also have been calculated by using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown related projects in the study area, as well as account for typical growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at one percent (1.0%) per year. The ambient growth factor was based on review of the background traffic growth estimates for the Baldwin Park area (RSA 26, San Gabriel Valley) published in the *2010 Congestion Management Program for Los Angeles County*, which indicate that existing traffic volumes would be expected to increase at an annual rate of less than one percent (approximately 0.40% per year) between years 2020 and 2030. However, a one percent (1.0%) ambient traffic growth factor has been employed in this analysis in order to provide a conservative, worst case forecast of future traffic volumes in the area. Further, it is noted that the CMP manual's traffic growth rate is intended to anticipate future traffic generated by development projects in the project vicinity. Thus, the inclusion in this traffic analysis of both a forecast of traffic generated by known related projects plus the use of an ambient traffic growth factor based on CMP travel demand model data results in a conservative estimate of future traffic volumes at the study intersections.

**Table 3-3**
**RELATED PROJECTS LIST AND TRIP GENERATION [1]**

| MAP NO. | PROJECT STATUS | PROJECT NAME/NUMBER ADDRESS/LOCATION | LAND USE DATA | | PROJECT DATA SOURCE | DAILY TRIP ENDS [2] VOLUMES | AM PEAK HOUR VOLUMES [2] | | | PM PEAK HOUR VOLUMES [2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LAND-USE | SIZE | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| 1 | Proposed | 1606 Puente Avenue | Car Wash | 1,200 GSF | [3] | None | None | None | 0 | 9 | 8 | 17 |
| | | | Convenience Store | 358 GSF | [4] | 273 | 11 | 11 | 22 | 9 | 9 | 18 |
| 2 | Built | 13619 Francisquito Avenue | Express Car Wash | 3,079 GSF | [3] | None | None | None | 0 | 22 | 22 | 44 |
| 3 | Under Construction | 13057-13065 Garvey Avenue | Industrial Warehouse | 15,635 GSF | [5] | 76 | 11 | 1 | 12 | 1 | 9 | 10 |
| 4 | Under Construction | 13127 Garvey Avenue | Industrial Warehouse | 10,345 GSF | [5] | 50 | 7 | 1 | 8 | 1 | 6 | 7 |
| **TOTAL** | | | | | | **399** | **29** | **13** | **42** | **42** | **54** | **96** |

[1] Source: City of Baldwin Park Community Development Department. The peak hour traffic volumes were forecast on trip data rates as provided in the ITE "Trip Generation", 11th Edition, 2021.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 948 (Automated Car Wash) trip generation average rates.
[4] ITE Land Use Code 851 (Convenience Market) trip generation average rates.
[5] ITE Land Use Code 110 (General Light Industrial) trip generation average rates.




Project Site

XX Related Project Location

# Figure 3-7
## Location of Related Projects

Kaiser Permanente Baldwin Park Medical Center Project

LINSCOTT LAW & GREENSPAN engineers



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# 4.0 CEQA TRANSPORTATION ANALYSIS

## 4.1 Vehicle Miles Traveled Analysis

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the CEQA guidelines in November 2017 and an accompanying technical advisory guidance finalized in December 2018 (*OPR Technical Advisory*) that amends the Appendix G question for transportation impacts to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the CEQA Guidelines asking if the project will result in a substantial increase in vehicle miles traveled (VMT). The California Natural Resources Agency certified and adopted the CEQA Guidelines in December of 2018, and as of July 1, 2020 the provisions of the new section are in effect statewide. Concurrently, OPR developed the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), which provides non-binding recommendations on the implementation of VMT methodology which has significantly informed the way VMT analyses are conducted in the State. Accordingly, for the purpose of environmental review under CEQA, the City of Baldwin Park has established criteria for transportation impacts based on VMT for land use projects and plans which is generally consistent with the recommendations provided by OPR in the *Technical Advisory*.

The City of Baldwin Park is a member agency of the San Gabriel Valley Council of Governments (SGVCOG). The SGVCOG undertook the SGVCOG SB 743 Implementation Study to assist with answering important implementation questions about the methodology, thresholds, and mitigation approaches for VMT impact analysis for its member agencies. As part of the SGVCOG SB 743 Implementation Study, a VMT Evaluation Tool was developed, which is a web-based tool that can be used for VMT screening and mitigation recommendation. The SGVCOG VMT Evaluation Tool is designed to assist in screening and estimating project-generated VMT for certain types of land use projects in the San Gabriel Valley and calculating VMT reductions associated with certain VMT-reducing measures. The SGVCOG VMT Evaluation Tool utilizes the Southern California Association of Governments Regional Travel Demand Model (SCAG RTDM).

As a member agency of the SGVCOG, the City of Baldwin Park utilized the information produced through the Implementation Study to adopt a methodology and significance thresholds for use in CEQA compliance. The City of Baldwin Park has adopted VMT as the metric for determining environmental impacts and released its *City of Baldwin Park Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* dated September 2020. The guidelines outline the steps for complying with the new CEQA VMT analysis.

### 4.1.1 *Screening Criteria*

Consistent with the recommendations provided by OPR in the *Technical Advisory*, the City's Guidelines recognize three (3) screening criteria which may be applied to screen proposed projects out of detailed VMT analysis. The guidelines have established screening criteria pertaining to project trip generation forecasts, project land use types (i.e., local serving retail, affordable housing, etc.), proximity to transit, and locality within a low VMT-generating area. The guidelines provide the

following three (3) types of potential screening criteria that may be applied to screen projects from project-level assessment:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Size Screening

Proposed projects are not required to satisfy all of the screening criteria in order to screen out of further VMT analysis; satisfaction of one criterion is sufficient for screening purposes. Projects which are screened out of detailed VMT assessment based on these criteria are presumed to have less than significant transportation impacts. Projects which are not screened out would be required to conduct a formal VMT Analysis in order to determine the significance of project impacts. Based on a review of the project's development program, size, and other pertinent factors, it was determined that the City's screening criteria may be applied to the proposed project.

### 4.1.2 *Transit Priority Area Screening*

Projects located within a Transit Priority Area (TPA) may be presumed to have a less than significant impact. A TPA is defined as one-half mile of either an existing major transit stop[7] or an existing stop along a high-quality transit corridor[8]. Thus, development projects that are located within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor may also be presumed to cause a less than significant transportation impact. Similarly, development projects that decrease VMTs in the project area compared to existing conditions may be considered to have a less than significant transportation impact. However, according to the City's guidelines, the presumption might not be appropriate if the project:

- Has a floor area ratio of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by City Code;
- Is inconsistent with the SCAG Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS),
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

[7] Pub. Resources Code 21064.3: Major transit stop means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.
[8] Pub. Resources Code 21155: A high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

Based on the SGVCOG VMT Evaluation Tool, the project site is located within a TPA. In addition, as noted in Section 3.2, extensive transit service is currently provided within the project study area. Therefore, the proposed project meets the statutory requirements to presume less than significant transportation impacts.

The proposed project was further reviewed in order to determine if any project-specific or site-specific information indicates that the presumption would not be valid. A detailed review of each question is provided below.

- Does the project have a Floor Area Ratio (FAR) less than 0.75?

  Yes. Based on information provided by the project team, the project will have an overall FAR of 0.71, which is less than 0.75.

- Does the project provide more parking than required by the City Code?

  Yes. The parking supply of 3,059 spaces provided on-site exceeds the City of Baldwin Park Municipal Code parking requirement of 2,632 spaces.

- Is the project inconsistent with the SCAG RTP/SCS?

  No. The project site is currently zoned as General Commercial (GC). Since the project is consistent with the City's adopted zoning, and is not expected to result in substantial changes to the existing transportation network/infrastructure, it is assumed to be consistent with the land use and transportation network assumptions incorporated in the Southern California Council of Government's (SCAG) Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS).

- Does the project replace residential units set aside for lower income households with a smaller number of market-rate residential units?

  No. The project will not result in the replacement or loss of affordable housing units.

Based on this review, it is concluded that the answer to two of the four questions is no. Since it is concluded that the answer to two of the questions is yes, according to the *Technical Advisory*, the presumption of less than significant impacts may not be appropriate. Therefore, while the project does meet the conditions to presume less than significant transportation impacts stated in CEQA Guidelines Section 15064.3 and therefore screen out of VMT analysis, it has been conservatively concluded that such a presumption may not be appropriate for the proposed project. Therefore, the project does not satisfy the proximity to transit screening criteria.

### 4.1.3 *Low VMT Area Screening*

As outlined in the City's guidelines, residential and office development projects located within a low VMT-generating area may be presumed to have a less than significant impact absent any substantial

evidence to the contrary. Other employment-related and mixed-use land use projects may also qualify for the screening if the project can reasonably be expected to generate VMT per resident, per worker or per service population that is similar to the existing land uses in the low VMT-generating area.

If the proposed project is residential, the project is considered screened out if it is located within the Low VMT areas of the "Home-Based VMT per Capita". Alternatively, if the predominant land uses in the vicinity are nominally of the same type as the proposed project and the proposed project is reasonably expected to generate similar VMT as the existing land uses, the project is considered screened out if it is in the low VMT area for the "Home-Based Work VMT per Employee".

As the project site is not located within a low VMT area, this screening criterion does not apply.

### 4.1.4 *Project Size Screening*

The City's Guidelines state that: projects that generates less than 110 daily trips may be screened from conducting a formal VMT analysis and presumed to have a less than significant VMT impact. The *Technical Advisory* provides the following evidence for this presumption: "CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact."

Local serving retail projects with a total square footage of less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. Any project that uses the designation of "local-serving" should be able to demonstrate that its users (employees, customers, visitors) would be existing within the community. The project would not generate new "demand" for the project land uses but would meet the existing demand that would shorten the distance existing residents, employees, customers, or visitors would need to travel.

As shown in *Table 2-1*, the proposed project is expected to generate a net decrease of 65 daily trips at project build-out. Since the proposed project is expected to generate less than 110 daily trips, the project satisfies the project size screening criteria. Further, it is noted that emergency department services are generally local serving, in that most patrons select service at locations which are near either their place of residence or their employment/business location. Emergency department services function in similar ways to other service land uses in that the predominant source of trips and therefore project-related VMT will be generated by the patrons of the site rather than employees.

As such, the proposed project would improve the density of available destinations, thereby shortening travel distances in the vicinity and reducing VMT.

Further, it is recognized that the emergency department/medical office land use generates trips at much lower rates than similarly sized retail projects, as much of the space is passively utilized for medical equipment and circulation around this equipment. It is expected that the proposed project will generate significantly fewer trips than a theoretical 50,000 square-foot retail project which would otherwise be screened out under the same criterion.

### 4.1.5 *VMT Screening Summary*

Proposed projects are not required to satisfy all of the screening criteria in order to screen out of further VMT analysis; satisfaction of one criterion is sufficient for screening purposes. The proposed project screens out from further analysis of VMT as the proposed development satisfies the project size screening criteria. Therefore, the proposed project is determined to have a less that significant transportation impact and is not required to conduct any additional VMT analysis.

### 4.1.6 *Summary of Cumulative VMT Analysis*

As stated in the City's TIA Guidelines (refer to page 29), analyses should consider both short-term and long-term project effects on VMT. Short-term effects are evaluated in the detailed project-level VMT analysis summarized above. Long-term, or cumulative, effects are determined through a consistency check with the Southern California Association of Government's (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS is the regional plan that demonstrates compliance with air quality conformity requirements and greenhouse gas (GHG) reduction targets. As such, projects that are consistent with this plan in terms of development, location, density, and intensity, are part of the regional solution for meeting air pollution and GHG reduction goals. Projects that are deemed to be consistent would have a less than significant cumulative impact on VMT. Development in a location where the RTP/SCS does not specify any development may indicate a significant impact on transportation. However, as noted in the City's TIA Guidelines, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., VMT per capita, VMT per employee, or VMT per service population) in the impact analysis, a less than significant project impact conclusion is sufficient in demonstrating there is no cumulative VMT impact. Projects that fall under the City's efficiency-based impact thresholds are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS. The City's TIA Guidelines also note that projects which demonstrate VMT impacts through application of efficiency-based thresholds, and which are deemed inconsistent with the RTP/SCS, could contribute toward a significant cumulative impact on VMT. The proposed project is not expected to have a significant project-level VMT impact. Therefore, it is concluded that the proposed project will not result in a significant cumulative VMT impact.

## 4.2 Active Transportation and Public Transit Analysis

Pursuant to current CEQA Guidelines, a significant impact may also occur "if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or

otherwise decreases the performance or safety of such facilities". The following section provides a brief review of the City's adopted policies, plans, and programs pertaining to active transportation and public transit analysis.

### 4.2.1 *Adopted Policies, Plans, or Programs*

The City's current Circulation Element of the General Plan sets forth goals and objectives pertaining to complete streets, transit and public transportation, and bicycle routes and pedestrian facilities, safety, among other things. Relevant adopted goals and policies include:

- Goal 1.0, Internal Traffic Circulation: Provide a street and highway system in Baldwin Park that provided adequate capacity to ensure acceptable traffic flow.
    - Policy 1.1: Develop and maintain the local circulation system.
    - Policy 1.2: Require significant new land use developments to prepare traffic studies using intersection analyses to detail potential traffic impacts.
    - Policy 1.3: Where project level traffic studies support the need for added street segment capacity, pursue alternatives to street widenings including lane restriping, peak hour restrictions, and/or similar less intensive and costly measures.
    - Policy 1.4: Maintain as a goal the provision of service levels at intersections along arterial highways at Level of Service "D" or better during the morning and evening peak travel periods.
    - Policy 1.5: Adopt five-year Capital Improvement Programs that identify street and related improvements required to ensure smooth traffic flow.
    - Policy 1.6: Continue to automate traffic signals and to develop an integrated traffic signal control system.
- Goal 3.0, Public Transportation: Encourage increased use of public transportation.
    - Policy 3.1: Work with MTA to establish bus stops at appropriate locations throughout the City to adequately serve retail, employment, rail and other public gathering areas.
    - Policy 3.2: Provide lighted, sheltered bus stops to encourage transit use.
    - Policy 3.3: Continue to support the City Transit system which serves to provide a viable alternative to the automobile and to reduce traffic trips.
- Goal 4.0, Alternative Modes of Transportation: Accommodate alternative modes of transportation in land use and circulation planning.

- Policy 4.1: Provide for a Citywide bicycle path system consistent with Figure C-4 that can be implemented in a safe and efficient manner.

- Policy 4.2: Continue funding City programs which provide for sidewalk construction in residential neighborhoods where sidewalks do not exist and are desired by local residents.

- Policy 4.3: Continue funding City programs which provide for sidewalk improvements and enhancements, particularly in areas where sidewalks link residential neighborhoods to local schools, parks and shopping areas.

- Goal 5.0, Parking: Ensure that adequate parking is provided to meet existing and future demand.

    - Policy 5.1: Provide incentives for carpooling and other rideshare programs through zoning ordinance parking regulations and other mechanisms.

    - Policy 5.2: Require new developments to incorporate a limited number of parking spaces capable of accommodating electric vehicle recharge stations.

### 4.2.2 *Qualitative Impact Conclusions*

The proposed project is not expected to have a significant impact on active transportation or public transit in the vicinity of the project site. As described in *Section 3.1.1* herein, the project site is planned to accommodate pedestrian and bicycle access via exclusive walkways which connect the proposed project to the public sidewalks. The walkways minimize the extent of pedestrian and bicycle interaction with vehicles at the site and provide a comfortable, convenient, and safe environment which in turn can encourage use of active transportation modes. The project site is further planned to provide bicycle parking facilities for use by staff, patients, and the public. The proposed project is therefore found to be in alignment with the City's General Plan Circulation Element goals to promote pedestrian and bicycle safety and provide appropriate and supportive active transportation infrastructure. The proposed project is not expected to affect access or safety at the existing bus stops, nor is it expected to hinder public transit service along Baldwin Park Boulevard. Further, the proposed project is not expected to preclude the City from constructing bicycle facilities or pursuing bicycle network improvements along local roadways within the study area. Development of the proposed project will not prevent the City from completing any proposed transit, bicycle, or pedestrian facilities.

Since the proposed project is not found to result in conflicts with adopted policies, plans, or programs, nor is it expected to negatively affect the performance or safety of existing or planned pedestrian, bicycle, or transit facilities, it is determined that the proposed project will have a less than significant impact on active transportation and public transit in the vicinity of the project site.

# 5.0 INTERSECTION OPERATIONAL ANALYSIS

As part of the approval process, the City has the authority to require a LOS analysis in order to assess the overall effects of the proposed project. Specifically, the City's *Transportation Analysis Updates* document requires an operational analysis of intersections and roadways in the vicinity of a proposed project in order to evaluate site access and circulation constraints that may be caused or worsened by project-generated traffic. The following section presents the intersection operational (i.e., Level of Service) analyses prepared for the proposed project pursuant to the General Plan LOS standards and transportation infrastructure goals.

## 5.1 Analysis Methodology

In order to estimate the proposed project's effect on intersection operations, a multi-step process has been utilized. The first step is trip generation, which estimates the total arriving and departing traffic volumes on a peak hour and daily basis. The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound project traffic volumes. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area. The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area. The proposed project's forecast trip generation, distribution, and assignment is presented in *Section 2.4* herein. With the forecasting process complete and project traffic assignments developed, the effect of the proposed project is isolated by comparing operational conditions at the selected study intersections using existing and expected future traffic volumes without and with forecast project traffic.

The study intersection LOS was analyzed using the Highway Capacity Manual[9] (HCM) method of analysis. The HCM methodology determines the average control delay (expressed in seconds per vehicle [s/veh]) at the intersection. Average control delay for any particular movement is a function of the capacity of the approach and the degree of saturation. The intersection delay is subsequently assigned a LOS value to describe intersection operations. Level of Service varies from LOS A (free flow conditions) to LOS F (jammed condition). The average control delay for signalized intersections represents the delay attributed to the traffic control facility as compared to a reference travel time in the absence of traffic control, geometric delay, incidents, and the influence of other vehicles. A detailed description of the HCM method and corresponding Level of Service for the signalized study intersections is provided in ***Appendix B***.

The HCM method calculations were prepared using the *Synchro 11* software package which implements the HCM operational methodology. A *Synchro* network was created based on existing conditions field reviews at the study intersections. In addition, specifics such as traffic volume data,

[9] *Highway Capacity Manual 6th Edition*, Transportation Research Board of the National Academies of Sciences-Engineering-Medicine, 2016.

lane configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing, etc., were coded to complete the existing network. The parameters and assumptions utilized in the analysis were based on the direction provided by City staff.

## 5.2 Criteria for Intersection Operational Analysis

The relative effect of the added project traffic volumes to be generated by the proposed project during the weekday AM and PM peak hours was evaluated based on analysis of existing and future operating conditions at the study intersections, without and with the proposed project. The previously discussed capacity analysis procedures were utilized to evaluate the delay and service level characteristics at each study intersection. As stated in the City's Guidelines, an intersection is considered to be affected if the addition of the traffic generated from the proposed project results in any one of the following:

- The addition of project traffic to an intersection results in the degradation of intersection operations from acceptable LOS (LOS D) to unacceptable LOS (LOS E or F)

- The project contributes 2% or more of the total traffic at an intersection that is expected to be deficient

Where intersections are found to operate at unacceptable LOS, and the addition of project-generated traffic causes an exceedance of the City's criteria, improvements should be identified to increase performance to pre-project conditions.

## 5.3 Analysis Scenarios

### 5.3.1 *Phase 1 Project Analysis Scenarios*

Traffic impacts at the study intersections for the Phase 1 project were analyzed for the following conditions:

[a] Existing conditions.

[b] Existing with Phase 1 project conditions.

[c] Condition [a] plus one percent (1.0%) annual ambient traffic growth through year 2026 and with completion and occupancy of the related projects (i.e., future without Phase 1 project conditions).

[d] Condition [c] with completion and occupancy of the Phase 1 project.

[e] Condition [d] with implementation of Phase 1 project mitigation measures, where necessary.

It should be noted that Condition [b] above is a hypothetical scenario in that it calculates the traffic due to the occupancy of the proposed project in addition to the existing traffic volumes, but changes

to existing volumes are expected to occur throughout the project's construction period due to other area projects and regional growth. However, this condition has been prepared to be consistent with the general rule under CEQA that the potential impacts of a development project are to be measured against existing conditions. Condition [d] above analyzes future conditions upon completion and full occupancy of the Phase 1 project, which is expected to occur in 2026.

### 5.3.2 *Project Build-out (Phases 1 and 2) Analysis Scenarios*

Traffic impacts at the study intersections for the Phase 2 project were analyzed for the following conditions:

[a] Existing conditions.

[b] Existing with Phase 2 project conditions.

[c] Condition [a] plus one percent (1.0%) annual ambient traffic growth through year 2029 and with completion and occupancy of the related projects (i.e., future without project build-out conditions).

[d] Condition [c] with completion and occupancy of the project at build-out (i.e., the combined effects of the removal of existing uses and addition of the proposed project components included on the Phases 1 and 2 development sites).

[e] Condition [d] with implementation of project build-out mitigation measures, where necessary.

It should be noted that Condition [b] above is a hypothetical scenario in that it calculates the traffic due to the occupancy of the proposed project in addition to the existing traffic volumes, but changes to existing volumes are expected to occur throughout the project's construction period due to other area projects and regional growth. However, this condition has been prepared to be consistent with the general rule under CEQA that the potential impacts of a development project are to be measured against existing conditions. Condition [d] above analyzes future conditions upon completion and full occupancy of the Phase 2 project, which is expected to occur in 2029.

The weekday AM and PM peak hour intersection analysis prepared for the study intersections for the Phase 1 and Project Build-out conditions are summarized in ***Tables 5-1 and 5-2, respectively***. The calculation data worksheets for the analyzed intersections are provided in *Appendix B*.

## 5.4 Existing Conditions

### 5.4.1 *Existing Conditions*

As indicated in column [1] of *Table 5–1*, all of the study intersections are presently operating at LOS D or better during the weekday AM and PM peak hours under existing conditions. The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 3–5* and *3–6*, respectively.

**Table 5-1**
**SUMMARY OF INTERSECTION OPERATIONAL ANALYSIS [a]**
**DELAYS AND LEVELS OF SERVICE**
**WEEKDAY AM AND PM PEAK HOURS**

| | | | | [1] | | [2] | | | [3] | | [4] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EXISTING | | EXISTING W/ PROJECT | | CHANGE | YEAR 2026 FUTURE PRE-PROJECT | | YEAR 2026 FUTURE W/ PROJECT | | CHANGE |
| NO. | INTERSECTION | TRAFFIC CONTROL | PEAK HOUR | Delay [b] | LOS [c] | Delay [b] | LOS [c] | Delay [b] [(2)-(1)] | Delay [b] | LOS [c] | Delay [b] | LOS [c] | Delay [b] [(4)-(3)] |
| 1 | Baldwin Park Boulevard/ Dalewood Street | Signalized | AM | 44.0 | D | 44.1 | D | 0.1 | 46.1 | D | 46.1 | D | 0.0 |
| | | | PM | 44.6 | D | 44.7 | D | 0.1 | 46.7 | D | 46.8 | D | 0.1 |
| 2 | Baldwin Park Boulevard/ Bess Avenue | Signalized | AM | 23.6 | C | 23.9 | C | 0.3 | 24.5 | C | 24.7 | C | 0.2 |
| | | | PM | 46.4 | D | 47.2 | D | 0.8 | 50.9 | D | 51.7 | D | 0.8 |

[a] Intersection analysis based on the Highway Capacity Manual, 6th Edition operational analysis methodologies.

[b] Reported control delay values in seconds per vehicle.

[c] Intersection Levels of Service are based on the following criteria:

[d] Oversaturated conditions. Under these conditions, minor changes in volumes may result in disproportionate changes in delay.

| Signalized Intersection Control Delay (s/veh) | Unsignalized Intersection Control Delay (s/veh) | LOS |
|---|---|---|
| <= 10 | <= 10 | A |
| > 10-20 | > 10-15 | B |
| > 20-35 | > 15-25 | C |
| > 35-55 | > 25-35 | D |
| > 55-80 | > 35-50 | E |
| > 80 | > 50 | F |

**Table 5-2**
**SUMMARY OF INTERSECTION OPERATIONAL ANALYSIS [a]**
**DELAYS AND LEVELS OF SERVICE**
**WEEKDAY AM AND PM PEAK HOURS**

| NO. | INTERSECTION | TRAFFIC CONTROL | PEAK HOUR | [1] EXISTING Delay [b] | [1] EXISTING LOS [c] | [2] EXISTING W/ PROJECT Delay [b] | [2] EXISTING W/ PROJECT LOS [c] | [2] CHANGE Delay [b] [(2)-(1)] | [3] YEAR 2029 FUTURE PRE-PROJECT Delay [b] | [3] YEAR 2029 FUTURE PRE-PROJECT LOS [c] | [4] YEAR 2029 FUTURE W/ PROJECT Delay [b] | [4] YEAR 2029 FUTURE W/ PROJECT LOS [c] | [4] CHANGE Delay [b] [(4)-(3)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Baldwin Park Boulevard/ Dalewood Street | Signalized | AM | 44.0 | D | 44.3 | D | 0.3 | 47.8 | D | 48.0 | D | 0.2 |
| | | | PM | 44.6 | D | 44.7 | D | 0.1 | 48.9 | D | 48.9 | D | 0.0 |
| 2 | Baldwin Park Boulevard/ Bess Avenue | Signalized | AM | 23.6 | C | 24.5 | C | 0.9 | 25.3 | C | 26.1 | C | 0.8 |
| | | | PM | 46.4 | D | 46.6 | D | 0.2 | 54.7 | D | 54.9 | D | 0.2 |

[a] Intersection analysis based on the Highway Capacity Manual, 6th Edition operational analysis methodologies.

[b] Reported control delay values in seconds per vehicle.

[c] Intersection Levels of Service are based on the following criteria:

[d] Oversaturated conditions. Under these conditions, minor changes in volumes may result in disproportionate changes in delay.

| Signalized Intersection Control Delay (s/veh) | Unsignalized Intersection Control Delay (s/veh) | LOS |
|---|---|---|
| <= 10 | <= 10 | A |
| > 10-20 | > 10-15 | B |
| > 20-35 | > 15-25 | C |
| > 35-55 | > 25-35 | D |
| > 55-80 | > 35-50 | E |
| > 80 | > 50 | F |

### 5.4.2 *Existing With Phase 1 Project Conditions*

As shown in column [2] of *Table 5–1,* application of the City's threshold criteria to the "Existing With Phase 1 Project" scenario indicates that the project-related effects of the Phase 1 project is not expected to exceed the City's threshold criteria at any of the study intersections. Incremental delays, but not exceeding the City's criteria, are noted at the study intersections. As such, no improvements are required or recommended for the study intersections under the "Existing With Phase 1 Project" conditions. The existing with Phase 1 project traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 5–1*** and ***5–2***, respectively.

### 5.4.3 *Existing With Project Build-out Conditions*

As indicated in column [2] of ***Table 5–2,*** application of the City's threshold criteria to the "Existing With Project Build-out" scenario indicates that the project-related effects of the Phase 2 project is not expected to exceed the City's threshold criteria at any of the study intersections. Incremental delays, but not exceeding the City's criteria, are noted at the study intersections. As such, no improvements are required or recommended for the study intersections. The existing with project build-out traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 5–3*** and ***5–4***, respectively.

## 5.5 Future 2026 Conditions

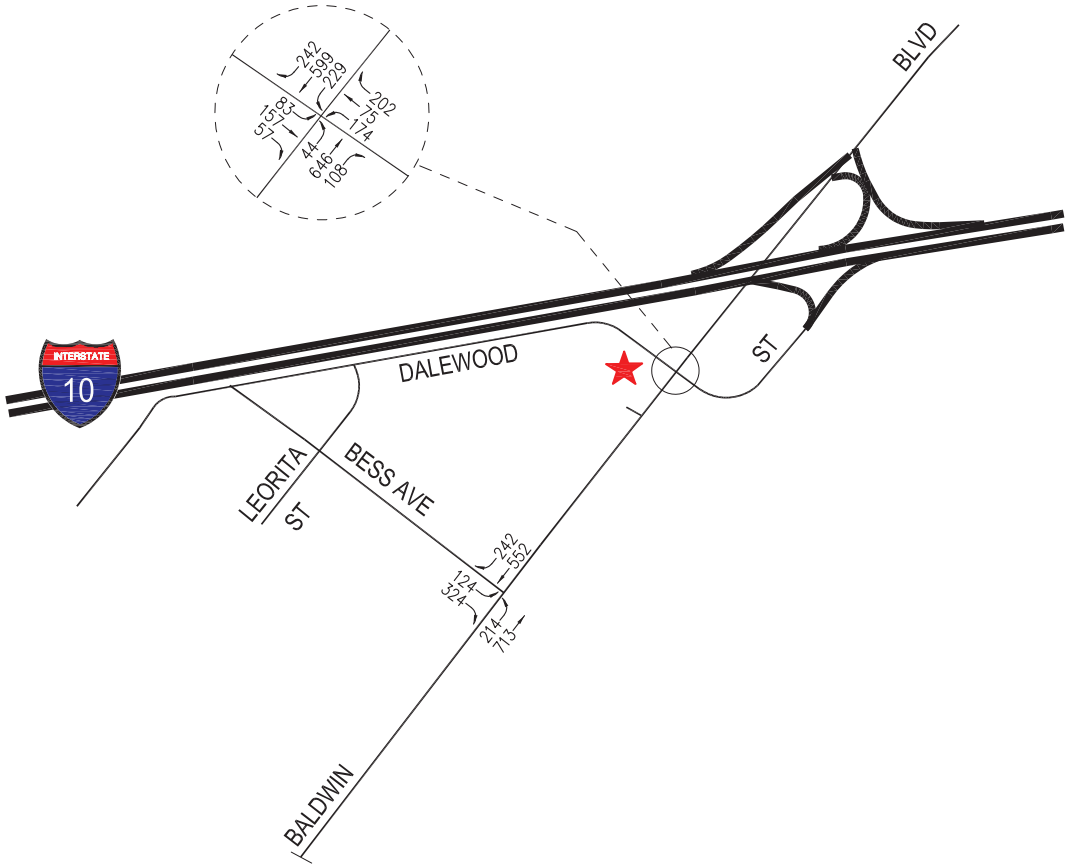
### 5.5.1 *Future Without Phase 1 Project Conditions*

The future cumulative baseline without Phase 1 project conditions (i.e., year 2026 without Phase 1 project) were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth to year 2026). The delay ratios at all of the study intersections are incrementally increased with the addition of ambient traffic and traffic generated by the related projects listed in *Table 3–1*. As presented in column [3] of *Table 5–1*, all of the study intersections are expected to operate at LOS D or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related projects traffic under the future without Phase 1 project conditions.

The future without Phase 1 project (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 5–5*** and ***5–6***, respectively.

### 5.5.2 *Future With Phase 1 Project Conditions*

As shown in column [4] of *Table 5–1,* application of the City's threshold criteria to the "Future With Proposed Phase 1 Project" scenario indicates that the project-related effects of the Phase 1 project is not expected to exceed the City's threshold criteria at any of the study intersections. Incremental delays, but not exceeding the City's criteria, are noted at the study intersections. As such, no improvements are required or recommended for the study intersections under the "Future With Proposed Phase 1 Project" scenario. The future with Phase 1 project (existing, ambient growth,

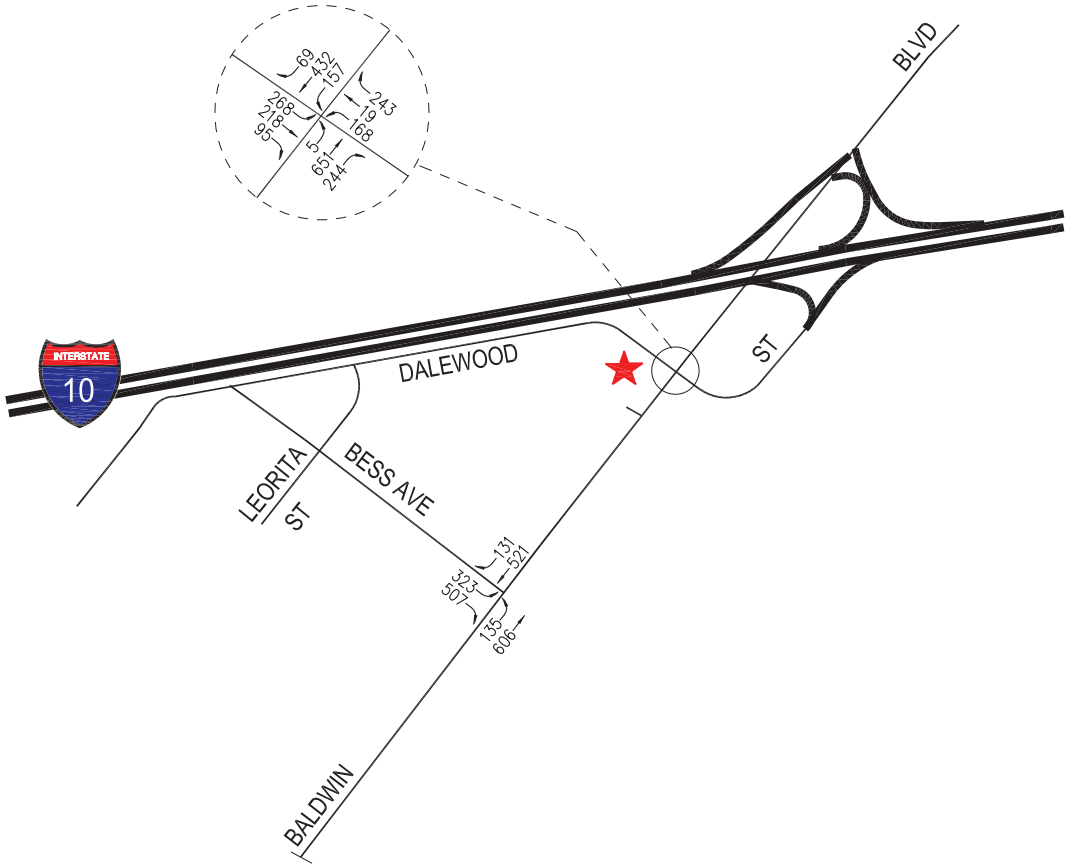



N

Project Site

Figure 5-1
Existing With Phase 1 Project Traffic Volumes
Weekday AM Peak Hour
Kaiser Permanente Baldwin Park Medical Center Project

o:\job_file\4109-3\dwg\f5-1.dwg 10/06/2022 15:47:46 rodriquez

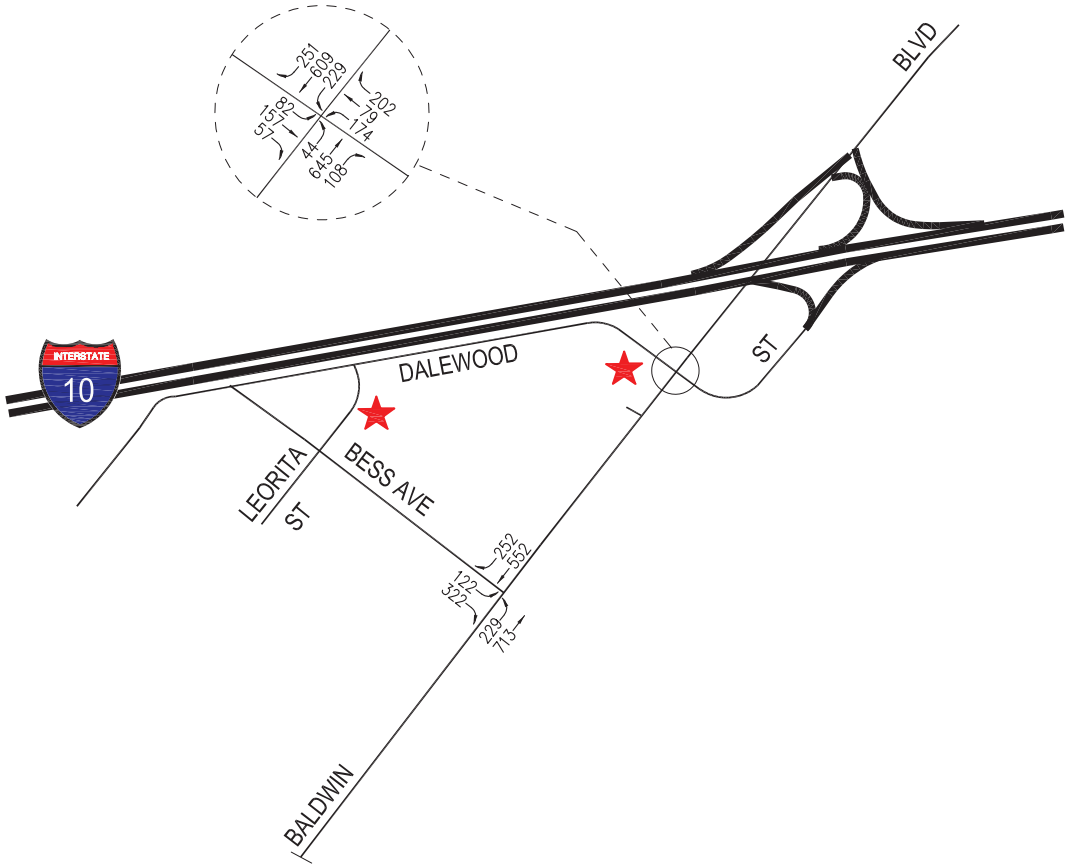



N

o:\job_file\4109-3\dwg\f5-2.dwg 10/06/2022 16:50:00 rodriquez

Project Site

Figure 5-2
Existing With Phase 1 Project Traffic Volumes
Weekday PM Peak Hour
Kaiser Permanente Baldwin Park Medical Center Project



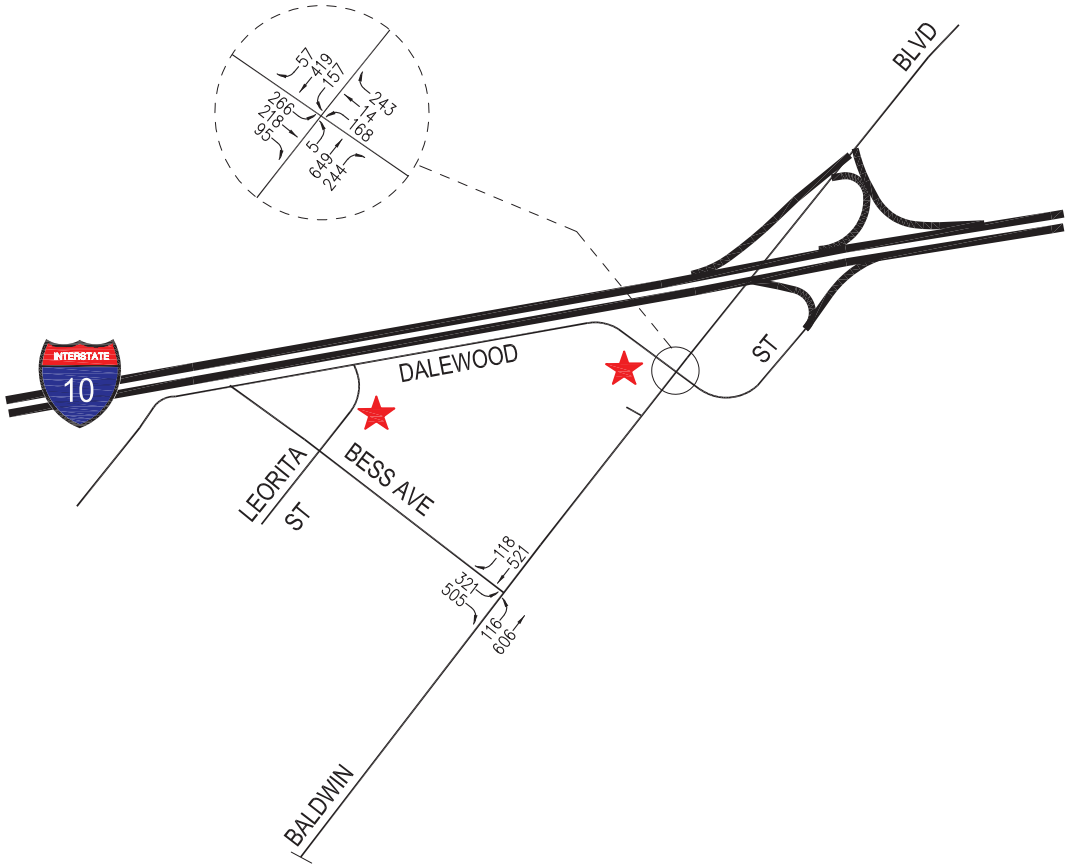

N

Project Site

Figure 5-3
Existing With Phase 2 Project Traffic Volumes
Weekday AM Peak Hour
Kaiser Permanente Baldwin Park Medical Center Project



o:\job_file\4109-3\dwg\f5-3.dwg 10/06/2022 16:50:40 rodriquez

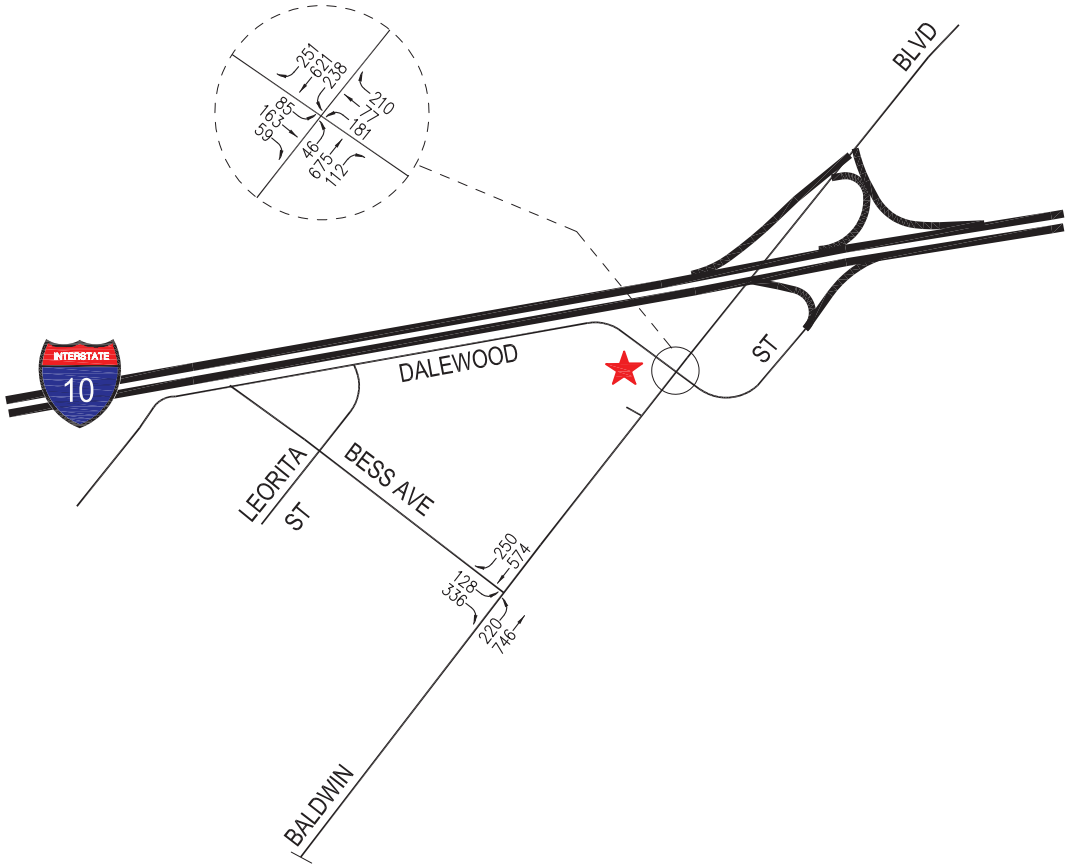



N

o:\job_file\4109-3\dwg\f5-4.dwg 10/06/2022 15:46:26 rodriquez

Project Site

Figure 5-4
Existing With Phase 2 Project Traffic Volumes
Weekday PM Peak Hour
Kaiser Permanente Baldwin Park Medical Center Project




N

Project Site

Figure 5-5

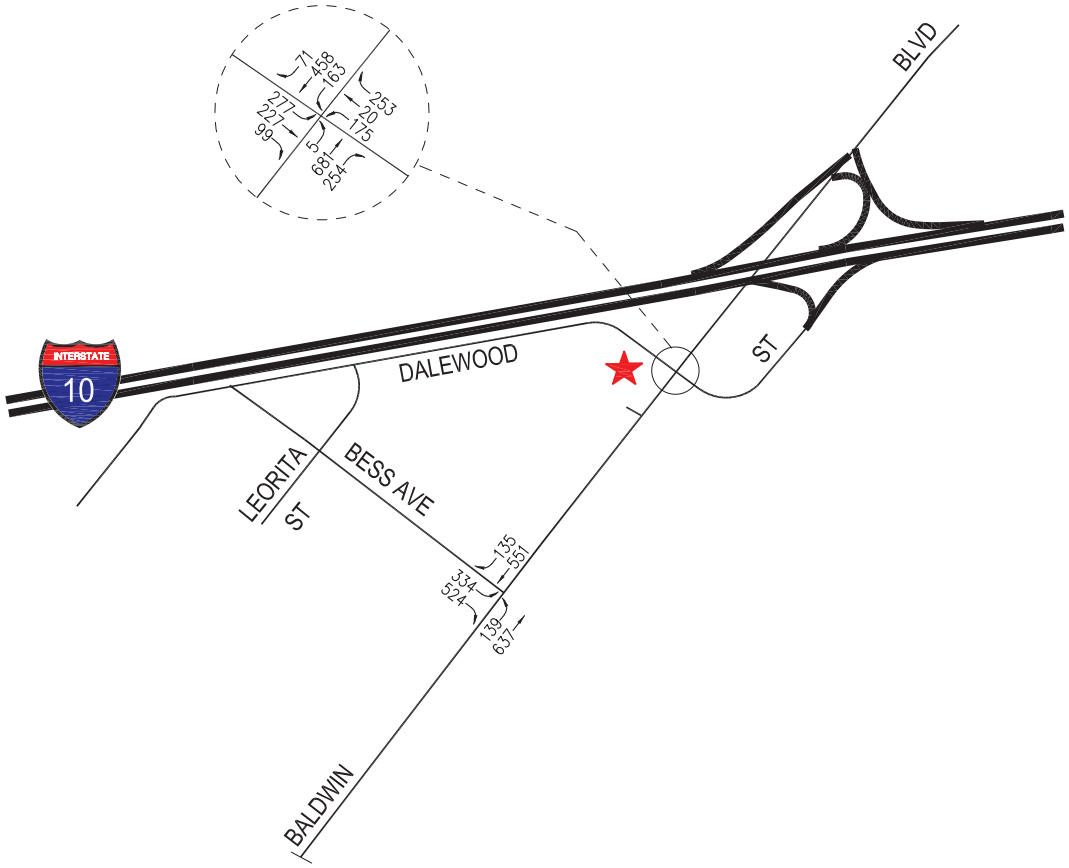
Future Year 2026 Without Project Traffic Volumes

Weekday AM Peak Hour

Kaiser Permanente Baldwin Park Medical Center Project



o:\job_file\4109-3\dwg\f5-5.dwg 10/06/2022 15:44:58 rodriquez




N

Project Site

Figure 5-6

Future Year 2026 Without Project Traffic Volumes

Weekday PM Peak Hour

Kaiser Permanente Baldwin Park Medical Center Project

o:\job_file\4109-3\dwg\f5-6.dwg 10/06/2022 15:44:15 rodriquez

related projects and Phase 1 project) traffic volumes at the study intersections during the weekday AM and PM peak hours are provided in ***Figures 5-7*** and ***5-8***, respectively.

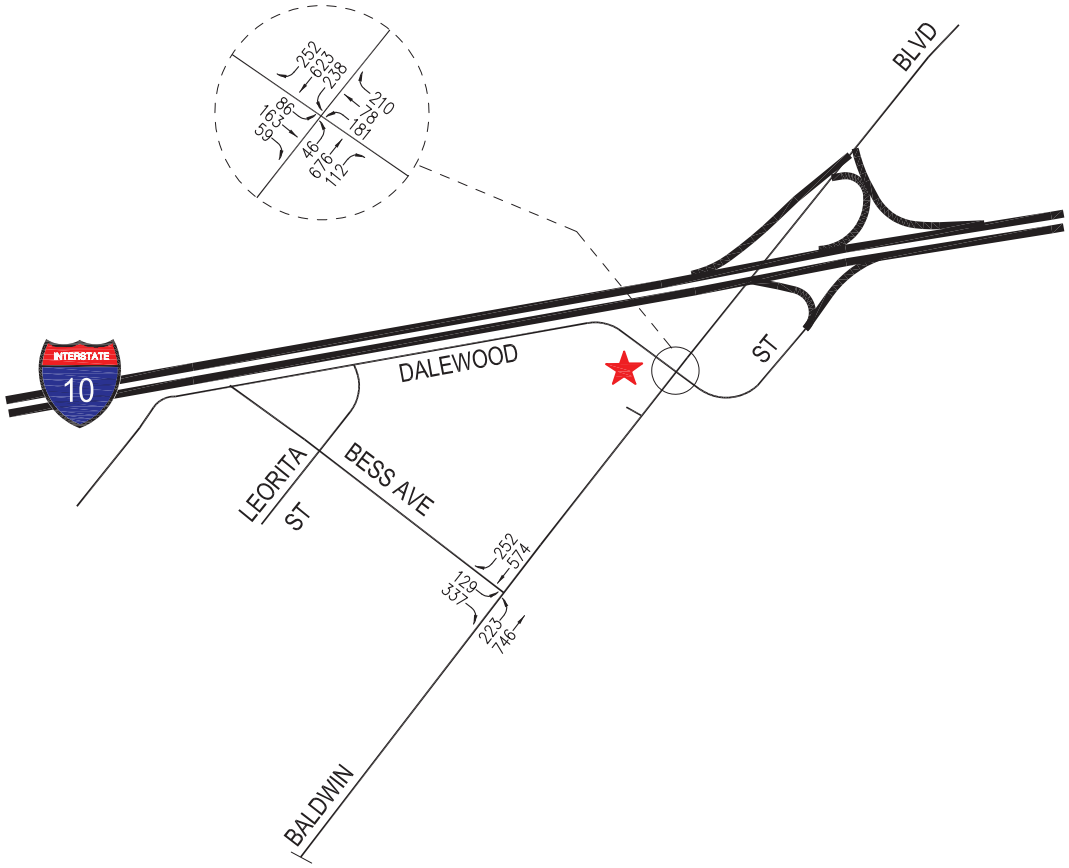
## 5.6 Future 2029 Conditions

### 5.6.1 *Future 2029 Without Project Build-out Conditions*

The future cumulative baseline without project build-out conditions (i.e., year 2029 without Phases 1 and 2 project) were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth to year 2029). The delay at all of the study intersections are incrementally increased with the addition of ambient traffic and traffic generated by the related projects listed in *Table 3–1*. As presented in column [3] of *Table 5–2*, all of the study intersections are expected to operate at LOS D or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related projects traffic under the future without project build-out conditions. The future without project build-out (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 5–9*** and ***5–10***, respectively.

### 5.6.2 *Future 2029 With Project Build-out Conditions*

As shown in column [4] of *Table 5-2,* application of the City's threshold criteria to the "Future With Project Build-out" scenario indicates that the project-related effects of the Phase 2 project is not expected to exceed the City's threshold criteria at any of the study intersections. Incremental delays, but not exceeding the City's criteria, are noted at the study intersections. As such, no improvements are required or recommended for the study intersections. The future with project build-out (existing, ambient growth, related projects and Phases 1 and 2 project) traffic volumes at the study intersections during the weekday AM and PM peak hours are provided in ***Figures 5-11*** and ***5-12***, respectively.




N

o:\job_file\4109-3\dwg\f5-7.dwg 10/06/2022 15:43:38 rodriquez

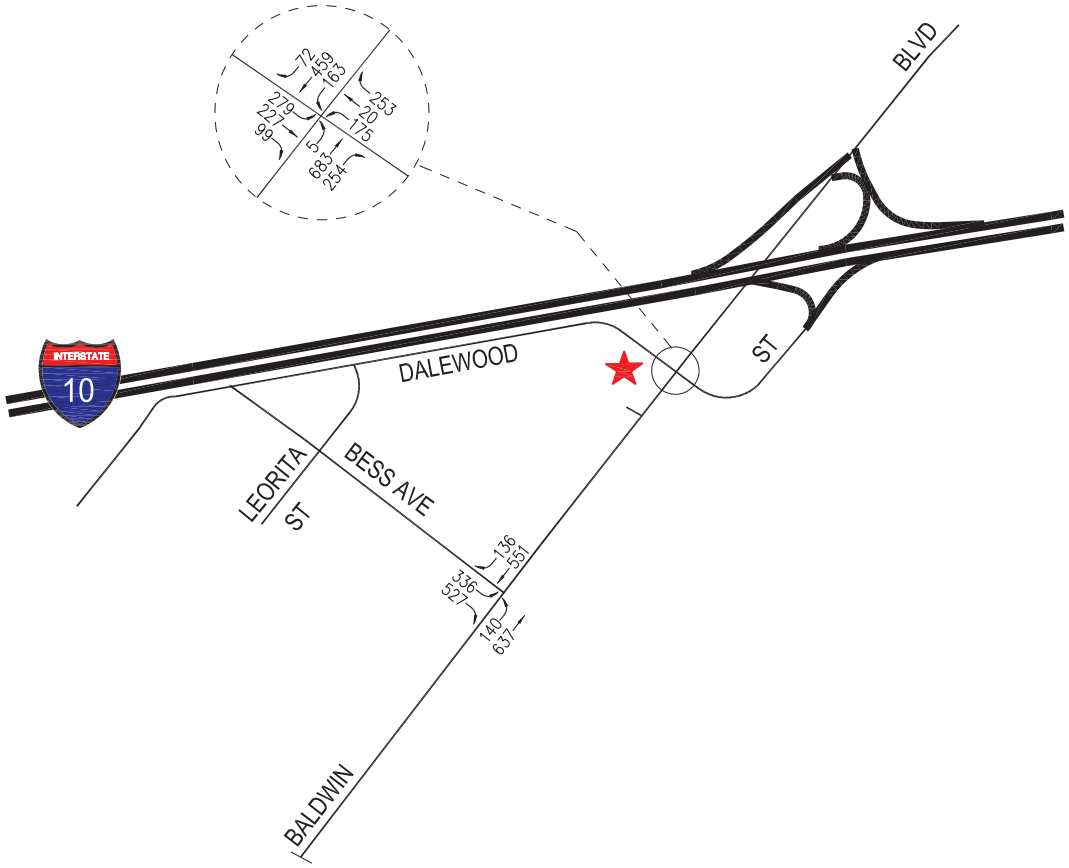
Project Site

Figure 5-7

Future Year 2026 With Phase 1 Project Traffic Volumes

Weekday AM Peak Hour

Kaiser Permanente Baldwin Park Medical Center Project




N

Project Site

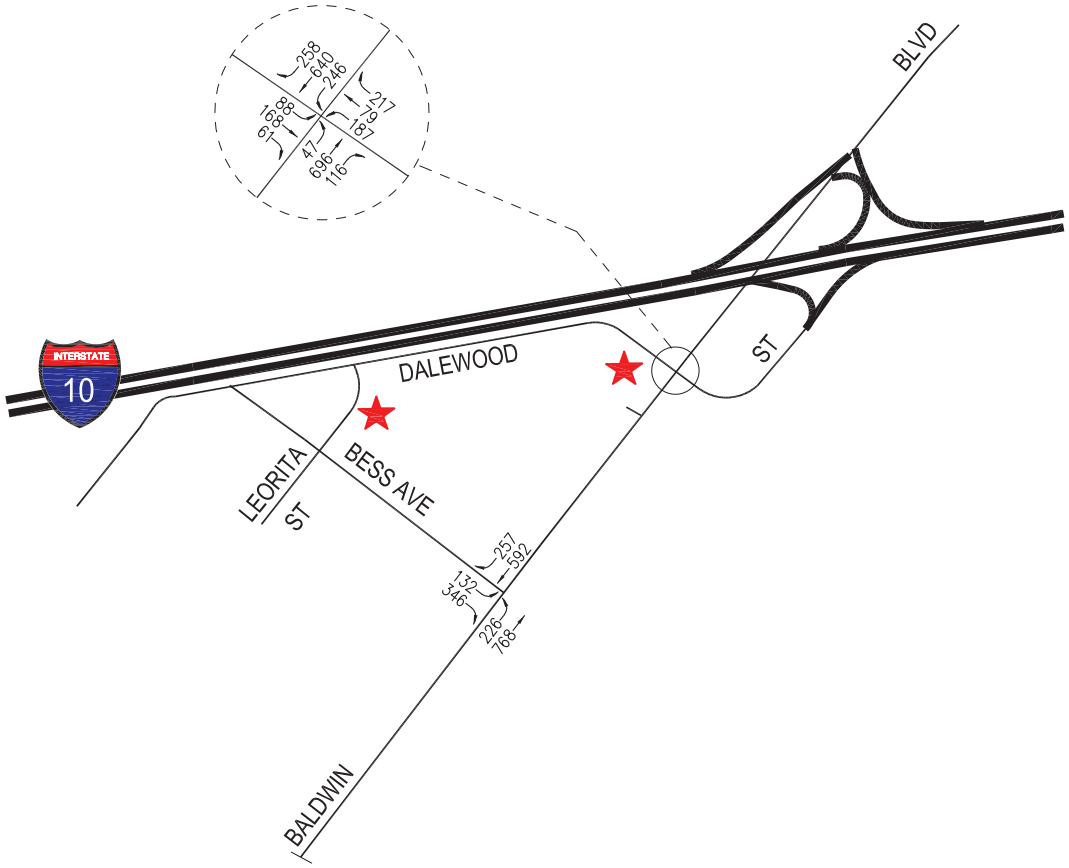
Figure 5-8

Future Year 2026 With Phase 1 Project Traffic Volumes

Weekday PM Peak Hour

Kaiser Permanente Baldwin Park Medical Center Project

o:\job_file\4109-3\dwg\f5-8.dwg 10/06/2022 15:43:13 rodriquez




o:\job_file\4109-3\dwg\f5-9.dwg 10/06/2022 15:41:57 rodriquez

N

Project Site

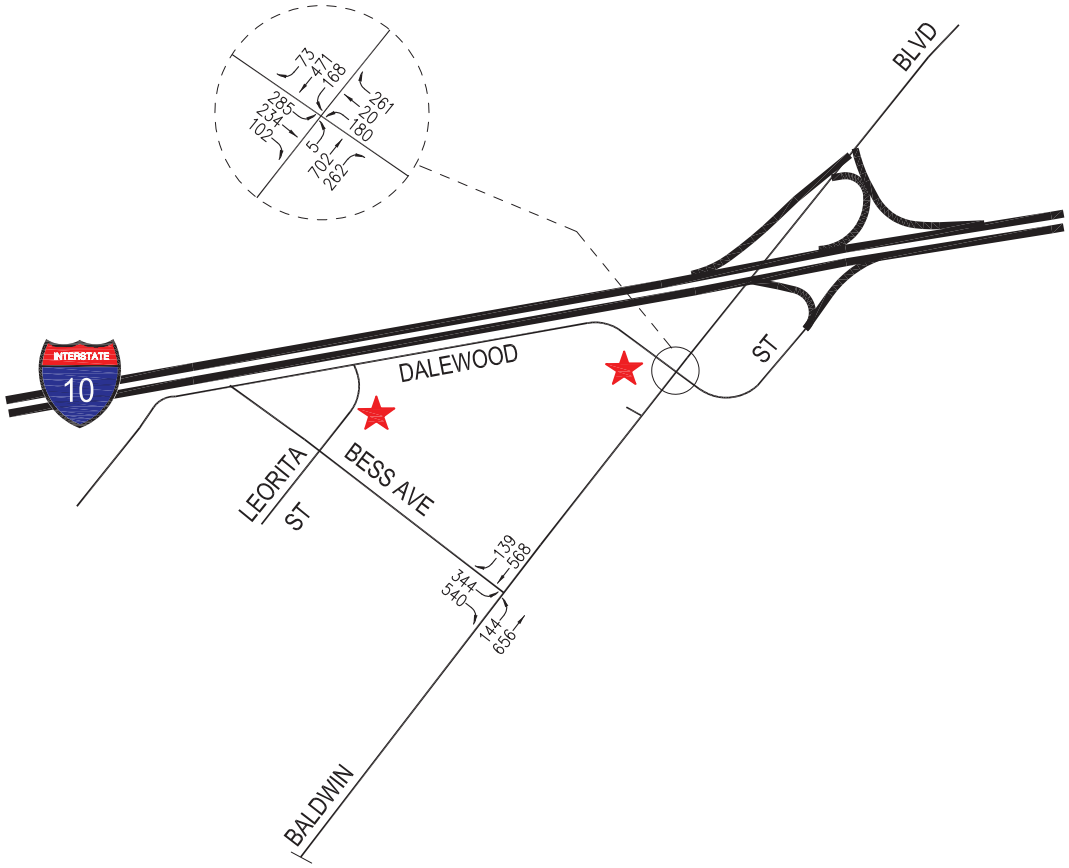
LINSCOTT LAW & GREENSPAN engineers

Figure 5-9

Future Year 2029 Without Project Traffic Volumes

Weekday AM Peak Hour

Kaiser Permanente Baldwin Park Medical Center Project




N

o:\job_file\4109-3\dwg\f5-10.dwg 10/06/2022 15:41:32 rodriquez

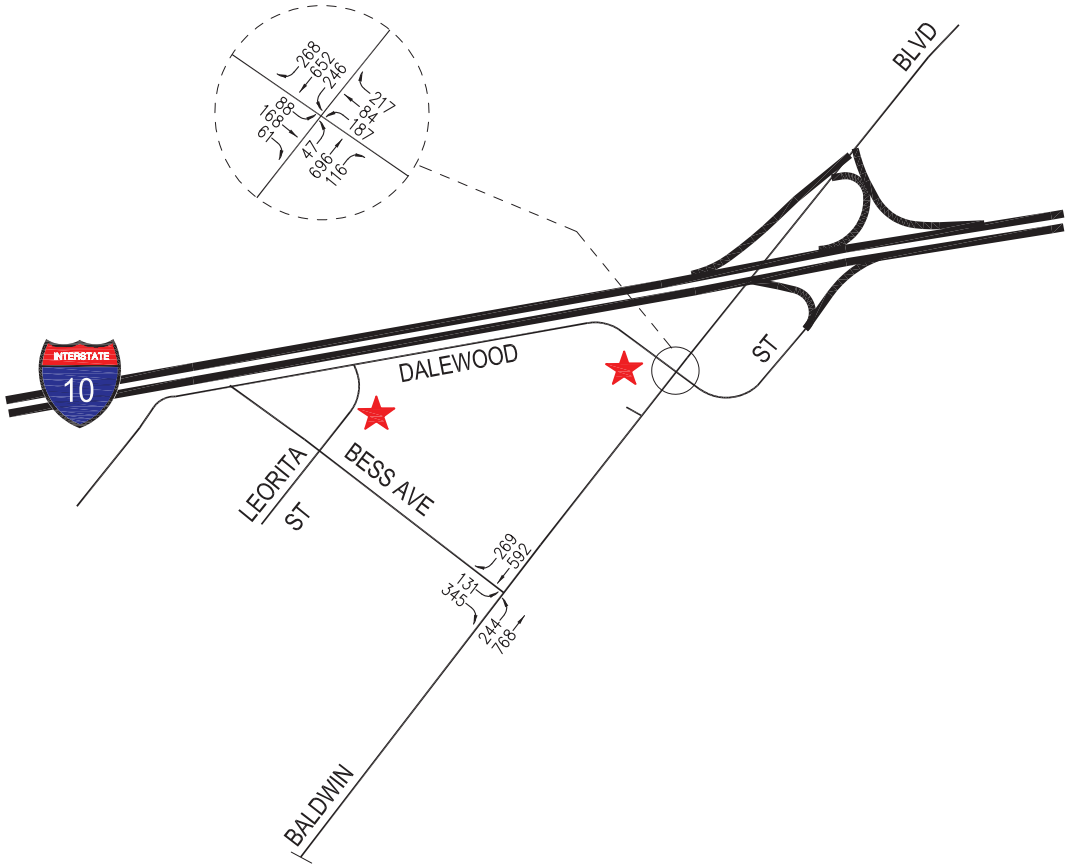
Project Site

Figure 5-10

Future Year 2029 Without Project Traffic Volumes

Weekday PM Peak Hour

Kaiser Permanente Baldwin Park Medical Center Project




N

Project Site

Figure 5-11

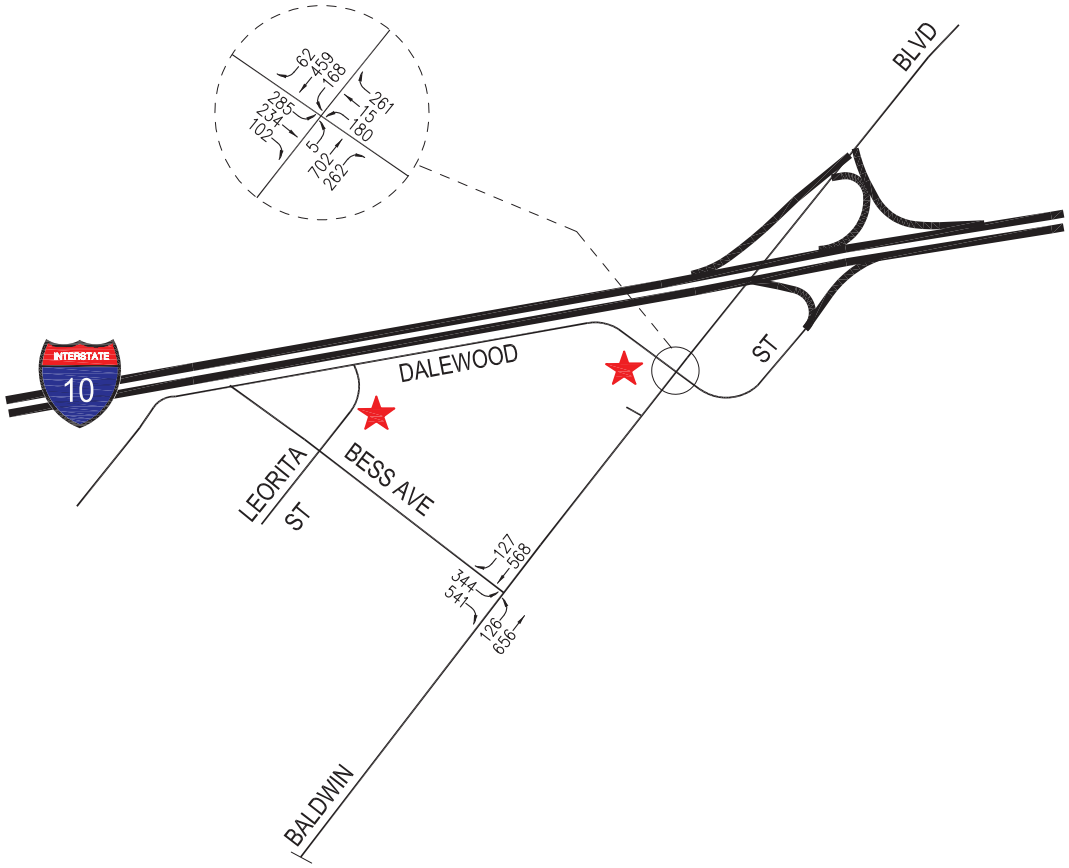
Future Year 2029 With Project Build-out Traffic Volumes

Weekday AM Peak Hour

Kaiser Permanente Baldwin Park Medical Center Project

LINSCOTT LAW & GREENSPAN engineers

o:\job_file\4109-3\dwg\f5-11.dwg 10/06/2022 15:40:31 rodriquez




N

Project Site

Figure 5-12

Future Year 2029 With Project Build-out Traffic Volumes

Weekday PM Peak Hour

Kaiser Permanente Baldwin Park Medical Center Project

o:\job_file\4109-3\dwg\f5-12.dwg 10/06/2022 15:39:56 rodriquez

## 6.0 SUMMARY AND CONCLUSIONS

- ***Project Description*** – The proposed Kaiser Permanente Baldwin Park project consists of the development of a two-phased project at the existing Kaiser Permanente BPMC campus. The first phase (Phase 1) is the construction of an expansion to the existing hospital emergency department (ED) located on the south end of the Kaiser campus. Expansion of the emergency department would add approximately 23,000 square feet resulting in a total square footage of approximately 40,000 square feet, expand the number of existing treatment bays from 38 to 60, a new ambulance canopy with four ambulance parking spaces, and tenant improvements within the existing emergency department. The Phase 1 project would also include the demolition of existing structures at 1022 Leorita Street (referred to as the "Broken Horn" site) with existing 68 parking spaces to remain. The "Broken Horn" site will remain gated until such time that the Phase 2 project construction will commence. The second phase of the project (Phase 2) would consist of the construction of an approximately 33,000 square foot medical office building (MOB). This component would expand the boundary of the medical campus to include the adjacent parcel to the northwest of the campus located at 1022 Leorita Street. The development of this site (the "Broken Horn" site) would require the demolition of the existing 23,040 square foot retail building under the Phase 1 project. A total of 80 parking spaces is planned to be provided at this site upon completion.

- ***Project Site Access*** – Vehicular access to the Kaiser Permanente BPMC campus is primarily provided via four roadways: Baldwin Park Boulevard, Dalewood Street, Bess Avenue, and Leorita Street. All of the campus driveways provide access to parking facilities and hospital/medical office buildings that are situated within the BPMC campus. There are no changes to the BPMC campus key access intersections and driveways planned as part of the proposed Kaiser Permanente BPMC project.

- ***Project Trip Generation*** – The proposed project at build-out is forecast to generate a net increase of 44 trips (46 inbound trips and 2 fewer outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project at build-out is expected to generate a net decrease of 48 trips (49 fewer inbound trips and 1 outbound trip). Over a 24-hour period, the proposed project is forecast to generate a net decrease of 65 trips (33 fewer inbound trips and 33 fewer outbound trips) during a typical weekday.

- ***VMT Analysis****:* The proposed project screens out from further analysis of VMT as the proposed development satisfies the project size screening criteria. Thus, the project is not expected to result in a significant VMT impact. Therefore, no mitigation is necessary as it relates to VMT. Further, based on the project-related VMT analysis and the conclusions reported in Section 4.1.7 (i.e., which conclude that the proposed project aligns with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), no cumulative VMT impacts are anticipated.

- ***CEQA Active Transportation and Public Transit Assessment*** –The proposed project is found to be in alignment with the City's General Plan Circulation Element goals to promote pedestrian

and bicycle safety and provide appropriate and supportive active transportation infrastructure. Further, development of the proposed project will not prevent the City from completing any proposed transit, bicycle, or pedestrian facilities. It is therefore determined that the proposed project will have a less than significant impact on active transportation and public transit in the vicinity of the project site.

- ***Intersection Level of Service Analysis*** – – Two (2) study intersections were reviewed for consistency with the City of Baldwin Park's adopted Level of Service (LOS) standards. The study intersections were evaluated using the City-approved Highway Capacity Manual (HCM) methodology to determine the LOS under existing, future year 2026 cumulative without and with project conditions, and future year 2029 cumulative without and with project conditions.. Based on application of the City's threshold criteria, project-related effects in delay at the study intersections are not expected to exceed the City's threshold criteria.

# APPENDIX A

## COUNT DATA

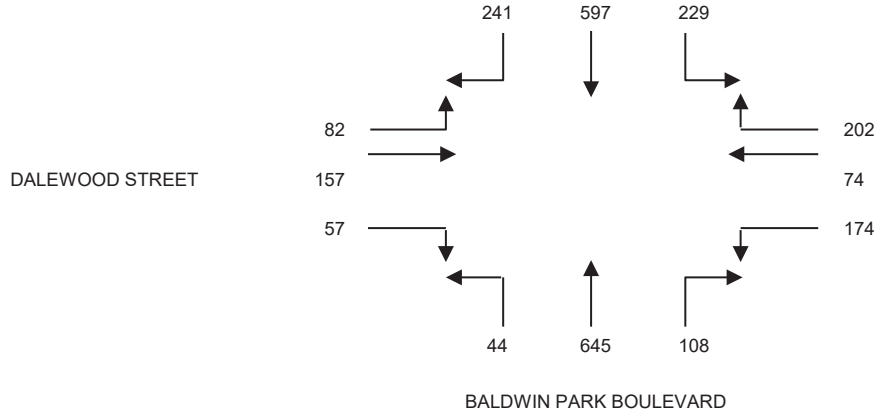
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: KP BALDWIN PARK ED EXPANSION PROJECT
DATE: TUESDAY, MAY 17, 2022
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION: N/S BALDWIN PARK BOULEVARD
E/W DALEWOOD STREET
FILE NUMBER: 1_AM

| 15 MINUTE TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0700-0715 | 24 | 91 | 42 | 24 | 9 | 36 | 21 | 169 | 6 | 4 | 28 | 18 |
| 0715-0730 | 40 | 84 | 52 | 47 | 14 | 22 | 23 | 158 | 14 | 7 | 32 | 20 |
| 0730-0745 | 48 | 132 | 60 | 66 | 14 | 42 | 29 | 160 | 9 | 13 | 40 | 29 |
| 0745-0800 | 59 | 143 | 56 | 50 | 25 | 30 | 28 | 165 | 6 | 11 | 46 | 18 |
| 0800-0815 | 70 | 162 | 61 | 38 | 16 | 57 | 26 | 170 | 11 | 15 | 43 | 23 |
| 0815-0830 | 64 | 160 | 52 | 48 | 19 | 45 | 25 | 150 | 18 | 18 | 28 | 12 |
| 0830-0845 | 43 | 151 | 36 | 52 | 20 | 43 | 38 | 125 | 10 | 13 | 23 | 16 |
| 0845-0900 | 36 | 130 | 38 | 35 | 19 | 41 | 36 | 112 | 5 | 12 | 17 | 19 |

| 1 HOUR TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0700-0800 | 171 | 450 | 210 | 187 | 62 | 130 | 101 | 652 | 35 | 35 | 146 | 85 | 2264 |
| 0715-0815 | 217 | 521 | 229 | 201 | 69 | 151 | 106 | 653 | 40 | 46 | 161 | 90 | 2484 |
| 0730-0830 | 241 | 597 | 229 | 202 | 74 | 174 | 108 | 645 | 44 | 57 | 157 | 82 | 2610 |
| 0745-0845 | 236 | 616 | 205 | 188 | 80 | 175 | 117 | 610 | 45 | 57 | 140 | 69 | 2538 |
| 0800-0900 | 213 | 603 | 187 | 173 | 74 | 186 | 125 | 557 | 44 | 58 | 111 | 70 | 2401 |

A.M. PEAK HOUR
0730-0830




DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
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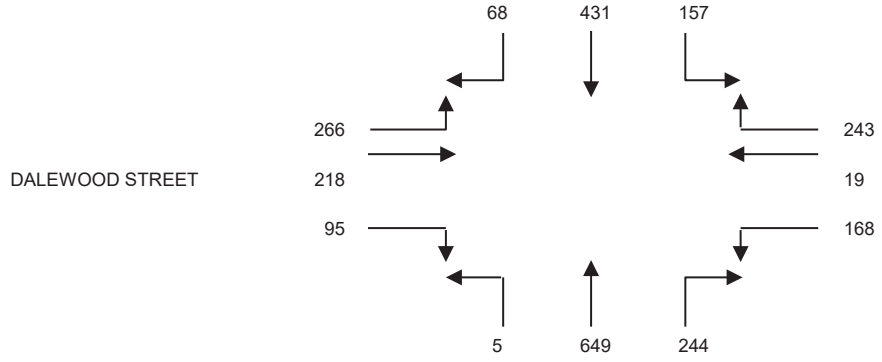
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: KP BALDWIN PARK ED EXPANSION PROJECT
DATE: TUESDAY, MAY 17, 2022
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION: N/S BALDWIN PARK BOULEVARD
E/W DALEWOOD STREET
FILE NUMBER: 1_PM

| 15 MINUTE TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0400-0415 | 17 | 92 | 25 | 51 | 6 | 30 | 39 | 132 | 3 | 18 | 38 | 67 |
| 0415-0430 | 23 | 101 | 31 | 53 | 7 | 24 | 41 | 145 | 6 | 20 | 53 | 50 |
| 0430-0445 | 16 | 114 | 34 | 50 | 2 | 33 | 64 | 178 | 2 | 24 | 50 | 63 |
| 0445-0500 | 23 | 112 | 39 | 59 | 4 | 32 | 58 | 162 | 1 | 22 | 51 | 67 |
| 0500-0515 | 13 | 101 | 49 | 72 | 7 | 50 | 57 | 150 | 1 | 25 | 64 | 66 |
| 0515-0530 | 16 | 104 | 35 | 62 | 6 | 53 | 65 | 159 | 1 | 24 | 53 | 70 |
| 0530-0545 | 23 | 100 | 34 | 60 | 4 | 40 | 40 | 179 | 3 | 19 | 31 | 56 |
| 0545-0600 | 14 | 87 | 30 | 55 | 5 | 31 | 54 | 161 | 1 | 15 | 38 | 50 |

| 1 HOUR TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0400-0500 | 79 | 419 | 129 | 213 | 19 | 119 | 202 | 617 | 12 | 84 | 192 | 247 | 2332 |
| 0415-0515 | 75 | 428 | 153 | 234 | 20 | 139 | 220 | 635 | 10 | 91 | 218 | 246 | 2469 |
| 0430-0530 | 68 | 431 | 157 | 243 | 19 | 168 | 244 | 649 | 5 | 95 | 218 | 266 | 2563 |
| 0445-0545 | 75 | 417 | 157 | 253 | 21 | 175 | 220 | 650 | 6 | 90 | 199 | 259 | 2522 |
| 0500-0600 | 66 | 392 | 148 | 249 | 22 | 174 | 216 | 649 | 6 | 83 | 186 | 242 | 2433 |

P.M. PEAK HOUR
0430-0530




DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
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# PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - PASADENA

PROJECT: KP BALDWIN PARK ED EXPANSION PROJECT

DATE: TUESDAY, MAY 17, 2022

PERIOD: 07:00 AM TO 09:00 AM

INTERSECTION: BALDWIN PARK BOULEVARD / DALEWOOD STREET

FILE: 1AMPED-BIKE

| | PEDESTRIAN MOVEMENTS | | | |
|---|---|---|---|---|
| 15-MINUTE PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D |
| 0700-0715 | 0 | 1 | 1 | 0 |
| 0715-0730 | 0 | 0 | 1 | 0 |
| 0730-0745 | 0 | 1 | 0 | 0 |
| 0745-0800 | 0 | 0 | 1 | 0 |
| 0800-0815 | 0 | 0 | 1 | 1 |
| 0815-0830 | 0 | 2 | 1 | 0 |
| 0830-0845 | 0 | 0 | 2 | 0 |
| 0845-0900 | 0 | 0 | 0 | 0 |

| | BICYCLIST MOVEMENTS | | | |
|---|---|---|---|---|
| 15-MINUTE PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D |
| 0700-0715 | 0 | 1 | 0 | 0 |
| 0715-0730 | 0 | 0 | 0 | 0 |
| 0730-0745 | 0 | 0 | 0 | 0 |
| 0745-0800 | 0 | 0 | 0 | 0 |
| 0800-0815 | 0 | 0 | 1 | 0 |
| 0815-0830 | 0 | 0 | 0 | 0 |
| 0830-0845 | 0 | 0 | 0 | 0 |
| 0845-0900 | 0 | 0 | 0 | 0 |

| | PEDESTRIAN MOVEMENTS | | | | |
|---|---|---|---|---|---|
| 1-HOUR PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D | TOTALS |
| 0700-0800 | 0 | 2 | 3 | 0 | 5 |
| 0715-0815 | 0 | 1 | 3 | 1 | 5 |
| 0730-0830 | 0 | 3 | 3 | 1 | 7 |
| 0745-0845 | 0 | 2 | 5 | 1 | 8 |
| 0800-0900 | 0 | 2 | 4 | 1 | 7 |

| | BICYCLIST MOVEMENTS | | | | |
|---|---|---|---|---|---|
| 1-HOUR PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D | TOTALS |
| 0700-0800 | 0 | 1 | 0 | 0 | 1 |
| 0715-0815 | 0 | 0 | 1 | 0 | 1 |
| 0730-0830 | 0 | 0 | 1 | 0 | 1 |
| 0745-0845 | 0 | 0 | 1 | 0 | 1 |
| 0800-0900 | 0 | 0 | 1 | 0 | 1 |

THE TRAFFIC SOLUTION
9 ALTA STREET UNIT E
ARCADIA, CALIFORNIA 91006
626.485.8048 PHONE
trafsolutn@aol.com

# PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - PASADENA

PROJECT: KP BALDWIN PARK ED EXPANSION PROJECT

DATE: TUESDAY, MAY 17, 2022

PERIOD: 04:00 PM TO 06:00 PM

INTERSECTION: BALDWIN PARK BOULEVARD / DALEWOOD STREET

FILE: 1PMPED-BIKE

| | PEDESTRIAN MOVEMENTS | | | |
|---|---|---|---|---|
| 15-MINUTE PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D |
| 0400-0415 | 0 | 0 | 0 | 0 |
| 0415-0430 | 0 | 0 | 0 | 0 |
| 0430-0445 | 0 | 2 | 3 | 0 |
| 0445-0500 | 0 | 1 | 0 | 0 |
| 0500-0515 | 0 | 0 | 0 | 1 |
| 0515-0530 | 0 | 0 | 0 | 0 |
| 0530-0545 | 0 | 0 | 0 | 0 |
| 0545-0600 | 0 | 0 | 0 | 0 |

| | BICYCLIST MOVEMENTS | | | |
|---|---|---|---|---|
| 15-MINUTE PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D |
| 0400-0415 | 0 | 0 | 1 | 0 |
| 0415-0430 | 0 | 0 | 0 | 0 |
| 0430-0445 | 0 | 1 | 0 | 0 |
| 0445-0500 | 0 | 0 | 0 | 0 |
| 0500-0515 | 0 | 0 | 0 | 1 |
| 0515-0530 | 0 | 0 | 0 | 0 |
| 0530-0545 | 0 | 0 | 0 | 0 |
| 0545-0600 | 0 | 0 | 0 | 0 |

| | PEDESTRIAN MOVEMENTS | | | | |
|---|---|---|---|---|---|
| 1-HOUR PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D | TOTALS |
| 0400-0500 | 0 | 3 | 3 | 0 | 6 |
| 0415-0515 | 0 | 3 | 3 | 1 | 7 |
| 0430-0530 | 0 | 3 | 3 | 1 | 7 |
| 0445-0545 | 0 | 1 | 0 | 1 | 2 |
| 0500-0600 | 0 | 0 | 0 | 1 | 1 |

| | BICYCLIST MOVEMENTS | | | | |
|---|---|---|---|---|---|
| 1-HOUR PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D | TOTALS |
| 0400-0500 | 0 | 1 | 1 | 0 | 2 |
| 0415-0515 | 0 | 1 | 0 | 1 | 2 |
| 0430-0530 | 0 | 1 | 0 | 1 | 2 |
| 0445-0545 | 0 | 0 | 0 | 1 | 1 |
| 0500-0600 | 0 | 0 | 0 | 1 | 1 |

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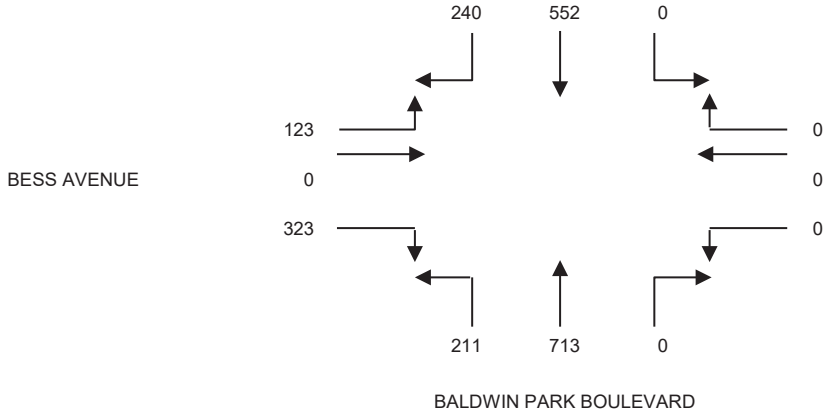
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: KP BALDWIN PARK ED EXPANSION PROJECT
DATE: TUESDAY, MAY 17, 2022
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION: N/S BALDWIN PARK BOULEVARD
E/W BESS AVENUE
FILE NUMBER: 2_AM

| 15 MINUTE TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0700-0715 | 23 | 75 | 0 | 0 | 0 | 0 | 0 | 176 | 27 | 31 | 0 | 13 |
| 0715-0730 | 20 | 94 | 0 | 0 | 0 | 0 | 0 | 191 | 30 | 49 | 0 | 11 |
| 0730-0745 | 32 | 122 | 0 | 0 | 0 | 0 | 0 | 203 | 47 | 97 | 0 | 20 |
| 0745-0800 | 57 | 152 | 0 | 0 | 0 | 0 | 0 | 189 | 54 | 79 | 0 | 31 |
| 0800-0815 | 72 | 151 | 0 | 0 | 0 | 0 | 0 | 165 | 56 | 85 | 0 | 40 |
| 0815-0830 | 79 | 127 | 0 | 0 | 0 | 0 | 0 | 156 | 54 | 62 | 0 | 32 |
| 0830-0845 | 65 | 115 | 0 | 0 | 0 | 0 | 0 | 132 | 57 | 61 | 0 | 44 |
| 0845-0900 | 76 | 120 | 0 | 0 | 0 | 0 | 0 | 127 | 52 | 58 | 0 | 48 |

| 1 HOUR TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0700-0800 | 132 | 443 | 0 | 0 | 0 | 0 | 0 | 759 | 158 | 256 | 0 | 75 | 1823 |
| 0715-0815 | 181 | 519 | 0 | 0 | 0 | 0 | 0 | 748 | 187 | 310 | 0 | 102 | 2047 |
| 0730-0830 | 240 | 552 | 0 | 0 | 0 | 0 | 0 | 713 | 211 | 323 | 0 | 123 | 2162 |
| 0745-0845 | 273 | 545 | 0 | 0 | 0 | 0 | 0 | 642 | 221 | 287 | 0 | 147 | 2115 |
| 0800-0900 | 292 | 513 | 0 | 0 | 0 | 0 | 0 | 580 | 219 | 266 | 0 | 164 | 2034 |

A.M. PEAK HOUR
0730-0830




DATA PROVIDED BY:

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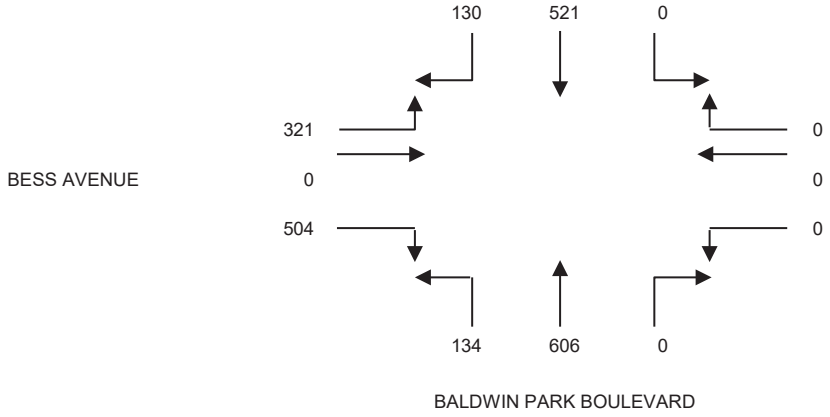
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: KP BALDWIN PARK ED EXPANSION PROJECT
DATE: TUESDAY, MAY 17, 2022
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION: N/S BALDWIN PARK BOULEVARD
E/W BESS AVENUE
FILE NUMBER: 2_PM

| 15 MINUTE TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0400-0415 | 39 | 84 | 0 | 0 | 0 | 0 | 0 | 123 | 38 | 114 | 0 | 69 |
| 0415-0430 | 29 | 102 | 0 | 0 | 0 | 0 | 0 | 132 | 32 | 107 | 0 | 59 |
| 0430-0445 | 33 | 126 | 0 | 0 | 0 | 0 | 0 | 153 | 30 | 125 | 0 | 87 |
| 0445-0500 | 36 | 132 | 0 | 0 | 0 | 0 | 0 | 140 | 40 | 124 | 0 | 87 |
| 0500-0515 | 30 | 128 | 0 | 0 | 0 | 0 | 0 | 172 | 28 | 128 | 0 | 86 |
| 0515-0530 | 31 | 135 | 0 | 0 | 0 | 0 | 0 | 141 | 36 | 127 | 0 | 61 |
| 0530-0545 | 26 | 119 | 0 | 0 | 0 | 0 | 0 | 168 | 47 | 118 | 0 | 38 |
| 0545-0600 | 23 | 111 | 0 | 0 | 0 | 0 | 0 | 130 | 30 | 104 | 0 | 41 |

| 1 HOUR TOTALS | 1 SBRT | 2 SBTH | 3 SBLT | 4 WBRT | 5 WBTH | 6 WBLT | 7 NBRT | 8 NBTH | 9 NBLT | 10 EBRT | 11 EBTH | 12 EBLT | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0400-0500 | 137 | 444 | 0 | 0 | 0 | 0 | 0 | 548 | 140 | 470 | 0 | 302 | 2041 |
| 0415-0515 | 128 | 488 | 0 | 0 | 0 | 0 | 0 | 597 | 130 | 484 | 0 | 319 | 2146 |
| 0430-0530 | 130 | 521 | 0 | 0 | 0 | 0 | 0 | 606 | 134 | 504 | 0 | 321 | 2216 |
| 0445-0545 | 123 | 514 | 0 | 0 | 0 | 0 | 0 | 621 | 151 | 497 | 0 | 272 | 2178 |
| 0500-0600 | 110 | 493 | 0 | 0 | 0 | 0 | 0 | 611 | 141 | 477 | 0 | 226 | 2058 |

P.M. PEAK HOUR
0430-0530

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# PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - PASADENA

PROJECT: KP BALDWIN PARK ED EXPANSION PROJECT

DATE: TUESDAY, MAY 17, 2022

PERIOD: 07:00 AM TO 09:00 AM

INTERSECTION: BALDWIN PARK BOULEVARD / BESS AVENUE

FILE: 2AMPED-BIKE

| | PEDESTRIAN MOVEMENTS | | | |
|---|---|---|---|---|
| 15-MINUTE PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D |
| 0700-0715 | 0 | 0 | 0 | 4 |
| 0715-0730 | 2 | 0 | 0 | 2 |
| 0730-0745 | 0 | 0 | 2 | 0 |
| 0745-0800 | 3 | 0 | 0 | 1 |
| 0800-0815 | 3 | 0 | 0 | 1 |
| 0815-0830 | 1 | 0 | 0 | 1 |
| 0830-0845 | 3 | 0 | 0 | 1 |
| 0845-0900 | 1 | 0 | 0 | 0 |

| | BICYCLIST MOVEMENTS | | | |
|---|---|---|---|---|
| 15-MINUTE PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D |
| 0700-0715 | 1 | 0 | 0 | 0 |
| 0715-0730 | 0 | 0 | 0 | 0 |
| 0730-0745 | 0 | 0 | 0 | 0 |
| 0745-0800 | 0 | 0 | 0 | 0 |
| 0800-0815 | 0 | 0 | 0 | 0 |
| 0815-0830 | 0 | 0 | 0 | 0 |
| 0830-0845 | 0 | 0 | 0 | 0 |
| 0845-0900 | 0 | 0 | 0 | 0 |

| | PEDESTRIAN MOVEMENTS | | | | |
|---|---|---|---|---|---|
| 1-HOUR PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D | TOTALS |
| 0700-0800 | 5 | 0 | 2 | 7 | 14 |
| 0715-0815 | 8 | 0 | 2 | 4 | 14 |
| 0730-0830 | 7 | 0 | 2 | 3 | 12 |
| 0745-0845 | 10 | 0 | 0 | 4 | 14 |
| 0800-0900 | 8 | 0 | 0 | 3 | 11 |

| | BICYCLIST MOVEMENTS | | | | |
|---|---|---|---|---|---|
| 1-HOUR PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D | TOTALS |
| 0700-0800 | 1 | 0 | 0 | 0 | 1 |
| 0715-0815 | 0 | 0 | 0 | 0 | 0 |
| 0730-0830 | 0 | 0 | 0 | 0 | 0 |
| 0745-0845 | 0 | 0 | 0 | 0 | 0 |
| 0800-0900 | 0 | 0 | 0 | 0 | 0 |

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# PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - PASADENA

PROJECT: KP BALDWIN PARK ED EXPANSION PROJECT

DATE: TUESDAY, MAY 17, 2022

PERIOD: 04:00 PM TO 06:00 PM

INTERSECTION: BALDWIN PARK BOULEVARD / BESS AVENUE

FILE: 2PMPED-BIKE

| | PEDESTRIAN MOVEMENTS | | | |
|---|---|---|---|---|
| 15-MINUTE PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D |
| 0400-0415 | 1 | 0 | 0 | 1 |
| 0415-0430 | 2 | 0 | 0 | 1 |
| 0430-0445 | 2 | 0 | 0 | 0 |
| 0445-0500 | 1 | 0 | 0 | 0 |
| 0500-0515 | 1 | 0 | 0 | 2 |
| 0515-0530 | 1 | 0 | 0 | 0 |
| 0530-0545 | 0 | 0 | 0 | 2 |
| 0545-0600 | 1 | 0 | 0 | 1 |

| | BICYCLIST MOVEMENTS | | | |
|---|---|---|---|---|
| 15-MINUTE PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D |
| 0400-0415 | 0 | 0 | 0 | 0 |
| 0415-0430 | 0 | 0 | 0 | 0 |
| 0430-0445 | 0 | 0 | 0 | 0 |
| 0445-0500 | 0 | 0 | 0 | 0 |
| 0500-0515 | 0 | 0 | 0 | 0 |
| 0515-0530 | 0 | 0 | 0 | 0 |
| 0530-0545 | 0 | 0 | 0 | 0 |
| 0545-0600 | 0 | 0 | 0 | 0 |

| | PEDESTRIAN MOVEMENTS | | | | |
|---|---|---|---|---|---|
| 1-HOUR PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D | TOTALS |
| 0400-0500 | 6 | 0 | 0 | 2 | 8 |
| 0415-0515 | 6 | 0 | 0 | 3 | 9 |
| 0430-0530 | 5 | 0 | 0 | 2 | 7 |
| 0445-0545 | 3 | 0 | 0 | 4 | 7 |
| 0500-0600 | 3 | 0 | 0 | 5 | 8 |

| | BICYCLIST MOVEMENTS | | | | |
|---|---|---|---|---|---|
| 1-HOUR PERIOD | NORTH LEG A | EAST LEG B | SOUTH LEG C | WEST LEG D | TOTALS |
| 0400-0500 | 0 | 0 | 0 | 0 | 0 |
| 0415-0515 | 0 | 0 | 0 | 0 | 0 |
| 0430-0530 | 0 | 0 | 0 | 0 | 0 |
| 0445-0545 | 0 | 0 | 0 | 0 | 0 |
| 0500-0600 | 0 | 0 | 0 | 0 | 0 |

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# APPENDIX B

## SYNCHRO ANALYSIS DATA
## SYNCHRO ANALYSIS DATA WORKSHEETS – WEEKDAY AM AND PM PEAK HOURS

## LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for traffic signals are stated in terms of the average control delay per vehicle. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the *v/c* ratio for the lane group in question.

Level of Service Criteria for Signalized Intersections

| Level of Service | Control Delay (Sec/Veh) |
|---|---|
| A | $\leq 10$ |
| B | $> 10$ and $\leq 20$ |
| C | $> 20$ and $\leq 35$ |
| D | $> 35$ and $\leq 55$ |
| E | $> 55$ and $\leq 80$ |
| F | $> 80$ |

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

**LOS A** describes operations with very low control delay, up to 10 seconds per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay values.

**LOS B** describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

**LOS C** describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

**LOS D** describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

**LOS E** describes operations with control delay greater than 55 and up to 80 seconds per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.

**LOS F** describes operations with control delay in excess of 80 seconds per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the lane groups. It may also occur at high *v/c* ratios with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 82 | 157 | 57 | 174 | 74 | 202 | 44 | 645 | 108 | 229 | 597 | 241 |
| Future Volume (veh/h) | 82 | 157 | 57 | 174 | 74 | 202 | 44 | 645 | 108 | 229 | 597 | 241 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 89 | 171 | 62 | 189 | 80 | 220 | 48 | 701 | 117 | 249 | 649 | 262 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 204 | 214 | 181 | 215 | 91 | 491 | 90 | 1258 | 210 | 251 | 1242 | 501 |
| Arrive On Green | 0.11 | 0.11 | 0.11 | 0.17 | 0.17 | 0.17 | 0.05 | 0.41 | 0.41 | 0.14 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1270 | 537 | 1585 | 1781 | 3047 | 508 | 1781 | 2471 | 997 |
| Grp Volume(v), veh/h | 89 | 171 | 62 | 269 | 0 | 220 | 48 | 409 | 409 | 249 | 467 | 444 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1807 | 0 | 1585 | 1781 | 1777 | 1779 | 1781 | 1777 | 1691 |
| Q Serve(g_s), s | 6.1 | 11.6 | 4.7 | 18.9 | 0.0 | 14.5 | 3.4 | 22.8 | 22.8 | 18.2 | 23.0 | 23.0 |
| Cycle Q Clear(g_c), s | 6.1 | 11.6 | 4.7 | 18.9 | 0.0 | 14.5 | 3.4 | 22.8 | 22.8 | 18.2 | 23.0 | 23.0 |
| Prop In Lane | 1.00 | | 1.00 | 0.70 | | 1.00 | 1.00 | | 0.29 | 1.00 | | 0.59 |
| Lane Grp Cap(c), veh/h | 204 | 214 | 181 | 305 | 0 | 491 | 90 | 733 | 734 | 251 | 893 | 850 |
| V/C Ratio(X) | 0.44 | 0.80 | 0.34 | 0.88 | 0.00 | 0.45 | 0.53 | 0.56 | 0.56 | 0.99 | 0.52 | 0.52 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 359 | 0 | 538 | 182 | 733 | 734 | 251 | 893 | 850 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.7 | 56.1 | 53.1 | 52.7 | 0.0 | 36.0 | 60.2 | 29.1 | 29.1 | 55.8 | 21.8 | 21.8 |
| Incr Delay (d2), s/veh | 1.5 | 6.8 | 1.1 | 19.4 | 0.0 | 0.6 | 1.6 | 2.7 | 2.7 | 54.7 | 2.2 | 2.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.1 | 9.9 | 3.5 | 15.5 | 0.0 | 9.6 | 2.8 | 14.9 | 15.0 | 17.5 | 14.9 | 14.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 55.1 | 62.9 | 54.2 | 72.1 | 0.0 | 36.6 | 61.8 | 31.8 | 31.8 | 110.5 | 24.0 | 24.1 |
| LnGrp LOS | E | E | D | E | A | D | E | C | C | F | C | C |
| Approach Vol, veh/h | | 322 | | | 489 | | | 866 | | | 1160 | |
| Approach Delay, s/veh | | 59.1 | | | 56.1 | | | 33.5 | | | 42.6 | |
| Approach LOS | | E | | | E | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.0 | 59.1 | | 20.8 | 11.3 | 70.8 | | 27.2 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 20.2 | 24.8 | | 13.6 | 5.4 | 25.0 | | 20.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 5.7 | | 1.3 | 0.0 | 8.9 | | 1.1 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | 44.0 | |
| HCM 6th LOS | D | |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 266 | 218 | 95 | 168 | 19 | 243 | 5 | 649 | 244 | 157 | 431 | 68 |
| Future Volume (veh/h) | 266 | 218 | 95 | 168 | 19 | 243 | 5 | 649 | 244 | 157 | 431 | 68 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 289 | 237 | 103 | 183 | 21 | 264 | 5 | 705 | 265 | 171 | 468 | 74 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 333 | 350 | 296 | 269 | 31 | 440 | 18 | 941 | 354 | 196 | 1453 | 229 |
| Arrive On Green | 0.19 | 0.19 | 0.19 | 0.17 | 0.17 | 0.17 | 0.01 | 0.37 | 0.37 | 0.11 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1606 | 184 | 1585 | 1781 | 2527 | 950 | 1781 | 3076 | 484 |
| Grp Volume(v), veh/h | 289 | 237 | 103 | 204 | 0 | 264 | 5 | 496 | 474 | 171 | 269 | 273 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1790 | 0 | 1585 | 1781 | 1777 | 1699 | 1781 | 1777 | 1783 |
| Q Serve(g_s), s | 20.5 | 15.3 | 7.3 | 13.9 | 0.0 | 18.8 | 0.4 | 31.6 | 31.6 | 12.3 | 12.2 | 12.4 |
| Cycle Q Clear(g_c), s | 20.5 | 15.3 | 7.3 | 13.9 | 0.0 | 18.8 | 0.4 | 31.6 | 31.6 | 12.3 | 12.2 | 12.4 |
| Prop In Lane | 1.00 | | 1.00 | 0.90 | | 1.00 | 1.00 | | 0.56 | 1.00 | | 0.27 |
| Lane Grp Cap(c), veh/h | 333 | 350 | 296 | 300 | 0 | 440 | 18 | 662 | 633 | 196 | 839 | 843 |
| V/C Ratio(X) | 0.87 | 0.68 | 0.35 | 0.68 | 0.00 | 0.60 | 0.28 | 0.75 | 0.75 | 0.87 | 0.32 | 0.32 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 355 | 0 | 489 | 182 | 662 | 633 | 251 | 839 | 843 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.77 | 0.77 | 0.77 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 51.3 | 49.2 | 46.0 | 50.9 | 0.0 | 40.7 | 63.9 | 35.5 | 35.5 | 56.9 | 21.3 | 21.4 |
| Incr Delay (d2), s/veh | 14.2 | 2.8 | 0.7 | 4.1 | 0.0 | 1.7 | 2.3 | 5.9 | 6.2 | 19.2 | 1.0 | 1.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 15.8 | 11.9 | 5.4 | 10.8 | 0.0 | 12.1 | 0.3 | 19.8 | 19.1 | 10.7 | 9.0 | 9.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 65.5 | 52.0 | 46.7 | 55.0 | 0.0 | 42.4 | 66.2 | 41.5 | 41.7 | 76.2 | 22.3 | 22.4 |
| LnGrp LOS | E | D | D | D | A | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 629 | | | 468 | | | 975 | | | 713 | |
| Approach Delay, s/veh | | 57.3 | | | 47.9 | | | 41.7 | | | 35.3 | |
| Approach LOS | | E | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 19.0 | 53.8 | | 30.2 | 6.0 | 66.8 | | 27.0 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.3 | 33.6 | | 22.5 | 2.4 | 14.4 | | 20.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 0.0 | | 1.8 | 0.0 | 7.6 | | 1.0 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 44.6 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 83 | 157 | 57 | 174 | 75 | 202 | 44 | 646 | 108 | 229 | 599 | 242 |
| Future Volume (veh/h) | 83 | 157 | 57 | 174 | 75 | 202 | 44 | 646 | 108 | 229 | 599 | 242 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 90 | 171 | 62 | 189 | 82 | 220 | 48 | 702 | 117 | 249 | 651 | 263 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 204 | 214 | 181 | 214 | 93 | 493 | 90 | 1255 | 209 | 251 | 1240 | 501 |
| Arrive On Green | 0.11 | 0.11 | 0.11 | 0.17 | 0.17 | 0.17 | 0.05 | 0.41 | 0.41 | 0.14 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1260 | 547 | 1585 | 1781 | 3048 | 508 | 1781 | 2470 | 998 |
| Grp Volume(v), veh/h | 90 | 171 | 62 | 271 | 0 | 220 | 48 | 409 | 410 | 249 | 468 | 446 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1807 | 0 | 1585 | 1781 | 1777 | 1779 | 1781 | 1777 | 1691 |
| Q Serve(g_s), s | 6.1 | 11.6 | 4.7 | 19.0 | 0.0 | 14.4 | 3.4 | 22.9 | 22.9 | 18.2 | 23.2 | 23.2 |
| Cycle Q Clear(g_c), s | 6.1 | 11.6 | 4.7 | 19.0 | 0.0 | 14.4 | 3.4 | 22.9 | 22.9 | 18.2 | 23.2 | 23.2 |
| Prop In Lane | 1.00 | | 1.00 | 0.70 | | 1.00 | 1.00 | | 0.29 | 1.00 | | 0.59 |
| Lane Grp Cap(c), veh/h | 204 | 214 | 181 | 307 | 0 | 493 | 90 | 732 | 733 | 251 | 892 | 849 |
| V/C Ratio(X) | 0.44 | 0.80 | 0.34 | 0.88 | 0.00 | 0.45 | 0.53 | 0.56 | 0.56 | 0.99 | 0.53 | 0.53 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 359 | 0 | 538 | 182 | 732 | 733 | 251 | 892 | 849 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.7 | 56.1 | 53.1 | 52.7 | 0.0 | 35.9 | 60.2 | 29.2 | 29.2 | 55.8 | 21.9 | 21.9 |
| Incr Delay (d2), s/veh | 1.5 | 6.7 | 1.1 | 19.7 | 0.0 | 0.6 | 1.6 | 2.7 | 2.7 | 54.7 | 2.2 | 2.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.1 | 9.9 | 3.5 | 15.6 | 0.0 | 9.6 | 2.8 | 15.0 | 15.0 | 17.5 | 15.0 | 14.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 55.2 | 62.9 | 54.2 | 72.4 | 0.0 | 36.5 | 61.8 | 32.0 | 32.0 | 110.5 | 24.1 | 24.2 |
| LnGrp LOS | E | E | D | E | A | D | E | C | C | F | C | C |
| Approach Vol, veh/h | | 323 | | | 491 | | | 867 | | | 1163 | |
| Approach Delay, s/veh | | 59.1 | | | 56.3 | | | 33.6 | | | 42.6 | |
| Approach LOS | | E | | | E | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.0 | 58.9 | | 20.8 | 11.3 | 70.6 | | 27.3 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 20.2 | 24.9 | | 13.6 | 5.4 | 25.2 | | 21.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 5.6 | | 1.3 | 0.0 | 8.8 | | 1.1 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 44.1 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 268 | 218 | 95 | 168 | 19 | 243 | 5 | 651 | 244 | 157 | 432 | 69 |
| Future Volume (veh/h) | 268 | 218 | 95 | 168 | 19 | 243 | 5 | 651 | 244 | 157 | 432 | 69 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 291 | 237 | 103 | 183 | 21 | 264 | 5 | 708 | 265 | 171 | 470 | 75 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 335 | 351 | 298 | 269 | 31 | 440 | 18 | 939 | 352 | 196 | 1448 | 230 |
| Arrive On Green | 0.19 | 0.19 | 0.19 | 0.17 | 0.17 | 0.17 | 0.01 | 0.37 | 0.37 | 0.11 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1606 | 184 | 1585 | 1781 | 2530 | 947 | 1781 | 3072 | 488 |
| Grp Volume(v), veh/h | 291 | 237 | 103 | 204 | 0 | 264 | 5 | 497 | 476 | 171 | 271 | 274 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1790 | 0 | 1585 | 1781 | 1777 | 1700 | 1781 | 1777 | 1783 |
| Q Serve(g_s), s | 20.6 | 15.3 | 7.3 | 13.9 | 0.0 | 18.8 | 0.4 | 31.8 | 31.8 | 12.3 | 12.4 | 12.5 |
| Cycle Q Clear(g_c), s | 20.6 | 15.3 | 7.3 | 13.9 | 0.0 | 18.8 | 0.4 | 31.8 | 31.8 | 12.3 | 12.4 | 12.5 |
| Prop In Lane | 1.00 | | 1.00 | 0.90 | | 1.00 | 1.00 | | 0.56 | 1.00 | | 0.27 |
| Lane Grp Cap(c), veh/h | 335 | 351 | 298 | 300 | 0 | 440 | 18 | 660 | 631 | 196 | 838 | 840 |
| V/C Ratio(X) | 0.87 | 0.67 | 0.35 | 0.68 | 0.00 | 0.60 | 0.28 | 0.75 | 0.75 | 0.87 | 0.32 | 0.33 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 355 | 0 | 489 | 182 | 660 | 631 | 251 | 838 | 840 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.76 | 0.76 | 0.76 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 51.2 | 49.1 | 45.8 | 50.9 | 0.0 | 40.7 | 63.9 | 35.7 | 35.7 | 56.9 | 21.4 | 21.5 |
| Incr Delay (d2), s/veh | 14.5 | 2.7 | 0.7 | 4.1 | 0.0 | 1.7 | 2.3 | 6.0 | 6.3 | 19.2 | 1.0 | 1.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 15.9 | 11.9 | 5.3 | 10.8 | 0.0 | 12.1 | 0.3 | 19.9 | 19.2 | 10.7 | 9.0 | 9.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 65.7 | 51.8 | 46.5 | 55.0 | 0.0 | 42.4 | 66.2 | 41.7 | 41.9 | 76.2 | 22.4 | 22.5 |
| LnGrp LOS | E | D | D | D | A | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 631 | | | 468 | | | 978 | | | 716 | |
| Approach Delay, s/veh | | 57.4 | | | 47.9 | | | 41.9 | | | 35.3 | |
| Approach LOS | | E | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 19.0 | 53.7 | | 30.3 | 6.0 | 66.7 | | 27.0 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.3 | 33.8 | | 22.6 | 2.4 | 14.5 | | 20.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 0.0 | | 1.8 | 0.0 | 7.6 | | 1.0 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 44.7 |
| HCM 6th LOS | | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 85 | 163 | 59 | 181 | 77 | 210 | 46 | 675 | 112 | 238 | 621 | 251 |
| Future Volume (veh/h) | 85 | 163 | 59 | 181 | 77 | 210 | 46 | 675 | 112 | 238 | 621 | 251 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 92 | 177 | 64 | 197 | 84 | 228 | 50 | 734 | 122 | 259 | 675 | 273 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 210 | 220 | 187 | 222 | 94 | 500 | 92 | 1231 | 204 | 251 | 1217 | 492 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.17 | 0.17 | 0.17 | 0.05 | 0.40 | 0.40 | 0.14 | 0.49 | 0.49 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1267 | 540 | 1585 | 1781 | 3049 | 507 | 1781 | 2469 | 999 |
| Grp Volume(v), veh/h | 92 | 177 | 64 | 281 | 0 | 228 | 50 | 428 | 428 | 259 | 486 | 462 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1807 | 0 | 1585 | 1781 | 1777 | 1779 | 1781 | 1777 | 1691 |
| Q Serve(g_s), s | 6.2 | 12.0 | 4.8 | 19.8 | 0.0 | 14.9 | 3.6 | 24.6 | 24.6 | 18.3 | 24.8 | 24.8 |
| Cycle Q Clear(g_c), s | 6.2 | 12.0 | 4.8 | 19.8 | 0.0 | 14.9 | 3.6 | 24.6 | 24.6 | 18.3 | 24.8 | 24.8 |
| Prop In Lane | 1.00 | | 1.00 | 0.70 | | 1.00 | 1.00 | | 0.28 | 1.00 | | 0.59 |
| Lane Grp Cap(c), veh/h | 210 | 220 | 187 | 316 | 0 | 500 | 92 | 717 | 718 | 251 | 876 | 833 |
| V/C Ratio(X) | 0.44 | 0.80 | 0.34 | 0.89 | 0.00 | 0.46 | 0.55 | 0.60 | 0.60 | 1.03 | 0.55 | 0.55 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 359 | 0 | 538 | 182 | 717 | 718 | 251 | 876 | 833 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.3 | 55.9 | 52.7 | 52.4 | 0.0 | 35.6 | 60.2 | 30.5 | 30.5 | 55.8 | 23.0 | 23.0 |
| Incr Delay (d2), s/veh | 1.4 | 6.7 | 1.1 | 21.2 | 0.0 | 0.6 | 1.7 | 3.2 | 3.2 | 65.6 | 2.5 | 2.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.2 | 10.1 | 3.6 | 16.2 | 0.0 | 9.9 | 2.9 | 16.0 | 16.0 | 18.8 | 16.0 | 15.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 54.8 | 62.6 | 53.8 | 73.6 | 0.0 | 36.2 | 61.8 | 33.7 | 33.7 | 121.5 | 25.5 | 25.7 |
| LnGrp LOS | D | E | D | E | A | D | E | C | C | F | C | C |
| Approach Vol, veh/h | | 333 | | | 509 | | | 906 | | | 1207 | |
| Approach Delay, s/veh | | 58.8 | | | 56.9 | | | 35.2 | | | 46.2 | |
| Approach LOS | | E | | | E | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.0 | 57.9 | | 21.2 | 11.4 | 69.5 | | 27.9 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 20.3 | 26.6 | | 14.0 | 5.6 | 26.8 | | 21.8 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.8 | | 1.3 | 0.0 | 8.2 | | 1.0 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 46.1 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 277 | 227 | 99 | 175 | 20 | 253 | 5 | 681 | 254 | 163 | 458 | 71 |
| Future Volume (veh/h) | 277 | 227 | 99 | 175 | 20 | 253 | 5 | 681 | 254 | 163 | 458 | 71 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 301 | 247 | 108 | 190 | 22 | 275 | 5 | 740 | 276 | 177 | 498 | 77 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 344 | 361 | 306 | 277 | 32 | 453 | 18 | 906 | 338 | 202 | 1423 | 219 |
| Arrive On Green | 0.19 | 0.19 | 0.19 | 0.17 | 0.17 | 0.17 | 0.01 | 0.36 | 0.36 | 0.11 | 0.46 | 0.46 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1604 | 186 | 1585 | 1781 | 2533 | 945 | 1781 | 3087 | 475 |
| Grp Volume(v), veh/h | 301 | 247 | 108 | 212 | 0 | 275 | 5 | 519 | 497 | 177 | 286 | 289 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1790 | 0 | 1585 | 1781 | 1777 | 1700 | 1781 | 1777 | 1785 |
| Q Serve(g_s), s | 21.3 | 16.0 | 7.7 | 14.5 | 0.0 | 19.5 | 0.4 | 34.5 | 34.5 | 12.7 | 13.4 | 13.6 |
| Cycle Q Clear(g_c), s | 21.3 | 16.0 | 7.7 | 14.5 | 0.0 | 19.5 | 0.4 | 34.5 | 34.5 | 12.7 | 13.4 | 13.6 |
| Prop In Lane | 1.00 | | 1.00 | 0.90 | | 1.00 | 1.00 | | 0.56 | 1.00 | | 0.27 |
| Lane Grp Cap(c), veh/h | 344 | 361 | 306 | 309 | 0 | 453 | 18 | 635 | 608 | 202 | 819 | 823 |
| V/C Ratio(X) | 0.87 | 0.68 | 0.35 | 0.69 | 0.00 | 0.61 | 0.28 | 0.82 | 0.82 | 0.87 | 0.35 | 0.35 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 355 | 0 | 495 | 182 | 635 | 608 | 251 | 819 | 823 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.75 | 0.75 | 0.75 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 50.9 | 48.7 | 45.4 | 50.5 | 0.0 | 40.1 | 63.9 | 37.9 | 37.9 | 56.7 | 22.5 | 22.5 |
| Incr Delay (d2), s/veh | 15.4 | 3.1 | 0.7 | 4.6 | 0.0 | 1.8 | 2.3 | 8.6 | 8.9 | 20.8 | 1.2 | 1.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 16.4 | 12.4 | 5.6 | 11.2 | 0.0 | 12.4 | 0.3 | 21.8 | 21.0 | 11.1 | 9.7 | 9.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 66.3 | 51.9 | 46.1 | 55.1 | 0.0 | 41.9 | 66.1 | 46.5 | 46.8 | 77.5 | 23.7 | 23.7 |
| LnGrp LOS | E | D | D | E | A | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 656 | | | 487 | | | 1021 | | | 752 | |
| Approach Delay, s/veh | | 57.6 | | | 47.6 | | | 46.7 | | | 36.4 | |
| Approach LOS | | E | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 19.5 | 51.9 | | 31.0 | 6.0 | 65.3 | | 27.6 |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 |
| Max Q Clear Time (g_c+I1), s | 14.7 | 36.5 | | 23.3 | 2.4 | 15.6 | | 21.5 |
| Green Ext Time (p_c), s | 0.1 | 0.0 | | 1.8 | 0.0 | 7.9 | | 0.9 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 46.7 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 86 | 163 | 59 | 181 | 78 | 210 | 46 | 676 | 112 | 238 | 623 | 252 |
| Future Volume (veh/h) | 86 | 163 | 59 | 181 | 78 | 210 | 46 | 676 | 112 | 238 | 623 | 252 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 93 | 177 | 64 | 197 | 85 | 228 | 50 | 735 | 122 | 259 | 677 | 274 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 210 | 220 | 187 | 221 | 96 | 501 | 92 | 1229 | 204 | 251 | 1215 | 492 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.18 | 0.18 | 0.18 | 0.05 | 0.40 | 0.40 | 0.14 | 0.49 | 0.49 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1263 | 545 | 1585 | 1781 | 3050 | 506 | 1781 | 2468 | 999 |
| Grp Volume(v), veh/h | 93 | 177 | 64 | 282 | 0 | 228 | 50 | 428 | 429 | 259 | 487 | 464 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1807 | 0 | 1585 | 1781 | 1777 | 1779 | 1781 | 1777 | 1691 |
| Q Serve(g_s), s | 6.3 | 12.0 | 4.8 | 19.8 | 0.0 | 14.9 | 3.6 | 24.6 | 24.7 | 18.3 | 24.9 | 24.9 |
| Cycle Q Clear(g_c), s | 6.3 | 12.0 | 4.8 | 19.8 | 0.0 | 14.9 | 3.6 | 24.6 | 24.7 | 18.3 | 24.9 | 24.9 |
| Prop In Lane | 1.00 | | 1.00 | 0.70 | | 1.00 | 1.00 | | 0.28 | 1.00 | | 0.59 |
| Lane Grp Cap(c), veh/h | 210 | 220 | 187 | 317 | 0 | 501 | 92 | 716 | 717 | 251 | 875 | 832 |
| V/C Ratio(X) | 0.44 | 0.80 | 0.34 | 0.89 | 0.00 | 0.46 | 0.55 | 0.60 | 0.60 | 1.03 | 0.56 | 0.56 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 359 | 0 | 538 | 182 | 716 | 717 | 251 | 875 | 832 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.4 | 55.9 | 52.7 | 52.4 | 0.0 | 35.5 | 60.2 | 30.5 | 30.5 | 55.8 | 23.1 | 23.1 |
| Incr Delay (d2), s/veh | 1.5 | 6.7 | 1.1 | 21.4 | 0.0 | 0.6 | 1.7 | 3.2 | 3.2 | 65.6 | 2.6 | 2.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.3 | 10.1 | 3.6 | 16.3 | 0.0 | 9.9 | 2.9 | 16.0 | 16.0 | 18.8 | 16.0 | 15.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 54.8 | 62.6 | 53.8 | 73.7 | 0.0 | 36.2 | 61.8 | 33.7 | 33.7 | 121.5 | 25.6 | 25.8 |
| LnGrp LOS | D | E | D | E | A | D | E | C | C | F | C | C |
| Approach Vol, veh/h | | 334 | | | 510 | | | 907 | | | 1210 | |
| Approach Delay, s/veh | | 58.8 | | | 56.9 | | | 35.3 | | | 46.2 | |
| Approach LOS | | E | | | E | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.0 | 57.8 | | 21.2 | 11.4 | 69.4 | | 28.0 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 20.3 | 26.7 | | 14.0 | 5.6 | 26.9 | | 21.8 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.8 | | 1.3 | 0.0 | 8.1 | | 1.0 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 46.1 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

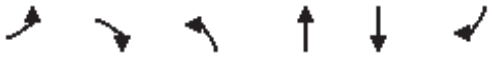
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 279 | 227 | 99 | 175 | 20 | 253 | 5 | 683 | 254 | 163 | 459 | 72 |
| Future Volume (veh/h) | 279 | 227 | 99 | 175 | 20 | 253 | 5 | 683 | 254 | 163 | 459 | 72 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 303 | 247 | 108 | 190 | 22 | 275 | 5 | 742 | 276 | 177 | 499 | 78 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 346 | 363 | 308 | 277 | 32 | 453 | 18 | 904 | 336 | 202 | 1418 | 221 |
| Arrive On Green | 0.19 | 0.19 | 0.19 | 0.17 | 0.17 | 0.17 | 0.01 | 0.36 | 0.36 | 0.11 | 0.46 | 0.46 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1604 | 186 | 1585 | 1781 | 2535 | 943 | 1781 | 3081 | 480 |
| Grp Volume(v), veh/h | 303 | 247 | 108 | 212 | 0 | 275 | 5 | 520 | 498 | 177 | 287 | 290 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1790 | 0 | 1585 | 1781 | 1777 | 1701 | 1781 | 1777 | 1784 |
| Q Serve(g_s), s | 21.5 | 15.9 | 7.7 | 14.5 | 0.0 | 19.5 | 0.4 | 34.6 | 34.6 | 12.7 | 13.5 | 13.6 |
| Cycle Q Clear(g_c), s | 21.5 | 15.9 | 7.7 | 14.5 | 0.0 | 19.5 | 0.4 | 34.6 | 34.6 | 12.7 | 13.5 | 13.6 |
| Prop In Lane | 1.00 | | 1.00 | 0.90 | | 1.00 | 1.00 | | 0.55 | 1.00 | | 0.27 |
| Lane Grp Cap(c), veh/h | 346 | 363 | 308 | 309 | 0 | 453 | 18 | 634 | 607 | 202 | 817 | 821 |
| V/C Ratio(X) | 0.88 | 0.68 | 0.35 | 0.69 | 0.00 | 0.61 | 0.28 | 0.82 | 0.82 | 0.87 | 0.35 | 0.35 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 355 | 0 | 495 | 182 | 634 | 607 | 251 | 817 | 821 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.75 | 0.75 | 0.75 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 50.8 | 48.6 | 45.3 | 50.5 | 0.0 | 40.1 | 63.9 | 38.0 | 38.0 | 56.7 | 22.6 | 22.6 |
| Incr Delay (d2), s/veh | 15.7 | 3.1 | 0.7 | 4.6 | 0.0 | 1.8 | 2.3 | 8.8 | 9.2 | 20.8 | 1.2 | 1.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 16.5 | 12.3 | 5.6 | 11.2 | 0.0 | 12.4 | 0.3 | 21.9 | 21.1 | 11.1 | 9.7 | 9.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 66.5 | 51.7 | 46.0 | 55.1 | 0.0 | 41.9 | 66.1 | 46.8 | 47.2 | 77.5 | 23.8 | 23.8 |
| LnGrp LOS | E | D | D | E | A | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 658 | | | 487 | | | 1023 | | | 754 | |
| Approach Delay, s/veh | | 57.6 | | | 47.6 | | | 47.1 | | | 36.4 | |
| Approach LOS | | E | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 19.5 | 51.8 | | 31.2 | 6.0 | 65.2 | | 27.6 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.7 | 36.6 | | 23.5 | 2.4 | 15.6 | | 21.5 | | | | |
| Green Ext Time (p_c), s | 0.1 | 0.0 | | 1.8 | 0.0 | 7.9 | | 0.9 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 46.8 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



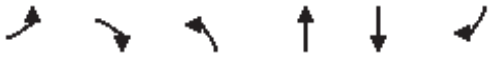
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 123 | 323 | 211 | 713 | 552 | 240 |
| Future Volume (veh/h) | 123 | 323 | 211 | 713 | 552 | 240 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 134 | 351 | 229 | 775 | 600 | 261 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 437 | 389 | 264 | 2326 | 1140 | 495 |
| Arrive On Green | 0.25 | 0.25 | 0.15 | 0.65 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2504 | 1048 |
| Grp Volume(v), veh/h | 134 | 351 | 229 | 775 | 442 | 419 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1682 |
| Q Serve(g_s), s | 5.5 | 19.3 | 11.3 | 8.7 | 15.7 | 15.7 |
| Cycle Q Clear(g_c), s | 5.5 | 19.3 | 11.3 | 8.7 | 15.7 | 15.7 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.62 |
| Lane Grp Cap(c), veh/h | 437 | 389 | 264 | 2326 | 840 | 795 |
| V/C Ratio(X) | 0.31 | 0.90 | 0.87 | 0.33 | 0.53 | 0.53 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2326 | 840 | 795 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.82 | 0.82 |
| Uniform Delay (d), s/veh | 27.7 | 32.9 | 37.5 | 6.9 | 16.6 | 16.7 |
| Incr Delay (d2), s/veh | 0.4 | 18.9 | 14.7 | 0.4 | 1.9 | 2.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.3 | 24.3 | 9.7 | 5.0 | 10.0 | 9.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 28.1 | 51.8 | 52.2 | 7.3 | 18.6 | 18.7 |
| LnGrp LOS | C | D | D | A | B | B |
| Approach Vol, veh/h | 485 | | | 1004 | 861 | |
| Approach Delay, s/veh | 45.2 | | | 17.5 | 18.6 | |
| Approach LOS | D | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 63.9 | | 26.1 | 16.3 | 47.6 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.7 | | 21.3 | 13.3 | 17.7 |
| Green Ext Time (p_c), s | | 8.7 | | 0.8 | 0.1 | 6.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 23.6 |
| HCM 6th LOS | C |

Notes

User approved volume balancing among the lanes for turning movement.



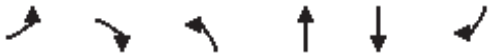
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 321 | 504 | 134 | 606 | 521 | 130 |
| Future Volume (veh/h) | 321 | 504 | 134 | 606 | 521 | 130 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 349 | 548 | 146 | 659 | 566 | 141 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 458 | 179 | 2172 | 1346 | 334 |
| Arrive On Green | 0.29 | 0.29 | 0.10 | 0.61 | 0.48 | 0.48 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2914 | 700 |
| Grp Volume(v), veh/h | 349 | 548 | 146 | 659 | 356 | 351 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1744 |
| Q Serve(g_s), s | 15.6 | 26.0 | 7.2 | 8.0 | 11.8 | 11.9 |
| Cycle Q Clear(g_c), s | 15.6 | 26.0 | 7.2 | 8.0 | 11.8 | 11.9 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.40 |
| Lane Grp Cap(c), veh/h | 515 | 458 | 179 | 2172 | 848 | 832 |
| V/C Ratio(X) | 0.68 | 1.20 | 0.82 | 0.30 | 0.42 | 0.42 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2172 | 848 | 832 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 28.3 | 32.0 | 39.7 | 8.4 | 15.4 | 15.4 |
| Incr Delay (d2), s/veh | 3.6 | 108.1 | 3.4 | 0.4 | 1.5 | 1.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 11.3 | 47.7 | 5.8 | 4.8 | 8.1 | 8.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 31.9 | 140.1 | 43.1 | 8.7 | 16.8 | 16.9 |
| LnGrp LOS | C | F | D | A | B | B |
| Approach Vol, veh/h | 897 | | | 805 | 707 | |
| Approach Delay, s/veh | 98.0 | | | 14.9 | 16.9 | |
| Approach LOS | F | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 30.0 | 12.0 | 48.0 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.0 | | 28.0 | 9.2 | 13.9 |
| Green Ext Time (p_c), s | | 7.1 | | 0.0 | 0.1 | 5.9 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 46.4 |
| HCM 6th LOS | D |

Notes

User approved volume balancing among the lanes for turning movement.



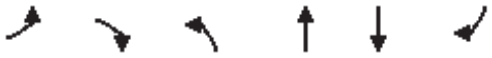
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 124 | 324 | 214 | 713 | 552 | 242 |
| Future Volume (veh/h) | 124 | 324 | 214 | 713 | 552 | 242 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 135 | 352 | 233 | 775 | 600 | 263 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 438 | 390 | 268 | 2324 | 1130 | 495 |
| Arrive On Green | 0.25 | 0.25 | 0.15 | 0.65 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2498 | 1053 |
| Grp Volume(v), veh/h | 135 | 352 | 233 | 775 | 443 | 420 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1681 |
| Q Serve(g_s), s | 5.6 | 19.4 | 11.5 | 8.7 | 15.8 | 15.9 |
| Cycle Q Clear(g_c), s | 5.6 | 19.4 | 11.5 | 8.7 | 15.8 | 15.9 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.63 |
| Lane Grp Cap(c), veh/h | 438 | 390 | 268 | 2324 | 835 | 790 |
| V/C Ratio(X) | 0.31 | 0.90 | 0.87 | 0.33 | 0.53 | 0.53 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2324 | 835 | 790 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.82 | 0.82 |
| Uniform Delay (d), s/veh | 27.7 | 32.9 | 37.4 | 6.9 | 16.8 | 16.8 |
| Incr Delay (d2), s/veh | 0.4 | 19.0 | 15.4 | 0.4 | 2.0 | 2.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.3 | 24.3 | 9.9 | 5.0 | 10.0 | 9.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 28.1 | 51.8 | 52.8 | 7.3 | 18.8 | 18.9 |
| LnGrp LOS | C | D | D | A | B | B |
| Approach Vol, veh/h | 487 | | | 1008 | 863 | |
| Approach Delay, s/veh | 45.2 | | | 17.8 | 18.9 | |
| Approach LOS | D | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 63.8 | | 26.2 | 16.5 | 47.3 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.7 | | 21.4 | 13.5 | 17.9 |
| Green Ext Time (p_c), s | | 8.7 | | 0.8 | 0.1 | 6.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 23.9 |
| HCM 6th LOS | C |

Notes

User approved volume balancing among the lanes for turning movement.



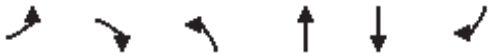
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 323 | 507 | 135 | 606 | 521 | 131 |
| Future Volume (veh/h) | 323 | 507 | 135 | 606 | 521 | 131 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 351 | 551 | 147 | 659 | 566 | 142 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 458 | 180 | 2172 | 1342 | 336 |
| Arrive On Green | 0.29 | 0.29 | 0.10 | 0.61 | 0.48 | 0.48 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2910 | 704 |
| Grp Volume(v), veh/h | 351 | 551 | 147 | 659 | 356 | 352 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1744 |
| Q Serve(g_s), s | 15.7 | 26.0 | 7.3 | 8.0 | 11.8 | 11.9 |
| Cycle Q Clear(g_c), s | 15.7 | 26.0 | 7.3 | 8.0 | 11.8 | 11.9 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.40 |
| Lane Grp Cap(c), veh/h | 515 | 458 | 180 | 2172 | 847 | 831 |
| V/C Ratio(X) | 0.68 | 1.20 | 0.82 | 0.30 | 0.42 | 0.42 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2172 | 847 | 831 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 28.3 | 32.0 | 39.6 | 8.4 | 15.4 | 15.4 |
| Incr Delay (d2), s/veh | 3.7 | 110.7 | 3.4 | 0.4 | 1.5 | 1.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 11.4 | 48.2 | 5.8 | 4.8 | 8.2 | 8.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 32.0 | 142.7 | 43.0 | 8.7 | 16.9 | 17.0 |
| LnGrp LOS | C | F | D | A | B | B |
| Approach Vol, veh/h | 902 | | | 806 | 708 | |
| Approach Delay, s/veh | 99.6 | | | 15.0 | 16.9 | |
| Approach LOS | F | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 30.0 | 12.1 | 47.9 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.0 | | 28.0 | 9.3 | 13.9 |
| Green Ext Time (p_c), s | | 7.1 | | 0.0 | 0.1 | 5.9 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 47.2 |
| HCM 6th LOS | D |

Notes

User approved volume balancing among the lanes for turning movement.



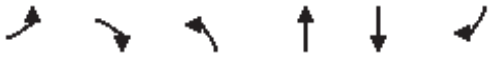
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 128 | 336 | 220 | 746 | 574 | 250 |
| Future Volume (veh/h) | 128 | 336 | 220 | 746 | 574 | 250 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 139 | 365 | 239 | 811 | 624 | 272 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 452 | 402 | 274 | 2297 | 1107 | 482 |
| Arrive On Green | 0.25 | 0.25 | 0.15 | 0.65 | 0.46 | 0.46 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2502 | 1049 |
| Grp Volume(v), veh/h | 139 | 365 | 239 | 811 | 460 | 436 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1681 |
| Q Serve(g_s), s | 5.7 | 20.1 | 11.8 | 9.4 | 17.0 | 17.0 |
| Cycle Q Clear(g_c), s | 5.7 | 20.1 | 11.8 | 9.4 | 17.0 | 17.0 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.62 |
| Lane Grp Cap(c), veh/h | 452 | 402 | 274 | 2297 | 816 | 772 |
| V/C Ratio(X) | 0.31 | 0.91 | 0.87 | 0.35 | 0.56 | 0.56 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2297 | 816 | 772 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.79 | 0.79 |
| Uniform Delay (d), s/veh | 27.2 | 32.6 | 37.2 | 7.3 | 17.7 | 17.8 |
| Incr Delay (d2), s/veh | 0.4 | 20.3 | 16.4 | 0.4 | 2.2 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.4 | 25.2 | 10.2 | 5.4 | 10.6 | 10.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 27.6 | 52.9 | 53.6 | 7.7 | 20.0 | 20.1 |
| LnGrp LOS | C | D | D | A | B | C |
| Approach Vol, veh/h | 504 | | | 1050 | 896 | |
| Approach Delay, s/veh | 45.9 | | | 18.2 | 20.0 | |
| Approach LOS | D | | | B | C | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 63.2 | | 26.8 | 16.8 | 46.3 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 11.4 | | 22.1 | 13.8 | 19.0 |
| Green Ext Time (p_c), s | | 9.3 | | 0.7 | 0.1 | 6.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 24.5 |
| HCM 6th LOS | C |

Notes

User approved volume balancing among the lanes for turning movement.



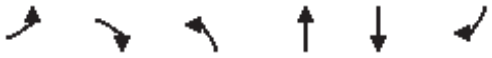
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 334 | 524 | 139 | 637 | 551 | 135 |
| Future Volume (veh/h) | 334 | 524 | 139 | 637 | 551 | 135 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 363 | 570 | 151 | 692 | 599 | 147 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 458 | 184 | 2172 | 1342 | 329 |
| Arrive On Green | 0.29 | 0.29 | 0.10 | 0.61 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2923 | 693 |
| Grp Volume(v), veh/h | 363 | 570 | 151 | 692 | 376 | 370 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1746 |
| Q Serve(g_s), s | 16.4 | 26.0 | 7.5 | 8.5 | 12.7 | 12.7 |
| Cycle Q Clear(g_c), s | 16.4 | 26.0 | 7.5 | 8.5 | 12.7 | 12.7 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.40 |
| Lane Grp Cap(c), veh/h | 515 | 458 | 184 | 2172 | 843 | 828 |
| V/C Ratio(X) | 0.71 | 1.24 | 0.82 | 0.32 | 0.45 | 0.45 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2172 | 843 | 828 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 28.6 | 32.0 | 39.5 | 8.5 | 15.8 | 15.8 |
| Incr Delay (d2), s/veh | 4.4 | 127.4 | 3.4 | 0.4 | 1.6 | 1.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 11.9 | 51.8 | 6.0 | 5.1 | 8.7 | 8.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 32.9 | 159.4 | 42.9 | 8.8 | 17.4 | 17.5 |
| LnGrp LOS | C | F | D | A | B | B |
| Approach Vol, veh/h | 933 | | | 843 | 746 | |
| Approach Delay, s/veh | 110.2 | | | 14.9 | 17.4 | |
| Approach LOS | F | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 30.0 | 12.3 | 47.7 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.5 | | 28.0 | 9.5 | 14.7 |
| Green Ext Time (p_c), s | | 7.6 | | 0.0 | 0.1 | 6.2 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 50.9 |
| HCM 6th LOS | D |

Notes

User approved volume balancing among the lanes for turning movement.



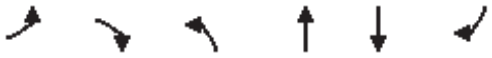
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 129 | 337 | 223 | 746 | 574 | 252 |
| Future Volume (veh/h) | 129 | 337 | 223 | 746 | 574 | 252 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 140 | 366 | 242 | 811 | 624 | 274 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 453 | 403 | 277 | 2295 | 1098 | 482 |
| Arrive On Green | 0.25 | 0.25 | 0.16 | 0.65 | 0.46 | 0.46 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2496 | 1055 |
| Grp Volume(v), veh/h | 140 | 366 | 242 | 811 | 461 | 437 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1681 |
| Q Serve(g_s), s | 5.7 | 20.2 | 12.0 | 9.4 | 17.1 | 17.1 |
| Cycle Q Clear(g_c), s | 5.7 | 20.2 | 12.0 | 9.4 | 17.1 | 17.1 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.63 |
| Lane Grp Cap(c), veh/h | 453 | 403 | 277 | 2295 | 812 | 768 |
| V/C Ratio(X) | 0.31 | 0.91 | 0.87 | 0.35 | 0.57 | 0.57 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2295 | 812 | 768 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.78 | 0.78 |
| Uniform Delay (d), s/veh | 27.2 | 32.6 | 37.1 | 7.3 | 17.9 | 17.9 |
| Incr Delay (d2), s/veh | 0.4 | 20.4 | 16.8 | 0.4 | 2.2 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.4 | 25.2 | 10.4 | 5.4 | 10.7 | 10.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 27.6 | 52.9 | 54.0 | 7.7 | 20.2 | 20.3 |
| LnGrp LOS | C | D | D | A | C | C |
| Approach Vol, veh/h | 506 | | | 1053 | 898 | |
| Approach Delay, s/veh | 45.9 | | | 18.4 | 20.2 | |
| Approach LOS | D | | | B | C | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 63.1 | | 26.9 | 17.0 | 46.1 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 11.4 | | 22.2 | 14.0 | 19.1 |
| Green Ext Time (p_c), s | | 9.3 | | 0.7 | 0.1 | 6.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 24.7 |
| HCM 6th LOS | C |

Notes

User approved volume balancing among the lanes for turning movement.



| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 336 | 527 | 140 | 637 | 551 | 136 |
| Future Volume (veh/h) | 336 | 527 | 140 | 637 | 551 | 136 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 365 | 573 | 152 | 692 | 599 | 148 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 458 | 186 | 2172 | 1338 | 330 |
| Arrive On Green | 0.29 | 0.29 | 0.10 | 0.61 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2919 | 696 |
| Grp Volume(v), veh/h | 365 | 573 | 152 | 692 | 376 | 371 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1745 |
| Q Serve(g_s), s | 16.5 | 26.0 | 7.5 | 8.5 | 12.7 | 12.8 |
| Cycle Q Clear(g_c), s | 16.5 | 26.0 | 7.5 | 8.5 | 12.7 | 12.8 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.40 |
| Lane Grp Cap(c), veh/h | 515 | 458 | 186 | 2172 | 842 | 826 |
| V/C Ratio(X) | 0.71 | 1.25 | 0.82 | 0.32 | 0.45 | 0.45 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2172 | 842 | 826 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 28.6 | 32.0 | 39.5 | 8.5 | 15.8 | 15.8 |
| Incr Delay (d2), s/veh | 4.5 | 130.1 | 3.4 | 0.4 | 1.6 | 1.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 12.0 | 52.4 | 6.0 | 5.1 | 8.7 | 8.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 33.1 | 162.1 | 42.9 | 8.8 | 17.5 | 17.5 |
| LnGrp LOS | C | F | D | A | B | B |
| Approach Vol, veh/h | 938 | | | 844 | 747 | |
| Approach Delay, s/veh | 111.9 | | | 15.0 | 17.5 | |
| Approach LOS | F | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 30.0 | 12.4 | 47.6 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.5 | | 28.0 | 9.5 | 14.8 |
| Green Ext Time (p_c), s | | 7.6 | | 0.0 | 0.1 | 6.2 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 51.7 |
| HCM 6th LOS | D |

Notes

User approved volume balancing among the lanes for turning movement.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 82 | 157 | 57 | 174 | 79 | 202 | 44 | 645 | 108 | 229 | 609 | 251 |
| Future Volume (veh/h) | 82 | 157 | 57 | 174 | 79 | 202 | 44 | 645 | 108 | 229 | 609 | 251 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 89 | 171 | 62 | 189 | 86 | 220 | 48 | 701 | 117 | 249 | 662 | 273 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 204 | 214 | 181 | 214 | 97 | 496 | 90 | 1249 | 208 | 251 | 1227 | 506 |
| Arrive On Green | 0.11 | 0.11 | 0.11 | 0.17 | 0.17 | 0.17 | 0.05 | 0.41 | 0.41 | 0.14 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1243 | 565 | 1585 | 1781 | 3047 | 508 | 1781 | 2453 | 1012 |
| Grp Volume(v), veh/h | 89 | 171 | 62 | 275 | 0 | 220 | 48 | 409 | 409 | 249 | 479 | 456 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1808 | 0 | 1585 | 1781 | 1777 | 1779 | 1781 | 1777 | 1688 |
| Q Serve(g_s), s | 6.1 | 11.6 | 4.7 | 19.3 | 0.0 | 14.4 | 3.4 | 22.9 | 22.9 | 18.2 | 24.0 | 24.0 |
| Cycle Q Clear(g_c), s | 6.1 | 11.6 | 4.7 | 19.3 | 0.0 | 14.4 | 3.4 | 22.9 | 22.9 | 18.2 | 24.0 | 24.0 |
| Prop In Lane | 1.00 | | 1.00 | 0.69 | | 1.00 | 1.00 | | 0.29 | 1.00 | | 0.60 |
| Lane Grp Cap(c), veh/h | 204 | 214 | 181 | 311 | 0 | 496 | 90 | 728 | 729 | 251 | 889 | 844 |
| V/C Ratio(X) | 0.44 | 0.80 | 0.34 | 0.88 | 0.00 | 0.44 | 0.53 | 0.56 | 0.56 | 0.99 | 0.54 | 0.54 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 359 | 0 | 538 | 182 | 728 | 729 | 251 | 889 | 844 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.7 | 56.1 | 53.1 | 52.6 | 0.0 | 35.7 | 60.2 | 29.4 | 29.4 | 55.8 | 22.2 | 22.2 |
| Incr Delay (d2), s/veh | 1.5 | 6.8 | 1.1 | 20.3 | 0.0 | 0.6 | 1.6 | 2.8 | 2.8 | 54.7 | 2.3 | 2.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.1 | 9.9 | 3.5 | 15.8 | 0.0 | 9.6 | 2.8 | 15.0 | 15.0 | 17.5 | 15.5 | 14.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 55.1 | 62.9 | 54.2 | 72.9 | 0.0 | 36.3 | 61.8 | 32.2 | 32.2 | 110.5 | 24.6 | 24.7 |
| LnGrp LOS | E | E | D | E | A | D | E | C | C | F | C | C |
| Approach Vol, veh/h | | 322 | | | 495 | | | 866 | | | 1184 | |
| Approach Delay, s/veh | | 59.1 | | | 56.6 | | | 33.8 | | | 42.7 | |
| Approach LOS | | E | | | E | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.0 | 58.7 | | 20.8 | 11.3 | 70.4 | | 27.5 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 20.2 | 24.9 | | 13.6 | 5.4 | 26.0 | | 21.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 5.6 | | 1.3 | 0.0 | 8.5 | | 1.0 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 44.3 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 266 | 218 | 95 | 168 | 14 | 243 | 5 | 649 | 244 | 157 | 419 | 57 |
| Future Volume (veh/h) | 266 | 218 | 95 | 168 | 14 | 243 | 5 | 649 | 244 | 157 | 419 | 57 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 289 | 237 | 103 | 183 | 15 | 264 | 5 | 705 | 265 | 171 | 455 | 62 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 333 | 350 | 296 | 276 | 23 | 440 | 18 | 941 | 354 | 196 | 1486 | 201 |
| Arrive On Green | 0.19 | 0.19 | 0.19 | 0.17 | 0.17 | 0.17 | 0.01 | 0.37 | 0.37 | 0.11 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1652 | 135 | 1585 | 1781 | 2527 | 950 | 1781 | 3144 | 426 |
| Grp Volume(v), veh/h | 289 | 237 | 103 | 198 | 0 | 264 | 5 | 496 | 474 | 171 | 256 | 261 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1788 | 0 | 1585 | 1781 | 1777 | 1699 | 1781 | 1777 | 1794 |
| Q Serve(g_s), s | 20.5 | 15.3 | 7.3 | 13.5 | 0.0 | 18.8 | 0.4 | 31.6 | 31.6 | 12.3 | 11.5 | 11.7 |
| Cycle Q Clear(g_c), s | 20.5 | 15.3 | 7.3 | 13.5 | 0.0 | 18.8 | 0.4 | 31.6 | 31.6 | 12.3 | 11.5 | 11.7 |
| Prop In Lane | 1.00 | | 1.00 | 0.92 | | 1.00 | 1.00 | | 0.56 | 1.00 | | 0.24 |
| Lane Grp Cap(c), veh/h | 333 | 350 | 296 | 299 | 0 | 440 | 18 | 662 | 633 | 196 | 840 | 848 |
| V/C Ratio(X) | 0.87 | 0.68 | 0.35 | 0.66 | 0.00 | 0.60 | 0.28 | 0.75 | 0.75 | 0.87 | 0.31 | 0.31 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 355 | 0 | 489 | 182 | 662 | 633 | 251 | 840 | 848 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.77 | 0.77 | 0.77 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 51.3 | 49.2 | 46.0 | 50.7 | 0.0 | 40.7 | 63.9 | 35.5 | 35.5 | 56.9 | 21.1 | 21.2 |
| Incr Delay (d2), s/veh | 14.2 | 2.8 | 0.7 | 3.5 | 0.0 | 1.7 | 2.3 | 5.9 | 6.2 | 19.2 | 0.9 | 0.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 15.8 | 11.9 | 5.4 | 10.5 | 0.0 | 12.1 | 0.3 | 19.8 | 19.1 | 10.7 | 8.6 | 8.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 65.5 | 52.0 | 46.7 | 54.2 | 0.0 | 42.4 | 66.2 | 41.4 | 41.7 | 76.2 | 22.1 | 22.1 |
| LnGrp LOS | E | D | D | D | A | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 629 | | | 462 | | | 975 | | | 688 | |
| Approach Delay, s/veh | | 57.3 | | | 47.5 | | | 41.7 | | | 35.5 | |
| Approach LOS | | E | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 19.0 | 53.8 | | 30.2 | 6.0 | 66.8 | | 26.9 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.3 | 33.6 | | 22.5 | 2.4 | 13.7 | | 20.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 0.0 | | 1.8 | 0.0 | 7.3 | | 1.0 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 44.7 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 88 | 168 | 61 | 187 | 79 | 217 | 47 | 696 | 116 | 246 | 640 | 258 |
| Future Volume (veh/h) | 88 | 168 | 61 | 187 | 79 | 217 | 47 | 696 | 116 | 246 | 640 | 258 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 96 | 183 | 66 | 203 | 86 | 236 | 51 | 757 | 126 | 267 | 696 | 280 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 216 | 227 | 192 | 227 | 96 | 506 | 92 | 1208 | 201 | 251 | 1200 | 483 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.18 | 0.18 | 0.18 | 0.05 | 0.40 | 0.40 | 0.14 | 0.49 | 0.49 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1269 | 538 | 1585 | 1781 | 3049 | 507 | 1781 | 2473 | 995 |
| Grp Volume(v), veh/h | 96 | 183 | 66 | 289 | 0 | 236 | 51 | 441 | 442 | 267 | 500 | 476 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1807 | 0 | 1585 | 1781 | 1777 | 1779 | 1781 | 1777 | 1691 |
| Q Serve(g_s), s | 6.5 | 12.4 | 5.0 | 20.3 | 0.0 | 15.5 | 3.6 | 25.9 | 25.9 | 18.3 | 26.2 | 26.2 |
| Cycle Q Clear(g_c), s | 6.5 | 12.4 | 5.0 | 20.3 | 0.0 | 15.5 | 3.6 | 25.9 | 25.9 | 18.3 | 26.2 | 26.2 |
| Prop In Lane | 1.00 | | 1.00 | 0.70 | | 1.00 | 1.00 | | 0.29 | 1.00 | | 0.59 |
| Lane Grp Cap(c), veh/h | 216 | 227 | 192 | 323 | 0 | 506 | 92 | 704 | 705 | 251 | 862 | 821 |
| V/C Ratio(X) | 0.44 | 0.81 | 0.34 | 0.90 | 0.00 | 0.47 | 0.55 | 0.63 | 0.63 | 1.06 | 0.58 | 0.58 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 359 | 0 | 538 | 182 | 704 | 705 | 251 | 862 | 821 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.1 | 55.6 | 52.4 | 52.2 | 0.0 | 35.4 | 60.2 | 31.5 | 31.5 | 55.8 | 24.0 | 24.0 |
| Incr Delay (d2), s/veh | 1.4 | 6.7 | 1.1 | 22.4 | 0.0 | 0.7 | 1.7 | 3.7 | 3.7 | 75.0 | 2.8 | 3.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.4 | 10.4 | 3.7 | 16.7 | 0.0 | 10.2 | 3.0 | 16.8 | 16.8 | 19.8 | 16.8 | 16.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 54.5 | 62.3 | 53.4 | 74.6 | 0.0 | 36.0 | 61.9 | 35.2 | 35.2 | 130.9 | 26.8 | 26.9 |
| LnGrp LOS | D | E | D | E | A | D | E | D | D | F | C | C |
| Approach Vol, veh/h | | 345 | | | 525 | | | 934 | | | 1243 | |
| Approach Delay, s/veh | | 58.4 | | | 57.3 | | | 36.7 | | | 49.2 | |
| Approach LOS | | E | | | E | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.0 | 56.9 | | 21.7 | 11.4 | 68.5 | | 28.4 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 20.3 | 27.9 | | 14.4 | 5.6 | 28.2 | | 22.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.1 | | 1.4 | 0.0 | 7.5 | | 0.9 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 47.8 |
| HCM 6th LOS | | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 285 | 234 | 102 | 180 | 20 | 261 | 5 | 702 | 262 | 168 | 471 | 73 |
| Future Volume (veh/h) | 285 | 234 | 102 | 180 | 20 | 261 | 5 | 702 | 262 | 168 | 471 | 73 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 310 | 254 | 111 | 196 | 22 | 284 | 5 | 763 | 285 | 183 | 512 | 79 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 353 | 370 | 314 | 284 | 32 | 465 | 18 | 875 | 327 | 208 | 1397 | 215 |
| Arrive On Green | 0.20 | 0.20 | 0.20 | 0.18 | 0.18 | 0.18 | 0.01 | 0.35 | 0.35 | 0.12 | 0.45 | 0.45 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1609 | 181 | 1585 | 1781 | 2532 | 945 | 1781 | 3087 | 474 |
| Grp Volume(v), veh/h | 310 | 254 | 111 | 218 | 0 | 284 | 5 | 535 | 513 | 183 | 294 | 297 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1790 | 0 | 1585 | 1781 | 1777 | 1700 | 1781 | 1777 | 1785 |
| Q Serve(g_s), s | 22.0 | 16.4 | 7.9 | 14.9 | 0.0 | 20.1 | 0.4 | 36.7 | 36.7 | 13.1 | 14.1 | 14.2 |
| Cycle Q Clear(g_c), s | 22.0 | 16.4 | 7.9 | 14.9 | 0.0 | 20.1 | 0.4 | 36.7 | 36.7 | 13.1 | 14.1 | 14.2 |
| Prop In Lane | 1.00 | | 1.00 | 0.90 | | 1.00 | 1.00 | | 0.56 | 1.00 | | 0.27 |
| Lane Grp Cap(c), veh/h | 353 | 370 | 314 | 316 | 0 | 465 | 18 | 614 | 588 | 208 | 804 | 808 |
| V/C Ratio(X) | 0.88 | 0.69 | 0.35 | 0.69 | 0.00 | 0.61 | 0.28 | 0.87 | 0.87 | 0.88 | 0.37 | 0.37 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 355 | 0 | 500 | 182 | 614 | 588 | 251 | 804 | 808 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.74 | 0.74 | 0.74 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 50.6 | 48.4 | 45.0 | 50.2 | 0.0 | 39.6 | 63.9 | 39.8 | 39.8 | 56.5 | 23.3 | 23.4 |
| Incr Delay (d2), s/veh | 16.4 | 3.3 | 0.7 | 4.9 | 0.0 | 1.9 | 2.2 | 12.1 | 12.6 | 22.4 | 1.3 | 1.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 16.9 | 12.6 | 5.7 | 11.5 | 0.0 | 12.7 | 0.3 | 23.5 | 22.8 | 11.5 | 10.1 | 10.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 67.0 | 51.7 | 45.6 | 55.1 | 0.0 | 41.5 | 66.1 | 52.0 | 52.5 | 78.9 | 24.6 | 24.7 |
| LnGrp LOS | E | D | D | E | A | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 675 | | | 502 | | | 1053 | | | 774 | |
| Approach Delay, s/veh | | 57.7 | | | 47.4 | | | 52.3 | | | 37.5 | |
| Approach LOS | | E | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 19.9 | 50.4 | | 31.6 | 6.0 | 64.2 | | 28.1 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 15.1 | 38.7 | | 24.0 | 2.4 | 16.2 | | 22.1 | | | | |
| Green Ext Time (p_c), s | 0.1 | 0.0 | | 1.8 | 0.0 | 8.0 | | 0.9 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 48.9 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 88 | 168 | 61 | 187 | 84 | 217 | 47 | 696 | 116 | 246 | 652 | 268 |
| Future Volume (veh/h) | 88 | 168 | 61 | 187 | 84 | 217 | 47 | 696 | 116 | 246 | 652 | 268 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 96 | 183 | 66 | 203 | 91 | 236 | 51 | 757 | 126 | 267 | 709 | 291 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 216 | 227 | 192 | 226 | 101 | 510 | 92 | 1202 | 200 | 251 | 1187 | 487 |
| Arrive On Green | 0.12 | 0.12 | 0.12 | 0.18 | 0.18 | 0.18 | 0.05 | 0.39 | 0.39 | 0.14 | 0.48 | 0.48 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1248 | 560 | 1585 | 1781 | 3049 | 507 | 1781 | 2457 | 1008 |
| Grp Volume(v), veh/h | 96 | 183 | 66 | 294 | 0 | 236 | 51 | 441 | 442 | 267 | 513 | 487 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1808 | 0 | 1585 | 1781 | 1777 | 1779 | 1781 | 1777 | 1689 |
| Q Serve(g_s), s | 6.5 | 12.4 | 5.0 | 20.7 | 0.0 | 15.4 | 3.6 | 26.0 | 26.0 | 18.3 | 27.3 | 27.3 |
| Cycle Q Clear(g_c), s | 6.5 | 12.4 | 5.0 | 20.7 | 0.0 | 15.4 | 3.6 | 26.0 | 26.0 | 18.3 | 27.3 | 27.3 |
| Prop In Lane | 1.00 | | 1.00 | 0.69 | | 1.00 | 1.00 | | 0.29 | 1.00 | | 0.60 |
| Lane Grp Cap(c), veh/h | 216 | 227 | 192 | 327 | 0 | 510 | 92 | 700 | 701 | 251 | 858 | 816 |
| V/C Ratio(X) | 0.44 | 0.81 | 0.34 | 0.90 | 0.00 | 0.46 | 0.55 | 0.63 | 0.63 | 1.06 | 0.60 | 0.60 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 359 | 0 | 538 | 182 | 700 | 701 | 251 | 858 | 816 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.1 | 55.6 | 52.4 | 52.1 | 0.0 | 35.1 | 60.2 | 31.7 | 31.7 | 55.8 | 24.4 | 24.4 |
| Incr Delay (d2), s/veh | 1.4 | 6.7 | 1.1 | 23.3 | 0.0 | 0.7 | 1.7 | 3.8 | 3.8 | 75.0 | 3.1 | 3.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.4 | 10.4 | 3.7 | 17.0 | 0.0 | 10.1 | 3.0 | 16.9 | 16.9 | 19.8 | 17.4 | 16.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 54.5 | 62.3 | 53.4 | 75.3 | 0.0 | 35.8 | 61.9 | 35.5 | 35.5 | 130.9 | 27.5 | 27.6 |
| LnGrp LOS | D | E | D | E | A | D | E | D | D | F | C | C |
| Approach Vol, veh/h | | 345 | | | 530 | | | 934 | | | 1267 | |
| Approach Delay, s/veh | | 58.4 | | | 57.7 | | | 36.9 | | | 49.3 | |
| Approach LOS | | E | | | E | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.0 | 56.6 | | 21.7 | 11.4 | 68.2 | | 28.7 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 20.3 | 28.0 | | 14.4 | 5.6 | 29.3 | | 22.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.0 | | 1.4 | 0.0 | 7.0 | | 0.8 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 48.0 |
| HCM 6th LOS | | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

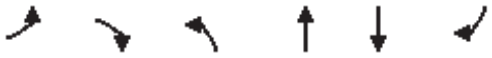
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 285 | 234 | 102 | 180 | 15 | 261 | 5 | 702 | 262 | 168 | 459 | 62 |
| Future Volume (veh/h) | 285 | 234 | 102 | 180 | 15 | 261 | 5 | 702 | 262 | 168 | 459 | 62 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 310 | 254 | 111 | 196 | 16 | 284 | 5 | 763 | 285 | 183 | 499 | 67 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 353 | 370 | 314 | 291 | 24 | 465 | 18 | 876 | 327 | 208 | 1426 | 191 |
| Arrive On Green | 0.20 | 0.20 | 0.20 | 0.18 | 0.18 | 0.18 | 0.01 | 0.35 | 0.35 | 0.12 | 0.45 | 0.45 |
| Sat Flow, veh/h | 1781 | 1870 | 1585 | 1653 | 135 | 1585 | 1781 | 2532 | 945 | 1781 | 3150 | 421 |
| Grp Volume(v), veh/h | 310 | 254 | 111 | 212 | 0 | 284 | 5 | 535 | 513 | 183 | 281 | 285 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1870 | 1585 | 1788 | 0 | 1585 | 1781 | 1777 | 1700 | 1781 | 1777 | 1795 |
| Q Serve(g_s), s | 22.0 | 16.4 | 7.9 | 14.4 | 0.0 | 20.1 | 0.4 | 36.7 | 36.7 | 13.1 | 13.3 | 13.5 |
| Cycle Q Clear(g_c), s | 22.0 | 16.4 | 7.9 | 14.4 | 0.0 | 20.1 | 0.4 | 36.7 | 36.7 | 13.1 | 13.3 | 13.5 |
| Prop In Lane | 1.00 | | 1.00 | 0.92 | | 1.00 | 1.00 | | 0.56 | 1.00 | | 0.23 |
| Lane Grp Cap(c), veh/h | 353 | 370 | 314 | 315 | 0 | 465 | 18 | 615 | 588 | 208 | 804 | 812 |
| V/C Ratio(X) | 0.88 | 0.69 | 0.35 | 0.67 | 0.00 | 0.61 | 0.28 | 0.87 | 0.87 | 0.88 | 0.35 | 0.35 |
| Avail Cap(c_a), veh/h | 426 | 447 | 379 | 355 | 0 | 500 | 182 | 615 | 588 | 251 | 804 | 812 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.74 | 0.74 | 0.74 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 50.6 | 48.4 | 45.0 | 50.0 | 0.0 | 39.6 | 63.9 | 39.8 | 39.8 | 56.5 | 23.1 | 23.2 |
| Incr Delay (d2), s/veh | 16.4 | 3.3 | 0.7 | 4.2 | 0.0 | 1.9 | 2.2 | 12.1 | 12.6 | 22.4 | 1.2 | 1.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 16.9 | 12.6 | 5.7 | 11.1 | 0.0 | 12.7 | 0.3 | 23.5 | 22.7 | 11.5 | 9.7 | 9.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 67.0 | 51.7 | 45.6 | 54.3 | 0.0 | 41.5 | 66.1 | 51.9 | 52.4 | 78.9 | 24.3 | 24.4 |
| LnGrp LOS | E | D | D | D | A | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 675 | | | 496 | | | 1053 | | | 749 | |
| Approach Delay, s/veh | | 57.7 | | | 47.0 | | | 52.2 | | | 37.7 | |
| Approach LOS | | E | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 19.9 | 50.4 | | 31.6 | 6.0 | 64.2 | | 28.1 | | | | |
| Change Period (Y+Rc), s | * 4.7 | 5.4 | | 5.9 | * 4.7 | 5.4 | | 5.2 | | | | |
| Max Green Setting (Gmax), s | * 18 | 33.6 | | 31.1 | * 13 | 38.6 | | 25.8 | | | | |
| Max Q Clear Time (g_c+I1), s | 15.1 | 38.7 | | 24.0 | 2.4 | 15.5 | | 22.1 | | | | |
| Green Ext Time (p_c), s | 0.1 | 0.0 | | 1.8 | 0.0 | 7.8 | | 0.8 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 48.9 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



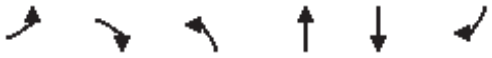
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 122 | 322 | 229 | 713 | 552 | 252 |
| Future Volume (veh/h) | 122 | 322 | 229 | 713 | 552 | 252 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 133 | 350 | 249 | 775 | 600 | 274 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 436 | 388 | 284 | 2328 | 1096 | 500 |
| Arrive On Green | 0.24 | 0.24 | 0.16 | 0.66 | 0.46 | 0.46 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2464 | 1082 |
| Grp Volume(v), veh/h | 133 | 350 | 249 | 775 | 450 | 424 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1676 |
| Q Serve(g_s), s | 5.5 | 19.3 | 12.3 | 8.7 | 16.4 | 16.4 |
| Cycle Q Clear(g_c), s | 5.5 | 19.3 | 12.3 | 8.7 | 16.4 | 16.4 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.65 |
| Lane Grp Cap(c), veh/h | 436 | 388 | 284 | 2328 | 822 | 775 |
| V/C Ratio(X) | 0.30 | 0.90 | 0.88 | 0.33 | 0.55 | 0.55 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2328 | 822 | 775 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.80 | 0.80 |
| Uniform Delay (d), s/veh | 27.7 | 32.9 | 37.0 | 6.8 | 17.4 | 17.4 |
| Incr Delay (d2), s/veh | 0.4 | 18.8 | 17.9 | 0.4 | 2.1 | 2.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.2 | 24.2 | 10.7 | 5.0 | 10.3 | 9.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 28.1 | 51.7 | 54.9 | 7.2 | 19.5 | 19.6 |
| LnGrp LOS | C | D | D | A | B | B |
| Approach Vol, veh/h | 483 | | | 1024 | 874 | |
| Approach Delay, s/veh | 45.2 | | | 18.8 | 19.6 | |
| Approach LOS | D | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 64.0 | | 26.0 | 17.3 | 46.6 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.7 | | 21.3 | 14.3 | 18.4 |
| Green Ext Time (p_c), s | | 8.7 | | 0.8 | 0.1 | 6.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 24.5 |
| HCM 6th LOS | C |

Notes

User approved volume balancing among the lanes for turning movement.



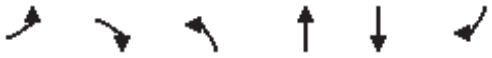
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 321 | 505 | 116 | 606 | 521 | 118 |
| Future Volume (veh/h) | 321 | 505 | 116 | 606 | 521 | 118 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 349 | 549 | 126 | 659 | 566 | 128 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 458 | 157 | 2172 | 1410 | 318 |
| Arrive On Green | 0.29 | 0.29 | 0.09 | 0.61 | 0.49 | 0.49 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2974 | 649 |
| Grp Volume(v), veh/h | 349 | 549 | 126 | 659 | 348 | 346 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1753 |
| Q Serve(g_s), s | 15.6 | 26.0 | 6.2 | 8.0 | 11.2 | 11.3 |
| Cycle Q Clear(g_c), s | 15.6 | 26.0 | 6.2 | 8.0 | 11.2 | 11.3 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.37 |
| Lane Grp Cap(c), veh/h | 515 | 458 | 157 | 2172 | 870 | 858 |
| V/C Ratio(X) | 0.68 | 1.20 | 0.80 | 0.30 | 0.40 | 0.40 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2172 | 870 | 858 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.97 |
| Uniform Delay (d), s/veh | 28.3 | 32.0 | 40.3 | 8.4 | 14.6 | 14.6 |
| Incr Delay (d2), s/veh | 3.6 | 109.0 | 3.5 | 0.4 | 1.3 | 1.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 11.3 | 47.8 | 5.0 | 4.8 | 7.8 | 7.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 31.9 | 141.0 | 43.8 | 8.7 | 15.9 | 16.0 |
| LnGrp LOS | C | F | D | A | B | B |
| Approach Vol, veh/h | 898 | | | 785 | 694 | |
| Approach Delay, s/veh | 98.6 | | | 14.3 | 15.9 | |
| Approach LOS | F | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 30.0 | 10.9 | 49.1 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.0 | | 28.0 | 8.2 | 13.3 |
| Green Ext Time (p_c), s | | 7.1 | | 0.0 | 0.1 | 5.8 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 46.6 |
| HCM 6th LOS | D |

Notes

User approved volume balancing among the lanes for turning movement.



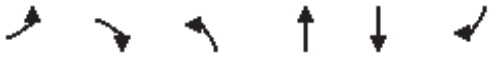
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 132 | 346 | 226 | 768 | 592 | 257 |
| Future Volume (veh/h) | 132 | 346 | 226 | 768 | 592 | 257 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 143 | 376 | 246 | 835 | 643 | 279 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 463 | 412 | 281 | 2275 | 1084 | 470 |
| Arrive On Green | 0.26 | 0.26 | 0.16 | 0.64 | 0.45 | 0.45 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2506 | 1047 |
| Grp Volume(v), veh/h | 143 | 376 | 246 | 835 | 474 | 448 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1682 |
| Q Serve(g_s), s | 5.8 | 20.7 | 12.1 | 9.9 | 18.0 | 18.0 |
| Cycle Q Clear(g_c), s | 5.8 | 20.7 | 12.1 | 9.9 | 18.0 | 18.0 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.62 |
| Lane Grp Cap(c), veh/h | 463 | 412 | 281 | 2275 | 798 | 756 |
| V/C Ratio(X) | 0.31 | 0.91 | 0.88 | 0.37 | 0.59 | 0.59 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2275 | 798 | 756 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.76 | 0.76 |
| Uniform Delay (d), s/veh | 26.8 | 32.3 | 37.0 | 7.6 | 18.6 | 18.6 |
| Incr Delay (d2), s/veh | 0.4 | 21.4 | 17.5 | 0.5 | 2.5 | 2.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.5 | 25.9 | 10.6 | 5.8 | 11.1 | 10.7 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 27.2 | 53.8 | 54.5 | 8.1 | 21.1 | 21.2 |
| LnGrp LOS | C | D | D | A | C | C |
| Approach Vol, veh/h | 519 | | | 1081 | 922 | |
| Approach Delay, s/veh | 46.4 | | | 18.6 | 21.1 | |
| Approach LOS | D | | | B | C | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 62.6 | | 27.4 | 17.2 | 45.4 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 11.9 | | 22.7 | 14.1 | 20.0 |
| Green Ext Time (p_c), s | | 9.6 | | 0.7 | 0.1 | 6.7 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 25.3 |
| HCM 6th LOS | C |

Notes

User approved volume balancing among the lanes for turning movement.



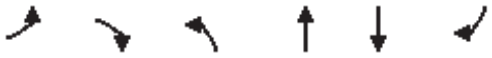
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 344 | 540 | 144 | 656 | 568 | 139 |
| Future Volume (veh/h) | 344 | 540 | 144 | 656 | 568 | 139 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 374 | 587 | 157 | 713 | 617 | 151 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 458 | 191 | 2172 | 1332 | 325 |
| Arrive On Green | 0.29 | 0.29 | 0.11 | 0.61 | 0.47 | 0.47 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2925 | 692 |
| Grp Volume(v), veh/h | 374 | 587 | 157 | 713 | 387 | 381 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1746 |
| Q Serve(g_s), s | 17.0 | 26.0 | 7.8 | 8.8 | 13.3 | 13.3 |
| Cycle Q Clear(g_c), s | 17.0 | 26.0 | 7.8 | 8.8 | 13.3 | 13.3 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.40 |
| Lane Grp Cap(c), veh/h | 515 | 458 | 191 | 2172 | 836 | 822 |
| V/C Ratio(X) | 0.73 | 1.28 | 0.82 | 0.33 | 0.46 | 0.46 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2172 | 836 | 822 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Uniform Delay (d), s/veh | 28.8 | 32.0 | 39.3 | 8.5 | 16.1 | 16.1 |
| Incr Delay (d2), s/veh | 5.1 | 142.8 | 3.4 | 0.4 | 1.7 | 1.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 12.3 | 55.1 | 6.2 | 5.3 | 9.0 | 8.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 33.9 | 174.8 | 42.7 | 8.9 | 17.9 | 17.9 |
| LnGrp LOS | C | F | D | A | B | B |
| Approach Vol, veh/h | 961 | | | 870 | 768 | |
| Approach Delay, s/veh | 119.9 | | | 15.0 | 17.9 | |
| Approach LOS | F | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 30.0 | 12.6 | 47.4 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.8 | | 28.0 | 9.8 | 15.3 |
| Green Ext Time (p_c), s | | 7.8 | | 0.0 | 0.1 | 6.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 54.7 |
| HCM 6th LOS | D |

Notes

User approved volume balancing among the lanes for turning movement.



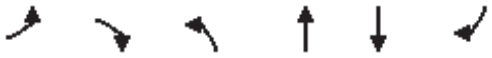
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 131 | 345 | 244 | 768 | 592 | 269 |
| Future Volume (veh/h) | 131 | 345 | 244 | 768 | 592 | 269 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 142 | 375 | 265 | 835 | 643 | 292 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 462 | 411 | 299 | 2277 | 1044 | 474 |
| Arrive On Green | 0.26 | 0.26 | 0.17 | 0.64 | 0.44 | 0.44 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2468 | 1078 |
| Grp Volume(v), veh/h | 142 | 375 | 265 | 835 | 481 | 454 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1676 |
| Q Serve(g_s), s | 5.8 | 20.7 | 13.1 | 9.9 | 18.7 | 18.7 |
| Cycle Q Clear(g_c), s | 5.8 | 20.7 | 13.1 | 9.9 | 18.7 | 18.7 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.64 |
| Lane Grp Cap(c), veh/h | 462 | 411 | 299 | 2277 | 781 | 737 |
| V/C Ratio(X) | 0.31 | 0.91 | 0.89 | 0.37 | 0.62 | 0.62 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2277 | 781 | 737 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.74 | 0.74 |
| Uniform Delay (d), s/veh | 26.8 | 32.4 | 36.6 | 7.6 | 19.4 | 19.4 |
| Incr Delay (d2), s/veh | 0.4 | 21.3 | 20.3 | 0.5 | 2.7 | 2.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.4 | 25.8 | 11.5 | 5.8 | 11.5 | 11.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 27.2 | 53.7 | 56.9 | 8.0 | 22.1 | 22.2 |
| LnGrp LOS | C | D | E | A | C | C |
| Approach Vol, veh/h | 517 | | | 1100 | 935 | |
| Approach Delay, s/veh | 46.4 | | | 19.8 | 22.2 | |
| Approach LOS | D | | | B | C | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 62.7 | | 27.3 | 18.1 | 44.6 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 11.9 | | 22.7 | 15.1 | 20.7 |
| Green Ext Time (p_c), s | | 9.6 | | 0.7 | 0.1 | 6.6 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 26.1 |
| HCM 6th LOS | C |

Notes

User approved volume balancing among the lanes for turning movement.



| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 344 | 541 | 126 | 656 | 568 | 127 |
| Future Volume (veh/h) | 344 | 541 | 126 | 656 | 568 | 127 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 374 | 588 | 137 | 713 | 617 | 138 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 515 | 458 | 169 | 2172 | 1393 | 311 |
| Arrive On Green | 0.29 | 0.29 | 0.10 | 0.61 | 0.48 | 0.48 |
| Sat Flow, veh/h | 1781 | 1585 | 1781 | 3647 | 2980 | 644 |
| Grp Volume(v), veh/h | 374 | 588 | 137 | 713 | 379 | 376 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1585 | 1781 | 1777 | 1777 | 1754 |
| Q Serve(g_s), s | 17.0 | 26.0 | 6.8 | 8.8 | 12.6 | 12.7 |
| Cycle Q Clear(g_c), s | 17.0 | 26.0 | 6.8 | 8.8 | 12.6 | 12.7 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.37 |
| Lane Grp Cap(c), veh/h | 515 | 458 | 169 | 2172 | 858 | 847 |
| V/C Ratio(X) | 0.73 | 1.28 | 0.81 | 0.33 | 0.44 | 0.44 |
| Avail Cap(c_a), veh/h | 515 | 458 | 336 | 2172 | 858 | 847 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 28.8 | 32.0 | 39.9 | 8.5 | 15.3 | 15.3 |
| Incr Delay (d2), s/veh | 5.1 | 143.7 | 3.5 | 0.4 | 1.6 | 1.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 12.3 | 55.3 | 5.4 | 5.3 | 8.6 | 8.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 33.9 | 175.7 | 43.4 | 8.9 | 16.9 | 16.9 |
| LnGrp LOS | C | F | D | A | B | B |
| Approach Vol, veh/h | 962 | | | 850 | 755 | |
| Approach Delay, s/veh | 120.6 | | | 14.5 | 16.9 | |
| Approach LOS | F | | | B | B | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 30.0 | 11.6 | 48.4 |
| Change Period (Y+Rc), s | | 5.0 | | 4.0 | 3.0 | 5.0 |
| Max Green Setting (Gmax), s | | 55.0 | | 26.0 | 17.0 | 35.0 |
| Max Q Clear Time (g_c+I1), s | | 10.8 | | 28.0 | 8.8 | 14.7 |
| Green Ext Time (p_c), s | | 7.8 | | 0.0 | 0.1 | 6.2 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 54.9 |
| HCM 6th LOS | D |

Notes

User approved volume balancing among the lanes for turning movement.

# Appendix I

Draft Archaeological Resources Assessment

DUDEK
38 NORTH MARENGO AVENUE
PASADENA, CALIFORNIA 91101
T 626.204.9800 F 626.204.9834

September 23, 2022 14416

Kaiser Foundation Hospitals
Attn: Mr. Eddie Arango, Project Manager
Capital Projects/Baldwin Park Service Area
4900 Rivergrade Rd., Suite C110
Irwindale, California 91706

**Subject: Draft Archaeological Resources Assessment for the Kaiser Baldwin Park Emergency Room Expansion and Medical Office Building Project, City of Baldwin Park, Los Angeles County, California**

Dear Mr. Eddie Arango:

This letter report documents the archaeological resources assessment conducted by Dudek for the proposed Kaiser Baldwin Park Emergency Room Expansion and Medical Office Building Project (Project or proposed Project) located at Kaiser's existing Kaiser Baldwin Park Medical Campus located within the City of Baldwin Park, Los Angeles County, California. The present study documents the results of a California Historical Resources Information System (CHRIS) records search conducted at the South Central Coastal Information Center (SCCIC); Native American coordination with the Native American Heritage Commission (NAHC) for a Sacred Lands File (SLF) search; in-depth review of geotechnical, archival, academic, and ethnographic information; an archaeological pedestrian survey; an analysis of the potential for the proposed Project site to contain archaeological resources; as well as management recommendations. The City of Baldwin Park (City) is the lead agency responsible for compliance with California Environmental Quality Act (CEQA).

# Project Location

The proposed Project site is located within the southern portion of the City of Baldwin Park, Los Angeles County, California. Specifically, the proposed Project site is located within public land survey system (PLSS) Section 24, Township 1 South, Range 11 West on the *Baldwin Park*, California 7.5-minute USGS Quadrangle (Appendix A: Figure 1). The proposed Project site is composed of three (3) parcels and includes Assessor Identification Number (AIN) 8559-006-006 (Kaiser Baldwin Park Medical Campus) and AINs 8559-008-011 and 8559-008-005 (herein collectively referred to as the "Broken Horn site"). The proposed Project site includes addresses 1026 Leorita Street and 1101 Baldwin Park Boulevard, and is bound by Dalewood Street to the north, Leorita Street to the West, Bess Avenue to the southwest, and Baldwin Park Boulevard to the southeast (Appendix A: Figure 2).

# Project Description

The proposed Project consists of two components, the expansion to the emergency department and the construction of a medical office building (MOB) at the current Kaiser Baldwin Park Medical Campus (medical

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campus). The emergency department building is part of an existing hospital tower located on the south end of the medical campus within AIN 8559-006-006. The MOB site or "Broken Horn" site includes AINs 8559-008-011 and 8559-008-005. While the existing medical campus is approximately 24.48 acres, only portions of the medical campus would be subject to development. Each proposed Project component is discussed below.

### Emergency Department Expansion

The emergency department expansion would increase the size of the existing emergency department by 23,000 square feet, resulting in a total square footage of an approximately 40,000 square foot emergency department once the project is complete and would be one-story. Phase 1 would also involve expanding the number of existing treatment bays from 38 to 60 and include a new ambulance canopy as well as additional improvements to the existing emergency department. The emergency department expansion would include an additional emergency department walk- in entrance to the northwest corner of the emergency department. The new ambulance canopy entry is approximately 252 feet away from the existing member walk-in entry. Existing primary entry will continue to serve member walk-in to the emergency department. Vehicle entrance to the proposed Project site would remain the same as the existing entrance. The new ambulance bay would include an addition of four ambulance parking spaces. The expansion and improvement of the emergency department would allow for better functionality within the emergency department. The emergency room department expansion includes proposed new underground utilities within the extant parking lot located immediately east. The proposed underground utility work involves routing from the existing Central Plant, located immediately north of the extant parking lot, to the proposed emergency room department expansion to the southwest. The remaining portions of the extant parking lot of the emergency room department expansion will only be subject to repaving and paring restriping. In total, the proposed emergency department expansion and adjacent parking lot encompasses approximately 0.79 acres.

### Construction and Operation of MOB

The construction and operation of the proposed MOB would consist of a two-story 33,000 square foot building at the Broken Horn site. This component would expand the existing medical campus to the northwest on a property which includes an existing retail building (AINs 8559-008-011 and 8559-008-005) and encompasses approximately 1.54 acres. The MOB component would also include 80 stall parking lot for Americans with Disabilities Act (ADA) and Member parking.

### Off-Site Improvements

The proposed Project also includes several off-site improvements for both phases, which include the following activities: new sidewalks adjacent to several of the streets that bound the proposed Project site, new ADA compliant ramps at a number of different entry points and junctions, closure of the northwestern driveway on Bess Avenue, asphalt grinding and overlaying close to the medical campus, and the removal and replacement of damages trees along the frontage of Baldwin Park Boulevard. The off-site improvements encompass approximately 3.03 acres.

### Project Construction and Phasing

The proposed Project will occur in two phases. Phase one would include activities on within AINs 8559-006-006, 8559-008-011, and 8559-008-005 of the proposed Project. Phase one activities for the emergency department expansion component would include site preparation, emergency room expansion, emergency room renovation.

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Phase one activities for the MOB component would include the demolition of the existing retail building and paving at the Broken Horn site. Additionally, phase one would include the off-site improvements listed above. Phase two will focus on the MOB component at the Broken Horn site and the remaining off-site improvements, including site preparation, grading, and construction of the MOB building. Current Project design indicates that the maximum depth of ground disturbance for the MOB component at the Broken Horn site is 10 feet below the existing ground surface and a maximum depth of 65 feet below current grade for the drilling of caissons at the emergency department expansion component. In addition, ground disturbance associated with all other construction components, including site preparation, vegetation removal, and trenching for utility work is assumed to be no deeper than 5 feet below existing ground surface.

# Environmental Setting

The proposed Project site is located approximately 7 miles south of the San Gabriel Mountains, approximately 0.05 miles north of the channelized Walnut Creek, approximately 1 mile east of the channelized San Gabriel River and over 30 miles east of the Pacific Ocean.

The proposed Project site is currently developed, consisting of the existing medical campus (AIN 8559-006-006) and an abandoned retail building within the Broken Horn site (AINs 8559-008-011 and 8559-008-005). The Broken Horn site is located adjacent to the existing medical campus to the northwest. Due to the develop nature of the site, the site is relatively flat and the site range elevation averages 308 feet above mean sea level (amsl) (Google Earth 2022). The proposed Project site is surrounded by existing development on all sides, including Interstate 10 (I-10) freeway to the north, commercial uses to the south and east, and residential uses to the south and west.

According to the to the Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022), soils within the proposed Project site predominantly consist of the Urban Land-Tujunga-Typic Xerorthents, sandy substratum complex at 0 to 2 percent slopes, and are composed of the following: Urban land (45 percent), Tujunga (35 percent), Typic Xerorthents (15 percent), and Palmview (5 percent). The above soil complex accounts for entirety of the proposed Project site, and all are found within flood plains.

The dominant soil series within the proposed Project site, Urban Land, refers to soils in areas of high population density in a largely built environment and can include human-transported or human-altered materials, minimally altered materials, or intact native soils (USDA 2022). The horizontal or slope data for this series is associated with soils that have been significantly altered by human activities and therefore associated with nearly level or low slopes (USDA 2022).

# Regulatory Context

Work for this Project was conducted in compliance with the California Environmental Quality Act (CEQA). The regulatory framework as it pertains to cultural resources under CEQA is detailed below.

Under the provisions of CEQA, including the CEQA Statutes (PRC Sections 21083.2 and 21084.1), the CEQA Guidelines (14 CCR 15064.5), and California Public Resources Code (PRC) Section 5024.1 (14 CCR 4850 et seq.), properties

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expected to be directly or indirectly affected by a proposed project must be evaluated for California Register of Historical Resources (CRHR) eligibility (PRC Section 5024.1).

The purpose of the CRHR is to maintain listings of the state's historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change. The term historical resources includes a resource listed in or determined to be eligible for listing in the CRHR; a resource included in a local register of historical resources; and any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a]). The criteria for listing properties in the CRHR were developed in accordance with previously established criteria developed for listing in the National Register of Historic Places. The California Office of Historic Preservation regards "any physical evidence of human activities over 45 years old" as meriting recordation and evaluation (OHP 1995:2).

# State

## The California Register of Historical Resources

A cultural resource is considered "historically significant" under CEQA if the resource meets one or more of the criteria for listing on the CRHR. The CRHR was designed to be used by state and local agencies, private groups, and citizens to identify existing cultural resources within the state and to indicate which of those resources should be protected, to the extent prudent and feasible, from substantial adverse change. The following criteria have been established for the CRHR. A resource is considered significant if it:

1. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. is associated with the lives of persons important in our past;
3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, historical resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such integrity is evaluated in regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Under CEQA, if an archeological site is not a historical resource but meets the definition of a "unique archeological resource" as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as follows:

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
  - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
  - Has a special and particular quality, such as being the oldest of its type or the best available example of its type
  - Is directly associated with a scientifically recognized important prehistoric or historic event or person

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Resources that neither meet any of these criteria for listing in the CRHR nor qualify as a "unique archaeological resource" under CEQA (PRC Section 21083.2) are viewed as not significant. Under CEQA, "A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects" (PRC Section 21083.2[h]).

Impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to historical resources from a proposed project are thus considered significant if the project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource, which contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

## California Environmental Quality Act

As described further, the following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource"; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; CEQA Guidelines Section 15064.5(b)). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(q)), it is an "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines

Section 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project does any of the following:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA (CEQA Guidelines Section 15064.5(b)(2)).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2(a)–(c)).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. (Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2(g)).

Impacts on nonunique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4)). However, if a nonunique archaeological resource qualifies as a TCR (PRC Sections 21074(c) and 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

### California State Assembly Bill 52

Assembly Bill (AB) 52 of 2014 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that tribal cultural resources (TCRs) must be considered under CEQA and also provided for additional Native American consultation requirements for

the lead agency. Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe and that is either:

- On or determined to be eligible for the California Register of Historical Resources or a local historic register; or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the project site, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

Section 1 (a)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to tribal cultural resources, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

### California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (Section 7050.5(b)). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact NAHC within 24 hours (Section 7050.5(c)). NAHC will notify the "most likely descendant." With the permission of the landowner, the most likely descendant may inspect the site of discovery. Recommendations from the MLD(s) should be provided within 48 hours of being provided access to the site. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains, and items associated with Native Americans.

## Local

There are no applicable local regulations for archaeological resources for the City of Baldwin Park.

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# Background Research

## SCCIC Records Search

On July 11, 2022, staff at the South Central Coast Information Center (SCCIC), located on the campus of California State University, Fullerton, provided the results of a CHRIS records search for the proposed Project site and a 1-mile radius. Due to COVID-19, the SCCIC notified researchers that they are only able to provide data for Los Angeles County that has already been digitized. As such, not all available data known to CHRIS may be provided in the records search. The CHRIS records search results provided by the SCCIC included their digitized collections of mapped prehistoric and historic archaeological resources and historic built-environment resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. The confidential records search results are also provided in Confidential Appendix B.

### Previously Conducted Cultural Resource Studies

Results of the cultural resources records search indicate that 39 previous cultural resource studies have been conducted within 1-mile of the proposed Project site between 1979 and 2013. Of these studies, three (3) overlap the proposed Project site (LA-10190, -10883, and -11784). Table 1, below, details all 39 previous cultural resources studies followed by a brief summary of the available reports overlapping the proposed Project site.

**Table 1. Previous Technical Studies Within a 1-Mile Radius of the Proposed Project Site**

| SCCIC Report No. (LA-) | Authors | Date | Title | Proximity to Proposed Project Site |
|---|---|---|---|---|
| 00294 | Adams, Andrea | Unknown | A Preliminary Archaeological Literature Search for the Community Development Plan | Outside |
| 00637 | Zahniser, Jack L. | 1979 | Final Environmental Impact Report S & S Construction Company Twin Lakes Condominium Project Zone Change 8-78 | Outside |
| 02412 | Singer, Clay A. | 1968 | UCLA Archaeological Survey Field Project Number UCAS-086. | Outside |
| 02871 | Wlodarski, Robert J. and Dan Larson | 1993 | Department of Transportation Negative Archaeological Survey Report DPD-EP-25 (Revised 2/83) Interstate 10 (I-10) Between Baldwin Avenue in City of El Monte on the West and the Interchange Between I-10 and I-605 | Outside |
| 02894 | De Barros, Phillip | 1993 | Cultural Resources Survey of Area of Potential Effects of Proposed Dam Near Drop Structure No. 13 Within the San Gabriel River, Los Angeles County, California | Outside |
| 03056 | Wlodarski, Robert J. | 1994 | Negative Archaeological Survey Report Minor Widening for I-10 Malibu, California. | Outside |

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**Table 1. Previous Technical Studies Within a 1-Mile Radius of the Proposed Project Site**

| SCCIC Report No. (LA-) | Authors | Date | Title | Proximity to Proposed Project Site |
|---|---|---|---|---|
| 03101 | White, William G. | 1994 | Cultural Resource Investigation of Eight Monitoring Well Locations for the San Gabriel Basin Demonstration Project, Los Angeles County, California | Outside |
| 03824 | Anonymous | 1995 | Cultural Resources Report for the Baldwin Park Operable Unit Water Delivery Plan | Outside |
| 04489 | Wrobleski, David E. and Richard A. Krautkramer | 1999 | A Class III Archaeological Investigation for the La Puente Valley County Water District Treatability Study in Los Angeles County, California | Outside |
| 04596 | Duke, Curt | 1999 | Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 951-01, County of Los Angeles, California | Outside |
| 04880 | Smith, Philomene and Sriro, Adam | 2000 | Pavement Rehabilitation Along Route 605 Within the Cities of Long Beach, Lakewood, Cerritos, Downey, Pico Rivera, Santa Fe Springs, Whittier, City of Industry, Baldwin Park and Irwindale. | Outside |
| 06112 | Bonner, Wayne H. | 2001 | Cultural Resources Assessment of Baldwin Park Site, Los Angeles County, California | Outside |
| 06114 | Conkling, Steven W. and McLean, Deborah K.B. | 2002 | Monitoring and Inadvertent Discovery Plan for Proposed Wells and Treated Water Pipelines for Treatment Plant B-6 and B-5, Cities of El Monte, Baldwin Park and Industry, Los Angeles County, California | Outside |
| 06276 | Duke, Curt | 2001 | Cultural Resource Assessment Cingular Wireless Facility No. VY 126-01 Los Angeles County, California | Outside |
| 06281 | Storey, Noelle | 2001 | Highway Project Construction of Wheelchair Ramps at Ramona Blvd., Lower Azusa Road, Live Oak Avenue and Arrow Highway Along Route 605 in the City of Irwindale, Los Angeles County. | Outside |
| 06282 | Duke, Curt | 2001 | Cultural Resource Assessment for AT & T Fixed Wireless Services Facility Number LA_156_A, County of Los Angeles, California | Outside |
| 06310 | Duke, Curt | 2002 | Cultural Resource Assessment at & T Wireless Services Facility No. 11015A-01 Los Angeles County, California | Outside |
| 07236 | Bonner, Wayne H. | 2005 | Cultural Resources Records Search Results and Site Visit for Cingular Site Candidate SV-047-01 (Sonoco), 166 North Baldwin Park Boulevard, Industry, Los Angeles County, California | Outside |
| 08082 | Billat, Lorna | 2006 | Rite Aid Cingular/LA-0433A | Outside |

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**Table 1. Previous Technical Studies Within a 1-Mile Radius of the Proposed Project Site**

| SCCIC Report No. (LA-) | Authors | Date | Title | Proximity to Proposed Project Site |
|---|---|---|---|---|
| 08670 | Bonner, Wayne H. and Kathleen A. Crawford | 2007 | Cultural Resources Records Search and Site Visit Results for Royal Street Communications, LLC Candidate LA2314A (Ramona SCE), Intersection of Ramona and I-605, El Monte, Los Angeles County, California | Outside |
| 09375 | Bonner, Wayne H. | 2007 | Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate IE25756 (Award Metals), 1450 Virginia Avenue, Baldwin Park, Los Angeles County, California | Outside |
| 09705 | Anonymous | 2007 | Cultural Resources Inventory of the Southern California Edison Company Tehachapi Renewable Transmission Project, Kern, Los Angeles and San Bernardino Counties, California. ARR #05-01-01046 | Outside |
| 10151 | Cotterman, Cary D. and Evelyn N. Chandler | 2008 | Cultural Resources Inventory of Proposed Pole Replacement in the City of Baldwin Park, Los Angeles County, CA | Outside |
| 10175 | Unknown | 2009 | Confidential Cultural Resources Specialist Report for the Tehachapi Transmission Project | Outside |
| 10189 | Gust, Sherri and Sara Alarcon | 2003 | Archaeological and Paleontological Evaluation Report and Mitigation Plan for the Interstate 605 Soundwall Project, from Whittier to Baldwin Park, Los Angeles County, CA | Outside |
| 10190 | Harbert, Claudia | 2002 | Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA | **Overlaps** |
| 10384 | Bonner, Wayne H. and Kathleen A. Crawford | 2009 | Direct APE Historic Architectural Assessment for T-Mobile USA Candidate IE25750B (Bonsai), 13300 Amar Rd., City of Industry, Los Angeles County, California. | Outside |
| 10501 | Toren, George A. | 1994 | Cultural Resource Survey of Three Segments of the Proposed San Gabriel Valley Water Reclamation Project, Los Angeles County, California | Outside |
| 10502 | Wrobleski, David E. and Richard A. Krautkramer | 2001 | A Class III Archaeological Investigation for Proposed Wells and Treated Water Pipelines Adjoining the Plant B-6 and B-5 Treatment Facility Project, Los Angeles County, California | Outside |
| 10532 | Landis, Daniel G. | 1993 | A Preliminary Cultural Resources Overview for the Proposed San Gabriel Valley Reclamation Program, Los Angeles County, California | Outside |

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**Table 1. Previous Technical Studies Within a 1-Mile Radius of the Proposed Project Site**

| SCCIC Report No. (LA-) | Authors | Date | Title | Proximity to Proposed Project Site |
|---|---|---|---|---|
| 10641 | Tang, Bai "Tom" | 2010 | Preliminary Historical/Archaeological Resources Study, San Bernadino Line Positive Train Control Project, Southern California Regional Rail Authority, Counties of Los Angeles and San Bernadino | Outside |
| 10883 | Stewart, Noah M. | 2008 | Finding of no adverse effect - Interstate Route 10-605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA:245400 | **Overlaps** |
| 11512 | Perez, Don | 2011 | Cultural Resources Analysis, IE750 Bonsai/2 CA32303CI. 13300 Amar Road City of Industry, Los Angeles County, California 91746 | Outside |
| 11784 | Stewart, Noah | 2012 | Supplemental Finding of No Adverse Effect, Interstate Route 10-605 Interchange Improvement | **Overlaps** |
| 11851 | Long, Michelle and Holson, John | 2010 | Archaeological Survey and National Register of Historic Places and California Register of Historical Resources Evaluation of 07-H-002 and 07-H-003, Strawberry Contractor Yard, for the Southern California Edison Company Tehachapi Renewable Transmission Pro | Outside |
| 11989 | Panich, Lee and Holson, John | 2010 | Supplemental Archaeological Survey Report, 66KV Transmission Lines Access Roads, Tehachapi Renewable Transmission Project Segments 7 and 8, Los Angeles and San Bernardino Counties, California | Outside |
| 11990 | Wetherbee, Matthew, Jackson, Thomas, and Tinsley-Becker, Wendy | 2010 | Supplemental Cultural Resources Survey Report for the Southern California Edison Tehachapi Renewable Transmission Project Segment 7 Rio Hondo-Amamdor-Jose-Mesa 66kv Line Relocation, Los Angeles County, California | Outside |
| 11991 | Schneider, Tsim and Holson, John | 2010 | Supplemental Archaeological Survey Report #2, Tehachapi Renewable Transmission Project Segment 7, Los Angeles County, California | Outside |
| 12272 | Unknown | 2013 | Cultural Resource Assessment Class I Inventory Verizon Wireless Services Emery CJ Facility City of Baldwin Park, Los Angeles, County, California | Outside |

**Report No. LA-10190**

*Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA* (Harbert 2002), documents the results of a historic property survey report consisting of an archival record search, and literature review, as well as an archaeological survey report (ASR) as an appendix. The

area of study overlaps approximately 30 percent of the current proposed Project site, which includes the entirety of AIN 8559-008-005 and a portion of AIN 8559-008-011. The study was conducted to determine the presence or absence of historic properties within the area of study and immediate vicinity. A review of the ASR included as Appendix A to the 2002 study revealed that the archaeological survey conducted in support of the project included a "windshield" survey for the entire project area and a pedestrian survey was employed within all "open" areas; no archaeological resources were identified within the current proposed Project site through the ASR. Based on the study's findings, no mitigation measures or further action were recommended.

### Report No. LA-10883

*Finding of No Adverse Effect Interstate Route 10 – 605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA: 245400* (Stewart 2008), documents the results of a historic property survey report consisting of archival record search, literature review, and pedestrian survey. The area of study overlaps the entirety (100 percent) of the medical campus and Broken Horn site of the current proposed Project site, which includes AINs 8559-006-006, 8559-008-011 and 8559-008-005. The study was conducted to determine the effects the project would have on historic properties. No cultural materials were identified within the current proposed Project site as a result of the 2008 investigation. Based on the study's findings, no mitigation measures or further action were recommended.

### Report No. LA-11784

*Supplemental Finding of No Adverse Effect Interstate Route 10 – 605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA: 245400* (Stewart 2012) documents the results of a historic property survey report in response to study changes. The area of study overlaps the entirety (100 percent) of the medical campus and Broken Horn site of the current proposed Project site, which includes AINs 8559-006-006, 8559-008-011 and 8559-008-005. The study was conducted to determine the effects the updated project design would have on historic properties. No cultural materials were identified within the current proposed Project site as a result of the 2012 investigation. Based on the study's findings, no mitigation measures or further action were recommended.

## Previously Recorded Cultural Resources

The SCCIC records indicate that 31 cultural resources have been previously recorded within 1-mile of the proposed Project site; none of these resources overlap or are adjacent to the proposed Project site. Of these, one (1) is a prehistoric archaeological site (P-19-000136/CA-LAN-136) located nearly 1-mile to the southwest, one (1) is a historic-period archaeological site (P-19-003118/CA-LAN-3118H) located 1-mile to the northwest, and the remaining 29 are historic built environment resources. None of the 31 resources overlap or are adjacent to the proposed Project site. Historic built environment resources, or non-archeological resources, are not within the purview of the present study and therefore, will not be addressed in this report. No historic-period or prehistoric archaeological resources were identified within the proposed Project site. Table 2, below, summarizes all 31 previously recorded cultural resources identified within the records search area.

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**Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site**

| SCCIC ID | Description | Recording Events | NRHP Status | Proximity to Proposed Project Site |
|---|---|---|---|---|
| P-19-000136 (CA-LAN-136) | Prehistoric site consisting of midden soils, pestles, bone rings, a core, and one burial. | 1967 (C. King) | 7: Not evaluated | Outside |
| P-19-003118 (CA-LAN-3118H) | Historic refuse scatter consisting of ceramic fragments, glass fragments, and a partially buried iron plow. | 2010 (L. Schrader, W. Bischoff) | 7: Not evaluated | Outside |
| P-19-186571 | Built Environment: Bassett Elementary School | 1983 (B. Revele) | Point of Historical Interest No. 34<br>7L: Needs to be reevaluated using current standards | Outside |
| P-19-187085 | Built Environment: The Mojave Road | 1989 (S. Elder); 2014 (Marc Beherec) | CA Historical Landmark No. 963<br>7L: Needs to be reevaluated using current standards | Outside |
| P-19-188523 | Built Environment: Commercial modern-style building located at 13300 Amar Road and constructed in 1956. | 2009 (K.A. Crawford) | 6Y: Determined ineligible for NR by consensus through Section 106 process | Outside |
| P-19-188913 | Built Environment: Multi-family property located at 12836 Dalewood Street and originally constructed in 1938. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188914 | Built Environment: Multi-unit apartment complex located at 12901 Dalewood Street and constructed in 1948. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188915 | Built Environment: Single-family residence located at | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |

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**Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site**

| SCCIC ID | Description | Recording Events | NRHP Status | Proximity to Proposed Project Site |
|---|---|---|---|---|
| | 819 Frazier Street and constructed in 1948. | | | |
| P-19-188916 | Built Environment: Multi-family property with 3 single-family homes located at 807-811 Frazier Street, the first of which was originally constructed in 1948. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188917 | Built Environment: Multi-family property located at 805 Frazier Street and originally constructed in 1947. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188918 | Built Environment: Commercial building and single-family residence located at 12957 Garvey Avenue and originally constructed in 1938. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188919 | Built Environment: Multi-family property with three structures located at 12961 Garvey Avenue and constructed in 1948. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188920 | Built Environment: Single-family residence located at 13057 Garvey Avenue and constructed in 1953. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188921 | Built Environment: Two single-family ranch-style residences located at 13003 Judith Street, the first of which was originally constructed in 1936. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188922 | Built Environment: Single-family ranch-style residence located at | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |

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**Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site**

| SCCIC ID | Description | Recording Events | NRHP Status | Proximity to Proposed Project Site |
|---|---|---|---|---|
| | 13013 Judith Street and originally constructed in 1950. | | | |
| P-19-188923 | Built Environment: Single-family ranch-style residence located at 13019 Judith Street and originally constructed in 1950. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188924 | Built Environment: Single-family ranch-style residence located at 13025 Judith Street and originally constructed in 1952. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188925 | Built Environment: Commercial building located at 13079 Garvey Avenue and constructed in 1948. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188926 | Built Environment: Multi-unit motel located at 13109 Garvey Avenue and was constructed in 1948. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188927 | Built Environment: Mexican-style commercial building located at 13127 Garvey Avenue, currently operating as Taxcos Restaurant, and constructed in 1946. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188928 | Built Environment: Commercial building located at 13247 Garvey Avenue currently operating as a Nextel, and constructed in 1946. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |

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**Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site**

| SCCIC ID | Description | Recording Events | NRHP Status | Proximity to Proposed Project Site |
|---|---|---|---|---|
| P-19-188929 | Built Environment: Single-family residence located at 1609 Vineland Avenue and constructed in 1950. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188930 | Built Environment: Single-family residence located at 1619 Vineland Avenue and constructed in 1950. | 2002 (Claudia A. Harbert) | 6Z: Found ineligible | Outside |
| P-19-188932 | Built Environment: Single-family residence located at 1741 Big Dalton Avenue, constructed in 1926. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188933 | Built Environment: Single-family Spanish-style residence located at 1747 Big Dalton Avenue and constructed in 1927. | 2002 (Kelly F. Ewing) | 6Z: Found ineligible | Outside |
| P-19-188983 | Built Environment: LADWP Boulder Transmission Lines constructed between 1933 and 1963. | 1999 (Stephen Van Wormer); 2008 (Noah M. Stewart); 2013 (Heather Gibson and Marc Beherec); 2018 (Jessica B. Feldman); 2020 (A. Canoff) | 2B: Determined eligible for NR as an individual property and as a contributor to an eligible district in a federal regulatory process. Listed in the CR | Outside |
| P-19-190504 | Built Environment: SCE Rio Hondo-Amador-Jose-Mesa-Narrows 66kV Transmission Line constructed in 1951. | 2010 (Wendy L. Tinsley Becker); 2018 (Audrey von Ahrens) | 6Z: Found ineligible | Outside |
| P-19-190508 | Built Environment: SCE Walnut-Hillgen-Industry-Mesa-reno 66kV Transmission Line constructed in 1954. | 2010 (Wendy L. Tinsley Becker); 2018 (Audrey von Ahrens) | 6Z: Found ineligible | Outside |
| P-19-192581 | Built Environment: SCE Antelope-Mesa 220 kV | 2010 (Wendy L. Tinsley); 2010 (Wendy L. Tinsley); 2014 (Daniel Leonard); | 6Z: Found ineligible | Outside |

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**Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Proposed Project Site**

| SCCIC ID | Description | Recording Events | NRHP Status | Proximity to Proposed Project Site |
|---|---|---|---|---|
| | Transmission Line constructed in 1949. | 2017 (Audry Williams); 2018 (Audrey von Ahrens); 2019 (Audry Williams) | | |
| P-19-192819 | Built Environment: A series of 3 industrial warehouse buildings located at 12424, 12432, and 12440 Exline Street, and constructed in 1966. | 2017 (Allison Lyons) | 6Y: Determined ineligible for NR by consensus through Section 106 Process, 6Z: Found ineligible | Outside |
| P-19-192820 | Built Environment: Mid-Century Modern commercial building located at 12955 Perez Place and constructed in 1967. | 2017 (Allison Lyons) | 6Y: Determined ineligible for NR by consensus through Section 106 Process, 6Z: Found ineligible | Outside |

# Review of Historical Topographical Maps and Aerial Photographs

Dudek consulted historical topographic maps and aerial photographs through the Nationwide Environmental Title Research, LLC (NETR) to better understand any natural or human-made changes to the proposed Project site and surrounding properties over time.

## Historical Topographic Maps

Topographic maps depict elevation of the study area as well as the areas surrounding it and illustrate the location of roads and some buildings. Although topographic maps are not comprehensive, they are another tool in determining whether a study area has been disturbed and at times to what approximate depth. Historical Topographic maps reviewed are available for the following years: 1897, 1898, 1902, 1904, 1908, 1912, 1923, 1927, 1932, 1937, 1941, 1946, 1955, 1960, 1967, 1975, 1982, 2012, 2015, and 2018 (NETR 2022a).

- **1897-1923**: The proposed Project site is illustrated as undeveloped, with an unnamed road bordering the east side of the proposed Project site. It is possible this unnamed road represents present-day Baldwin Park Boulevard.

- **1927**: The map shows another unnamed road developed in the southwest section of the proposed Project site, and it appears to correspond with present-day Bess Avenue. The 1927 topographic map also displays four relatively small square objects, possibly structures, near the intersections of the two roads previously mentioned.

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- **1932**: Illustrates the proposed Project site as undeveloped land with the one unnamed road as seen from the 1897 to 1923 topographic maps.
- **1937**: This map depicts what is represented in the 1927 topographic map.
- **1941 and 1946**: These topographic maps depict the proposed Project site as undeveloped land, with a road to the east of the proposed Project site.
- **1955**: This map shows what appears to be the development of the I-10 to the north of the medical campus as well as several relatively small square figures, which are probably structures, within AIN 8559-006-006.
- **1960**: This map depicts what is represented in the 1941 and 1946 topographic maps.
- **1967-1982**: These topographic maps portray more noteworthy changes to the proposed Project site, with "Drive-in Theater" labeled and two rectangular structures depicted within AIN 8559-006-006 of the proposed Project site. These maps also depict a road adjacent to the I-10.
- **2012-2018**: These topographic maps display the development of the Kaiser Baldwin Park Medical Campus (AIN 8559-006-006), consistent with present site conditions.

While topographic maps are informative, they do not illustrate the minute changes that can occur to a landscape overtime and at times, are inconsistent with what is depicted year to year. Most often, structures depicted in topographical maps are limited to those with community or social significance (e.g. Firehouses or Hospitals), including additions or changes to roads and/or waterways. Nonetheless, the information gathered contributes to the understanding of the chronological development of a study area.

## Historical Aerial Photographs

A review of historical aerial photographs was conducted as part of the archival research effort from the following years: 1948, 1952, 1964, 1972, 1980, 1987, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2003, 2004, 2005, 2009, 2010, 2012, 2014, 2016, and 2018 (NETR 2022b). Through careful comparative review of historical aerials, changes to the landscape of a study area may be revealed. Disturbance to the study area is specifically important as it helps determine if soils within the study area are capable of sustaining intact archaeological deposits. Additionally, historical aerials have the potential to reveal whether a study area was subjected to alluvial deposits by way of flooding, debris flows or mudslides, as well as placement of artificial or foreign fill soils that may have buried intact archaeological deposits. Table 3, below, summarizes the results of the aerial photographs review of the proposed Project site and surrounding properties for all available years.

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## Table 3. Historical Aerial Photographs Review

| Year | Description |
|---|---|
| 1948 | The proposed Project site has a U-shaped stream or creek essentially in the center of the site; it has several small buildings in the eastern section and a cluster of roads in the western section of the proposed Project site. The buildings and roads appear to be within present-day AIN 8559-006-006.<br><br>The San Gabriel River Wash and Walnut Creek are present, west and south of the proposed Project site, respectively, prior to channelization. Of note, the un-channelized route of Walnut Creek visibly intersects the proposed Project site from the west, traversing curvilinearly north then east before exiting the northeast portion of the proposed Project site. |
| 1952 | No significant changes to the proposed Project site, although some of the small buildings on the eastern side of the proposed Project site may have been removed.<br><br>Of note, the trajectory of the un-channelized route of Walnut Creek has shifted from its entrance into the proposed Project site from the west and now intersects from the southwest before changing course to the north then traveling east as it exists the proposed Project site from the northeast portion. Additionally, the span of the San Gabriel River Wash appears to have decrease in width with the previous footprint now consisting of residential development. |
| 1964 | The proposed Project site is shown to be undergoing significant grading within the central portion of the proposed Project site for the development of the drive-in theater with an amphitheater-shape (AIN 8559-006-006).<br><br>Additionally, the San Gabriel River Wash appears to have been channelized and Walnut Creek no longer intersects the proposed Project site and has been rerouted south and channelized. |
| 1972 | The continued development of the drive-in theater and staging of vehicles in possible designated parking areas are visible. Larger structures are visible to the east of the drive-in theater. There is also a small building in the western section of the proposed Project site. The drive-in theater, large structure, parking spots, and small building appear to be within present-day AINs 8559-008-011 and 8559-006-006. Ornamental landscaping along the perimeter of the amphitheater is visible.<br><br>AIN 8559-008-005 appears vacant and undeveloped. |
| 1980 | Visible within AIN 8559-008-005 is a large rectangular building/structure within its eastern half portion and a paved parking lot within the western half portion.<br><br>No other observable significant changes to the proposed Project site. |
| 1987 | There appears to be a new rectangular building present within the eastern half portion of AIN 8559-008-011 and a paved parking lot within the western half portion. The buildings and parking lots shown in this aerial for both AINs 8559-008-005 and 8559-008-011 appear consistent with present-day site conditions for both parcels. |
| 1992 | The drive-in theater appears to have been demolished to make way for the hospital as significant earthwork is shown to be underway.<br><br>To the south of the former drive-in theater is now a circular building. There are also several buildings to the west of the circular building, plus a paved parking lot south of the circular building along Bess Avenue. All the previously mentioned developments are within AIN 8559-006-006. |
| 1993 | Several more buildings along the eastern portion of the proposed Project site (AIN 8559-006-006) are visible, which appear to be consistent with present-day site conditions for the medical campus. |

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**Table 3. Historical Aerial Photographs Review**

| Year | Description |
|---|---|
| 1994 | Development observed in 1993 is on-going. Two more buildings are observed to be added to the proposed Project site, including one building immediately southeast of AINs 8559-008-005 and 8559-008-011 and expansions of the buildings observed in 1993 for the medical campus buildout. Also observed is the construction for the footprint of the man-made pond within the central portion of the proposed Project site, within AIN 8559-006-006. |
| 1995 | Continuation of the development for the medical campus buildout is observed, including an extension of the present-day parking structure that wraps around the medical campus from the north. Also observed are additional paved areas for walkways and parking along the southeastern and eastern portions of the proposed Project site. The previously mentioned developments are within present-day AIN 8559-006-006. |
| 1996 | No significant changes to the proposed Project site. |
| 1997 | No significant changes to the proposed Project site. |
| 1998 | No significant changes to the proposed Project site. |
| 1999 | No significant changes to the proposed Project site. |
| 2000 | No significant changes to the proposed Project site. |
| 2003 | No significant changes to the proposed Project site. |
| 2004 | No significant changes to the proposed Project site. |
| 2005 | No significant changes to the proposed Project site. |
| 2009 | No significant changes to the proposed Project site. |
| 2010 | No significant changes to the proposed Project site. |
| 2012 | No significant changes to the proposed Project site. |
| 2014 | No significant changes to the proposed Project site. |
| 2016 | No significant changes to the proposed Project site. |
| 2018 | An extension of the extant parking lot structure first observed in 1995, to include an addition along the western portion of the parking structure in a roughly northwest to southeast layout within AIN 8559-006-006.<br><br>The proposed Project site, including all three parcels (AINs 8559-008-005, 8559-006-006 and 8559-008-011, appears to be consistent with present-day site conditions. |

## Geotechnical Report Review

The geotechnical investigation report, *KAISER PERMANENTE — Baldwin Park Medical Center Emergency Department Expansion 1011 Baldwin Park Boulevard Baldwin Park, California, KP # CAP-015077 / HMC #: 1120180* (HDNGEO 2022), was prepared for HMC Architects on February 23, 2022 to determine subsurface geological conditions of the emergency department expansion component of the proposed Project site. The report details the results of two (2) subsurface investigations that were hand-augered in the upper 4 feet followed by the use of a truck-mounted CME-75 drill rig fitted with hollow-stem-augers. The borings were placed within accessible locations within the proposed emergency department expansion area of AIN 8559-006-006, with one boring (B-1) placed within the northwestern quadrant and the second (B-2) placed within the southeastern quadrant. According to the report boring logs, both exploratory borings were completed October 25, 2021. The soils encountered include: 1) pavement/concrete from surface to 8 inches below current grade; 2) Fills soils: characterized as a brown, medium- to coarse-grained sand with gravels that increased in density as the borings advanced in depth between 8 inches and 7.5 feet below ground surface (bgs); 3) Native soils: Quaternary Alluvium characterized as light brown,

medium- to coarse-grained silty sand and gravels, were identified underlying fill soils to the maximum depths explored, between 7.5 and 56.5 feet bgs. Additionally, the report includes a review of a geotechnical investigation conducted within the subject property by LeRoy Crandall and Associates, specifically one boring location (LCA 11) completed on June 23, 1986, along the mid-point of the western boundary of the proposed emergency department expansion location. A review of the boring log for LCA 11 (Boring 11) indicates that asphaltic pavement was encountered from surface to 2 inches bgs, overlying fine silty-sand with gravel and some cobbles between 2 inches and approximately 4 feet bgs, followed by fine to medium sand with some gravel and cobbles to maximum depth explored (40 feet bgs). It is unclear whether the silty-sand identified underlying the pavement (between 2 inches and approximately 4 feet bgs) represents fill soils as the boring log reviewed does not provide clarification.

The geotechnical report, *Kaiser Permanente Scoping for Additional Parking 1011 Baldwin Park Boulevard, Baldwin Park, California* (GEOBASE 2015), was submitted by GEOBASE, Inc in August 2015 to assess the subsurface conditions of a proposed parking structure located along the western portion of the present proposed Project site and the proposed MOB in the southwest portion of the present proposed Project site, both of which are within AIN 8559-006-006. The report details the results of four (4) subsurface exploratory borings, placed at accessible locations of the areas subjected to subsurface investigations, including three borings (B-2, B-3, and B-4) within the proposed parking structure location and one boring (B-1) immediately south of the proposed MOB development. Additionally, the report includes a review of geotechnical investigations conducted within the subject property by LeRoy Crandall and Associates between 1983 and 1991. Relevant subsurface geological investigations that were conducted by GEOBASE, Inc. and LeRoy Crandall and Associates are summarized below.

**GEOBASE, Inc (2015):** Four (4) subsurface exploratory borings were conducted August 28, 2015, along the western portion and southwestern quadrant of the present Project proposed site. The results of the GEOBASE, Inc. subsurface exploratory investigations are as follows:

- **B-1**: Pavement from 0-7 inches bgs. Fill soils were encountered between 7 inches and 5 feet bgs and is characterized as sand that is brown in color with little silt and gravels. Native soils, characterized as silty sands and gravels, underlies the fill soils, and was observed to a maximum boring depth of 56.5 feet bgs.

- **B-2**: Pavement from 0-10 inches bgs. Fill soils were encountered between 10 inches and 10 feet bgs and is characterized as sand that is light brown in color with little silt and gravels. Native soils, characterized as light brown, micaceous, sand with traces of silt and gravels, underlies the fill soils, and was observed to a maximum exploratory depth of 51.5 feet bgs.

- **B-3**: Pavement from 0-10 inches bgs. Fill soils were encountered between 10 inches and 12 feet bgs and is characterized as sand that is light brown in color with little silt and gravels. Native soils, characterized as light brown sand with traces of silt and gravels, underlies the fill soils, and was observed to a maximum exploratory depth of 51.5 feet bgs.

- **B-4**: Pavement from 0-10 inches bgs. Fill soils were encountered between 10 inches bgs and 8 feet bgs and is characterized as sand that is light brown in color with little silt and trace of gravels. Native soils, characterized as light brown, micaceous, sand with traces of silt and gravels, underlies the fill soils, and was observed to a maximum exploratory depth of 51.5 feet bgs.

**LeRoy Crandall and Associates (1990):** Figure A-2 of the GEOBASE, Inc. 2015 report shows five (5) subsurface exploratory borings that were conducted November 20, 1990 by LeRoy Crandall and Associates. These

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investigations were limited to the northwest quadrant of the present Project proposed site, within AIN 8559-006-006, directly southwest of AINs 8559-008-011 and 8559-008-005, which collectively represent the Broken Horn site. The results of the LeRoy Crandall and Associates 1990 subsurface exploratory investigations, as gleaned from the boring logs, are as follows:

- **LCA-1 (Boring 1)**: Silty sand encountered from 0-5 feet bgs, and native soils were encountered from 5-20 feet bgs. It is unclear whether the silty sand identified represents fill soils as the boring log reviewed does not provide the clarification.

- **LCA-2 (Boring 2)**: Silty sand encountered from 0-9 feet bgs and native soils from 9 feet bgs to a maximum exploratory depth of 20 feet bgs. It is unclear whether the silty sand identified represents fill soils as the boring log reviewed does not provide the clarification.

- **LCA-3 (Boring 3)**: Silty sand encountered from 0 to approximately 2.5 feet bgs and native soils from 2.5 feet to a maximum exploratory depth of 20 feet bgs. It is unclear whether the silty sand identified represents fill soils as the boring log reviewed does not provide the clarification.

- **LCA-4 (Boring 4)**: Silty sand encountered from 0 to approximately 4.5 feet bgs and native soils from 4.5 feet to a maximum exploratory depth of 20 feet bgs. It is unclear whether the silty sand identified represents fill soils as the boring log reviewed does not provide the clarification.

- **LCA-5 (Boring 5)**: Silty sand encountered from 0-4 feet bgs and native soils from 4-20 feet bgs. It is unclear whether the silty sand identified represents fill soils as the boring log reviewed does not provide the clarification.

**LeRoy Crandall and Associates (1986):** Of note, Figure A-2 of the GEOBASE, Inc. 2015 report does not show any of the subsurface exploratory boring locations for the investigations that were conducted between June 23-26, 1986 by LeRoy Crandall and Associates; however, based on the title of the 1986 report, the investigations were conducted between Dalewood Street and Bess Avenue, which border the present proposed Project site to the east and west, though the specific locations are unknown. A review of available records in the GEOBASE, Inc. 2015 for the 1986 investigation include four (4) boring logs and the results are as follows:

- **Boring 1**: Pavement from 0-2 inches bgs. Fill soils, characterized as sand with some gravel, cobbles, and pieces of metal and wood, were encountered between 2 inches and 12 feet bgs. Native soils, characterized as fine sand with some gravel and cobbles, underlie the fill soils and were encountered from 12-40 feet bgs.

- **Boring 4**: Pavement from 0-2 inches bgs. Fill soils, characterized as silty sand, were encountered from 2 inches to approximately 2 feet bgs with a 1-inch pipe that was observed between those depths. Native soils, characterized as fine sand with some gravel and cobbles, underlie the fill soils and were encountered from 2-50 feet bgs.

- **Boring 7**: Fill soils, characterized as silty sand, were encountered from 0 to approximately 2 feet bgs. Native soils, characterized as fine to medium sand with some gravel and cobbles, underlie the fill soils and were encountered from 2-50 feet bgs.

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- **Boring 9**: Sandy silt was encountered from 0-10 feet bgs and sand was encountered from 10-40 feet bgs. It is unclear whether the sandy silt identified represents fill soils as the boring log reviewed does not provide the clarification.

**LeRoy Crandall and Associates (1989):** Of note, Figure A-2 of the GEOBASE, Inc. 2015 report does not show any of the subsurface exploratory boring locations for the investigations that were conducted January 17, 1989 by LeRoy Crandall and Associates. Furthermore, a review of the references in the GEOBASE, Inc. 2015 report does not include any mention of an investigation conducted in 1989 and as such, it is unclear where this testing was conducted in relation to the present proposed Project site. A review of available records in the GEOBASE, Inc. 2015 for the 1989 investigation include one (1) boring log and the results are as follows:

- **Boring 18**: Sand with some gravel, few cobbles, lenses of silt, and a layer of silty sand was encountered from 0-21 feet bgs. It is unclear whether the soils identified represents fill soils as the boring log reviewed does not provide the clarification.

# Native American Coordination

## NAHC Sacred Lands File Search

Dudek requested a search of the SLF on July 22, 2022, to determine the presence of any Native American cultural resources within the proposed Project site. The NAHC maintains and reviews the SLF. Andrew Green, Cultural Resources Analyst, provided the SLF search results on September 6, 2022. The NAHC SLF records search results were positive for known Native American heritage resources within the proposed Project site. The NAHC identified the Gabrieleno Band of Mission Indians – Kizh Nation, as well as eight (8) additional Native American individuals who would potentially have specific knowledge as to whether or not Native American cultural resources are identified within the Project site that could be at-risk. To date, Dudek has not initiated contact with the individuals on the NAHC's contact list, in regard to the proposed Project site. However, in compliance with AB 52, the City has contacted all NAHC-listed traditionally geographically affiliated tribal representatives that have requested project notification. Assembly Bill 52 consultation efforts conducted by the City are discussed in the following paragraph. Documentation of the NAHC SLF search results is provided in Appendix C.

Note: SLF database maintained by the NAHC, represent a curation of "ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California" (nahc.gov 2021) provided by Tribal entities and Native American representatives. For various reasons, Tribal entities and Native American representatives do no not always report sacred lands or TCRs to the NAHC; as such, the NAHC's SLF is not necessarily a comprehensive list of known TCRs and searches of the SLF must be considered in concert with other research and not used as a sole source of information regarding the presence of TCRs or other resources of Native American cultural value. Additionally, results of the SLF provided relate to the general regional area within and surrounding the study area and do not necessarily equate to the existence of resources within the specific area occupied by the current proposed Project site.

## Assembly Bill 52

The proposed Project is subject to compliance with Assembly Bill (AB) 52 (PRC 21074), which requires consideration of impacts to TCRs as part of the CEQA process, and that the lead agency notify California Native American Tribal

representatives that have requested notification who are traditionally or culturally affiliated with the geographic area of the proposed Project site. All records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City. A summary of the consultation record is provided and addressed in the Initial Study/Mitigated Negative Declaration document for the proposed Project.

## 1938 Kirkman-Harriman Historical Map Review

Dudek cultural resources specialists reviewed sources commonly identified though Tribal consultation, notably the 1938 Kirkman-Harriman Historical Map (Image 1). Based on this map, the proposed Project site is approximately 375 feet directly south of the three Portolá expedition trails, approximately 573 feet northeast of a Mission Road (old highway as of May 19, 1851) and is within the historical route of the San Gabriel Wash. The proposed Project site is over 4 miles east/northeast of "Mission Vieja," which was founded in 1771 and identified as the first Mission of San Gabriel. The nearest mapped Native American village is nearly 4 miles southwest of the proposed Project site and referenced in the map as "The Abrarsanth-cogna." Additionally, the proposed Project site is approximately 578 feet directly south of one of the Portolá expedition camps. Father Juan Crespi of the Portola Expedition passed through the area on July 30, 1769, and January 17, 1770, as notated on the map. A review of the Crespi's diary entries for those dates did not include any reference to any encounters or interactions with Native American peoples or any mention of Native American villages (Brown 2002).

It should be noted that this map is highly generalized due to scale and age and may be somewhat inaccurate with regard to distance and location of mapped features. Additionally, this map was prepared based on review of historic documents and notes more than 100 years following secularization of the missions (in 1833). Although the map contains no specific primary references, it matches with the details documented by the Portolá expedition (circa 1769–1770). The map is a valuable representation of post-colonization mission history; however, it is limited to a specific period of Native American history and substantiation of the specific location and uses of the represented individual features should be verified by archaeological records and/or other primary documentation

No archaeological evidence of the nearest village on the 1938 Kirkman-Harriman map was provided in the available SCCIC records or as the result of a review of other archaeological information for the proposed Project site and surrounding area. This may suggest that the village is either likely no nearer than 1-mile from the proposed Project site or if existent within the records search radius, subsurface deposits associated with the village have not yet been discovered.

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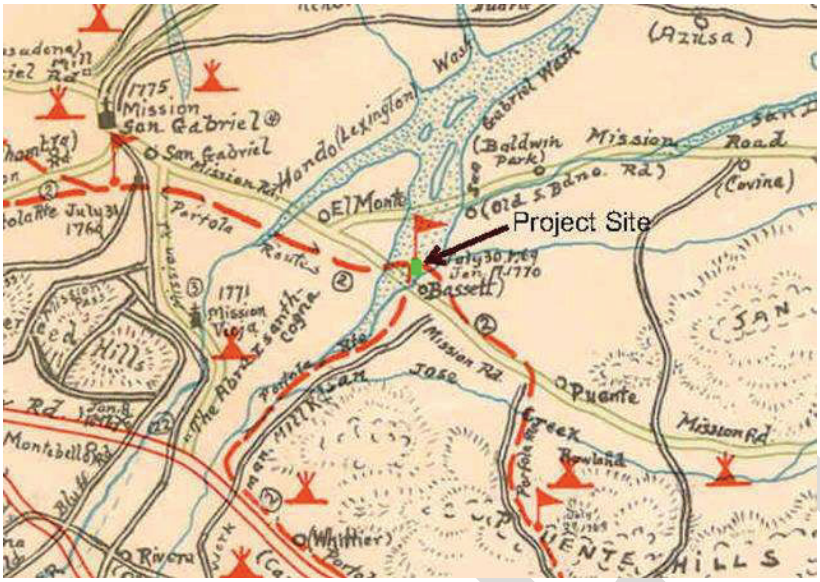


**Image 1**. 1938 Kirkman-Harriman Historical Map (Proposed Project Site in Green).

# Field Survey

## Methods

Dudek Archaeologist, Brenda Rogers, BA, conducted a pedestrian survey of the proposed Project site on August 24, 2022. The survey area of the proposed Project site included portions of AIN 8559-006-006 (emergency department expansion component, and off-site improvements, and the entirety of AINs 8559-008-011 and 8559-008-005 (Broken Horn site: abandoned retail buildings and parking lots) (see Figure 2). Because the proposed Project site is within a developed setting with limited exposed sediment, a compressive archaeological survey was not conducted. Instead, a mixed approach of transects spaced no more than 5-meters apart (approximately 15 feet), where feasible, and an opportunistic survey, selectively examining areas of exposed ground surfaces, were utilized. Developed portions of the proposed Project site with extant buildings/structures and paved parking lots, were subjected to a reconnaissance survey (visual inspection). The ground surface was inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, groundstone tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of structures and/or buildings (e.g., standing exterior walls, post holes, foundations), and historical artifacts (e.g., metal, glass, ceramics, building materials). Careful attention was given to barren ground including at the base of trees and bushes, within paths/trails and any soils exposed within landscaped flower beds for exposed subsurface materials. No artifacts were collected during the survey.

All fieldwork was documented using field notes and an Apple Generation 12 iPhone (iPhone) equipped with ESRI Collector and Avenza PDF Maps software with close-scale georeferenced field maps of the proposed Project site, and aerial photographs. Location-specific photographs were taken using the iPhone's 12-mega-pixel resolution camera. All field notes, photographs, and records related to the current study are on file at Dudek's Pasadena,

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California office. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory.

## Results

The proposed Project site is currently developed, consisting of an active medical campus and associated parking structure (AIN 8559-006-006), abandoned retail buildings and parking lots (AINs 8559-008-011 and 8559-008-005; Broken Horn site), and landscaped areas. The medical campus includes a large man-made water feature, and landscaped open areas that have terraced flower beds. Where possible, transects were employed, specifically in larger open grassy areas on either side of the extant parking structure and along Dalewood Street, Baldwin Park Boulevard, and Best Avenue. Exposed ground surfaces within landscaped flower beds were opportunistically surveyed across the entire proposed Project site. Approximately 95 percent of the proposed Project site is developed with extant buildings and structures and/or paved parking lots, which did not allow for the observation of any exposed ground soils. The remaining 5 percent consisted of landscape areas with grasses and ornamental trees, bushes, and flower beds. Given the current proposed Project site conditions, ground surface visibility was non-existent to poor (0-20 percent), depending on locations surveyed.

It is important to note that the geotechnical studies revealed that the proposed Project site is predominately covered in fill soils, though the origin of the soils and some of the locations investigated were not provided in available records. However, a review of aerial photographs indicate that the proposed Project site has been subjected to consistent ground disturbance since as early as the mid-twentieth century. As such, any exposed soils observed during the survey were likely fill soils and not a good representation of the native soils present prior to development/ground disturbing activities. Moreover, the presence of the fill soil is an indication that any potential cultural material from surface to native soils, has been previously displaced from the primary depositional location, buried, or destroyed. No cultural materials were observed within any of the three (3) parcels representing the proposed Project site; however, due to the presence of fill soils, observation of intact native soils was not possible.

Overall, the soils observed included brown silty sand in the terraced flower beds, as well as in faint trails across the grass lawns and yellow brown sand with rounded gravels as observed within some of the landscaped areas. These soils are consistent with the fill soils encountered during subsurface geological investigations.

# Sensitivity Analysis

## Archaeological Sensitivity

While the NAHC SLF records search results were positive, the results relate to the general regional area and do not necessarily equate to the existence of resources within the specific area occupied by the proposed Project site. A search of the CHRIS database for the Project site and 1-mile records search area did not identify any previously recorded historic-period or prehistoric archeological resources. Additionally, of the 13 previous technical studies that were conducted within 1-mile of the proposed Project site, three studies address portions of the proposed Project site; however, none of these previous studies identified archaeological resources within the proposed Project site. Approximately 70 percent of the proposed Project site has not been subjected to any previous archaeological investigations or surveys. According to the historical topographic maps and aerial photographs review, the proposed Project site has been subjected to consistent ground disturbance, shifting from undeveloped

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land as early as the late 1890s and transforming in the 1960s with the development of a drive-in theater. By the early 1990s, the proposed Project site underwent significant changes and extensive ground disturbance with the demolishment of the drive-in theater and the grading and construction of the extant medical campus, continuing into 2018. Also of note, aerial photographs showed the San Gabriel River Wash to the west of the proposed Project site was not channelized and Walnut Creek intersected the proposed Project site up until 1964, which suggests that the proposed Project site has likely been modified by the natural movement of soils in prehistoric and historic periods indicating that if cultural material does exist within the proposed Project site, it would likely have been buried, displaced (not exist within its original context), or destroyed along the historical route of Walnut Creek.

A pedestrian survey for the proposed Project (conducted August 24, 2022) did not identify any surficial evidence of cultural material.

A review of a 2022 and 2015 geotechnical report and available boring logs documenting the results of subsurface exploratory investigations conducted in 1986, 1989, 1990, 2015, and 2021 for portions of the proposed Project site determined that fill soils were encountered at a variety of depths across the proposed Project site and generally extended from surface to between 7 inches and 12 feet bgs, depending on the locations investigated. Current Project design indicates that the maximum depth of ground disturbance for the MOB component at the Broken Horn site (AINs 8559-008-005 and 8559-008-011) is 10 feet below the existing ground surface and a maximum depth of 65 feet below current grade for the drilling of caissons at the emergency department expansion component (8559-008-006). In addition, ground disturbance associated with all other construction components, including site preparation, vegetation removal, and trenching for utility work is assumed to be no deeper than 5 feet below existing ground surface across the proposed Project site.

In consideration of all these factors, the potential to encounter unknown intact archaeological resources between current grade and to depths of identified fill soils is relatively unlikely. However, the potential for intact cultural deposits to exist within soils underlying fills soils to proposed depths of disturbance is unknown considering the lack of opportunity to observe native soils during the pedestrian survey and that no previous archaeological investigation has occurred prior to placement of fill soils for approximately 70 percent of the proposed Project site. As such, there is potential for archaeological resources within the proposed Project site to be present within the native soils that exist beneath fill soils. Since proposed depths of disturbance may extend deeper than documented fill soils, native soils with the potential for archaeological deposits to exist will be disturbed. In the event that unknown archaeological resources are encountered during Project implementation, impacts to these resources could be significant. The following management recommendations are provided to ensure that measurements are in place for the proper treatment of any inadvertently discovered archaeological resources and potential impacts to archaeological resources and human remains would be reduced to less than significant.

# Management Recommendations

The following measures have been developed to ensure that any inadvertent discovery of archaeological resources will be treated appropriately and in accordance with CEQA regulations: preconstruction training, retention of an on-call archaeologist to address inadvertent discoveries, and inadvertent discovery clause implemented and included on all construction plans. Dudek further recommends an additional survey be conducted once fill soils have been removed. If cultural materials are observed during the course of ground disturbing activities below fill soils, then

subsurface testing may be required. These measures will ensure the potential Project impacts to archaeological resources and human remains would be less than significant.

## Inadvertent Discovery of Archaeological Resources

**Workers Environmental Awareness Program Training.** All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities. A basic presentation and handout or pamphlet shall be prepared in order to ensure proper identification and treatment of inadvertent discoveries. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

**Retention of a Qualified Archaeologist.** A qualified archaeologist shall be retained and on-call to respond and address any inadvertent discoveries identified for the duration of construction activities. Additionally, in consideration of the potential to encounter intact cultural deposits beneath fill soils, the qualified archaeologist shall survey the proposed Project site once fill soils have been removed to ensure no cultural deposits underly the fill layer. If is determined, based on the survey after the removal of fill soils, that cultural resources are present or may be present that may be impacted during Project construction, monitoring may be warranted. If it is determined that monitoring is warranted, a qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, should oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor will be responsible for maintaining daily monitoring logs.

**Inadvertent Discovery Treatment and Protocol.** In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed Project, all construction work occurring within 50 feet of the find should immediately stop and a qualified archaeologist should be notified immediately to assess the significance of the find and determine whether or not additional study is warranted. If human remains or suspected human remains are discovered, all construction work occurring within 50 feet of the find should immediately stop. The archaeologist will provide recommendations regarding next steps based on inspection and initial assessment of the significance of the find. The preferred management strategy for cultural resources should be preservation in place through avoidance or other methods. If the discovery proves significant under CEQA, and preservation in place infeasible, additional work such as preparation of an archaeological treatment plan, testing, data recovery, or monitoring may be warranted.

Within 60 days following completion of ground disturbance, an archaeological monitoring report shall be prepared and submitted to the City for review. This report should document compliance with approved mitigation, document the monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the SCCIC.

## Inadvertent Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or

any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has determined the appropriate treatment and disposition of the human remains. If the county coroner determines that the remains are, or are believed to be, Native American, he or she shall follow all required protocols according to California Public Resources Code, Section 5097.98.

Should you have any questions relating to this report and the findings and recommendations, please do not hesitate to contact dfaith@dudek.com and Linda Kry at lkry@dudek.com.

Sincerely,

David Faith, M.A., RPA
Archaeologist

Linda Kry, B.A., RA
Archaeologist

Adam Giacinto, M.A., RPA
Archaeologist

*Att.:* *Appendix A: Figures*
*Appendix B. CONFIDENTIAL SCCIC Records Search Results*
*Appendix C: NAHC SLF Search Results*

*cc:* *Shawn Shamlou, Dudek*

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# References

Brown, Alan K., editor. 2002. A Description of Distant Roads, Original Journals of the First Expedition into California, 1769-1770, Juan Crespi. San Diego State University Press, San Diego, California.

Google Earth. 2022. Retrieved from, Google Earth

Harbert, Claudia. 2002. Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA. On File at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

HDNGEO. Geotechnical Investigation Report. KAISER PERMANENTE, Baldwin Park Medical Center Emergency Department Expansion. 2022.

Kaiser Permanente Scoping for Additional Parking 1011 Baldwin Park Boulevard, Baldwin Park, California (GEOBASE 2015).

NAHC.gov (Native American Heritage Commission). 2022. About the Native American Heritage Commission. State of California Native American Heritage Commission, 2022, http://nahc.ca.gov/about/. Accessed September 2022.

NETR. 2022a. Historical Topographic maps of Project Site, dating from 1897, 1898, 1902, 1904, 1908, 1912, 1923, 1927, 1932, 1937, 1941, 1946, 1955, 1960, 1967, 1975, 1982, 2012, 2015, and 2018. Accessed August 2022. https://www.historicaerials.com/viewer.

NETR. 2022b. Historical Aerial Photographs of Project Site, dating from 1948, 1952, 1964, 1972, 1980, 1987, 1992, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2003, 2004, 2005, 2009, 2010, 2012, 2014, 2016, and 2018. Accessed August 2022. https://historicalaerials.com/viewer

Stewart, Noah. 2008. Finding of No Adverse Effect Interstate Route 10 – 605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA: 245400. On File at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

Stewart, Noah. 2012. Supplemental Finding of No Adverse Effect Interstate Route 10 – 605 Interchange Improvement 07-LA-10/605 PM 31.2/20.9 EA: 245400. On File at the South Central Coastal Information Center, California State University, Fullerton. Accessed July 2022.

USDA (United States Department of Agriculture). 2022. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm, Accessed September 2022.

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# National Archaeological Database (NADB) Information

| | |
|---|---|
| **Authors:** | David Faith, M.A., RPA, Linda Kry, B.A., RA, and Adam Giacinto, M.A., RPA |
| **Firm:** | Dudek |
| **Project Proponent:** | Kaiser Foundation Hospitals |
| **Report Date:** | September 2022 |
| **Report Title:** | Archaeological Resources Assessment For The Kaiser Permanente Baldwin Park Emergency Department Project, City Of Baldwin Park, Los Angeles County, California |
| **Type of Study:** | Phase I Archaeological Resources Assessment |
| **Acreage:** | Approximately 5.36 acres |
| **Resources:** | None |
| **USGS Quads:** | Section 24, Township 1 South, Range 11 West on the *Baldwin Park*, California 7.5-minute USGS Quadrangle |
| **Keywords:** | Archaeological Resources Assessment, Pedestrian Survey, Kaiser Baldwin Park Medical Campus, Walnut Creek, San Gabriel River |

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# Appendix A
Figures

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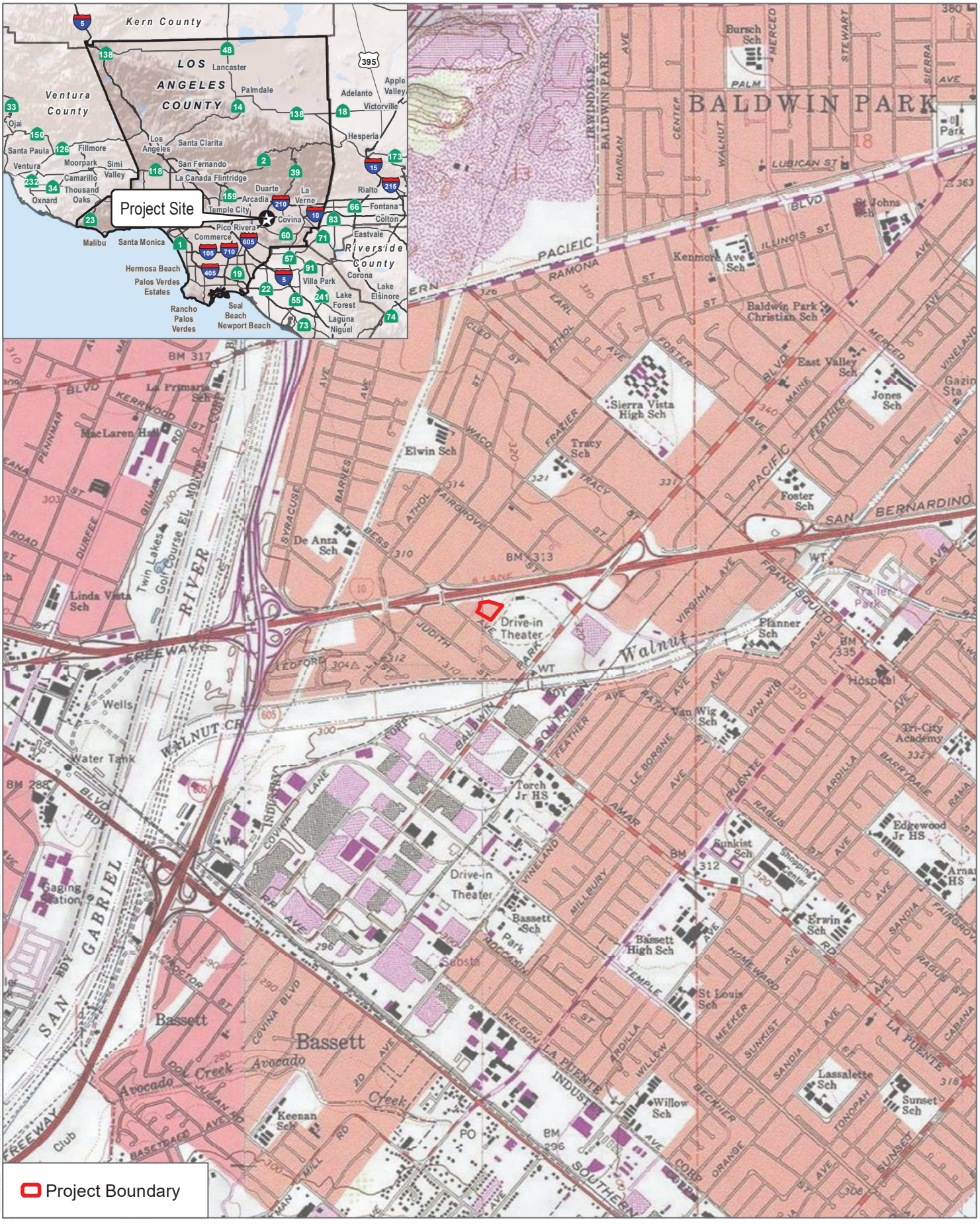


SOURCE: USGS 7.5-Minute Series Baldwin Park Quadrangle
Township 1S; Range 11W; Section 24

DUDEK

0 1,000 2,000 Feet

**FIGURE 1**

Project Location

Kaiser Baldwin Park Emergency Room Expansion and Medical Office Building Project

SOURCE: Bing Imagery 2021, Los Angeles County, Open Street Map 2019

DUDEK

0 125 250 Feet

**FIGURE 2**

Project Site

Kaiser Baldwin Park Emergency Room Expansion and Medical Office Building Project

# Appendix B

CONFIDENTIAL SCCIC Records Search Results

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# Appendix C
NAHC SLF Search Results

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# NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
**Laura Miranda**
*Luiseño*

VICE CHAIRPERSON
**Reginald Pagaling**
*Chumash*

PARLIAMENTARIAN
**Russell Attebery**
*Karuk*

SECRETARY
**Sara Dutschke**
*Miwok*

COMMISSIONER
**William Mungary**
*Paiute/White Mountain Apache*

COMMISSIONER
**Isaac Bojorquez**
*Ohlone-Costanoan*

COMMISSIONER
**Buffy McQuillen**
*Yokayo Pomo, Yuki, Nomlaki*

COMMISSIONER
**Wayne Nelson**
*Luiseño*

COMMISSIONER
**Stanley Rodriguez**
*Kumeyaay*

EXECUTIVE SECRETARY
**Raymond C. Hitchcock**
*Miwok/Nisenan*

**NAHC HEADQUARTERS**
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

September 6, 2022

David Faith
DUDEK

Via Email to: dfaith@dudek.com

**Re: Kaiser Baldwin Park Emergency Department Project, Los Angeles County**

Dear Mr. Faith:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Gabrieleno Band of Mission Indians – Kizh Nation on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
*Cultural Resources Analyst*

Attachment

# Appendix D

AB 52 Tribal Correspondence

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*Street and Apt. No., or PO Box No.* 23454 Vanowern Street
*City, State, ZIP+4®* West Hills, CA. 91307

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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*City, State, ZIP+4®* Covina, CA. 91723

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

September 28, 2022

Gabrielino Band of Mission Indians – Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393
Covina, CA 91723

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, Formal Notification of Proposed Kaiser Permanente Baldwin Park Emergency Department Project

Dear Mr. Salas,

Pursuant to California Assembly Bill (AB) 52, the City of Baldwin Park is providing you with formal notification of the Kaiser Baldwin Park Emergency Department Project (proposed project),located in the City of Baldwin Park, California. The City of Baldwin Park, as lead agency, is reaching out to all groups listed on the California Native American Heritage Commission (NAHC)Sacred Lands File Contact List in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. The present notice includes:

- A description of the proposed project and location;
- A summary of cultural resources work to date, and summary of associated information thatcan be made available upon request;
- A clear and definitive statement that the tribe has 30 days to request consultation; and
- The lead agency contact information.

**Project Description and Location**

The proposed Project, located at 1011 Baldwin Park Boulevard, in the city of Baldwin Park, includes the development of a two-phased project at the Kaiser Permanente Baldwin ParkEmergency Department. The first phase is the construction of an expansion to the emergency department which is part of an existing hospital tower on the south end of the Kaiser campus. Expansion of the emergency department would add approximately 23,000 square feet to the existing emergency department, expand the number of existing treatment bays from 38 to 60, a new ambulance canopy, and include additional improvements to the existing emergency department. The expansion and improvement of the emergency department would allow better functionality within the emergency department.

The second phase of the project would consist of the construction and operation of an approximately 33,000 square foot medical office building. This component would expand the boundary of the medical campus to include the parcel currently adjacent to the medical campus to the west. Development of this site (referred to as the "Broken Horn" site) would require the demolition of an existing retail building. The medical office building component would also include parking.

**Project Involves Ground Disturbance:** Yes

**Summary of Cultural Resources Work and Documentation**

A California Historical Resources Information System (CHRIS) records search, Native American Heritage Commission (NAHC) Sacred Lands File, and cultural resources investigation is currently underway. Once completed, cultural resources documentation can be provided upon request. Please note, this information should be considered confidential and is not to be redistributed to individuals without traditional or cultural affiliation.

**Consultation Request**

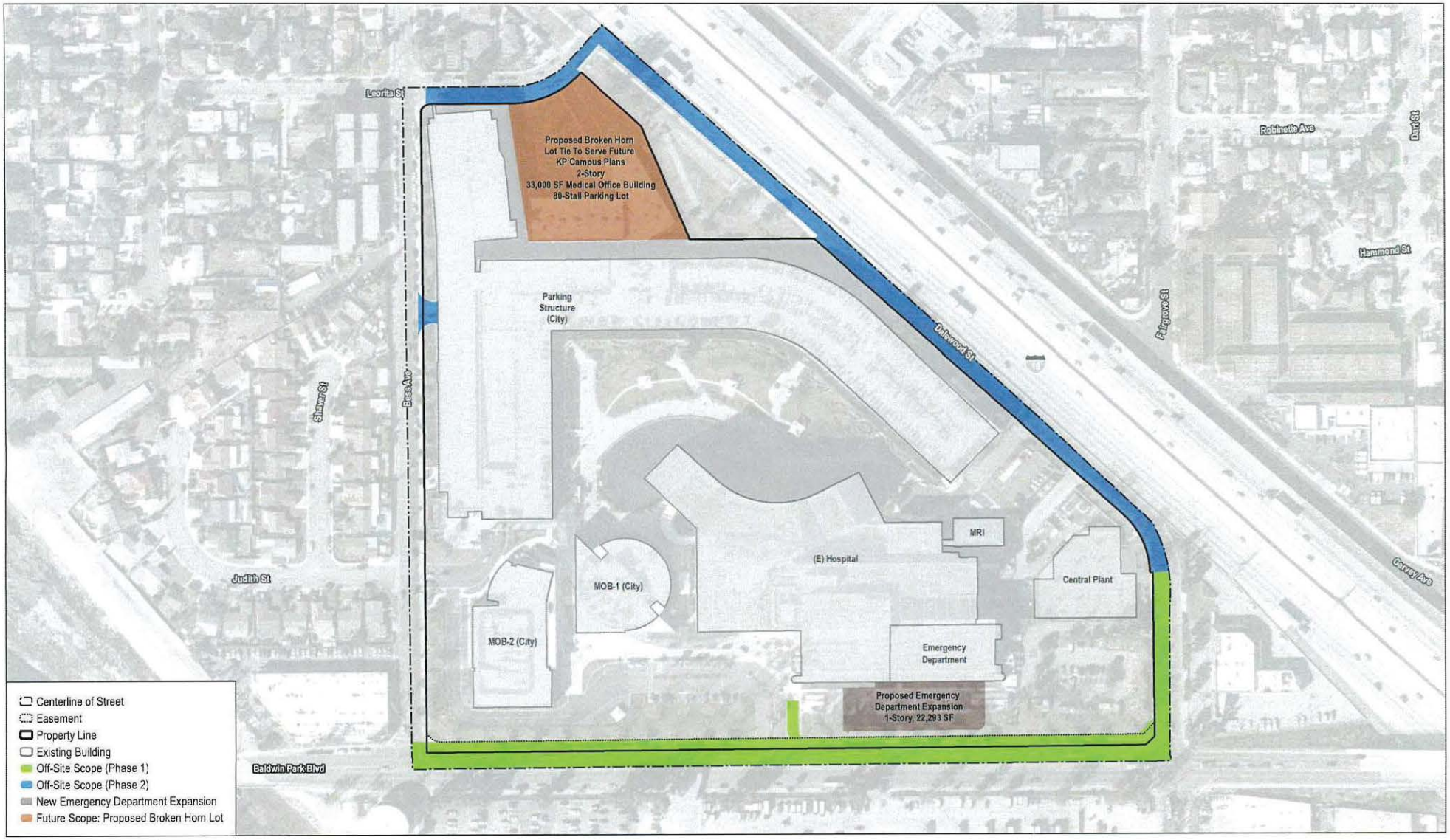
If you have any comments or concerns regarding potential impacts to tribal cultural resources (as defined in Public Resources Code § 21074) in relation to the proposed project, or would like to request any additional information, please contact the City of Baldwin Park at the address below or via email to Ron Garcia (RGarcia@baldwinpark.com) within 30 days of receipt of this notice with a formal request for consultation. Please include in this response the name of a designated lead contact person. If we do not receive notification within the 30-day period, we will assume that the Soboba Band of Luiseno Indians has no tribal cultural resource concerns regarding this project.

Sincerely,

For: Ron Garcia

Ron Garcia | Director of Community Development
City of Baldwin Park | Community Development Department 14403 E. Pacific Avenue | Baldwin Park, California 91706
T 626.960.4011 Ext.475
RGarcia@baldwinpark.com

Attachments:
Figure 1. Overall Site Plan Map




SOURCE: Bing Maps 2020; HMC Architects 2021

DUDEK 0 80 160 Feet

**FIGURE 1**

Overall Site Plan

Kaiser Baldwin Park

September 28, 2022

Gabrielino-Tongva Tribe
Charles Alvarez
23454 Vanowen Street
West Hills, CA 91307

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, Formal Notification of Proposed Kaiser Permanente Baldwin Park Emergency Department Project

Dear Mr. Alvarez,

Pursuant to California Assembly Bill (AB) 52, the City of Baldwin Park is providing you with formal notification of the Kaiser Baldwin Park Emergency Department Project (proposed project),located in the City of Baldwin Park, California. The City of Baldwin Park, as lead agency, is reaching out to all groups listed on the California Native American Heritage Commission (NAHC)Sacred Lands File Contact List in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. The present notice includes:

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**Project Involves Ground Disturbance:** Yes

**Summary of Cultural Resources Work and Documentation**

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Sincerely,

For: Ron Garcia

Ron Garcia | Director of Community Development
City of Baldwin Park | Community Development Department 14403 E. Pacific Avenue | Baldwin Park, California 91706
T 626.960.4011 Ext.475
RGarcia@baldwinpark.com

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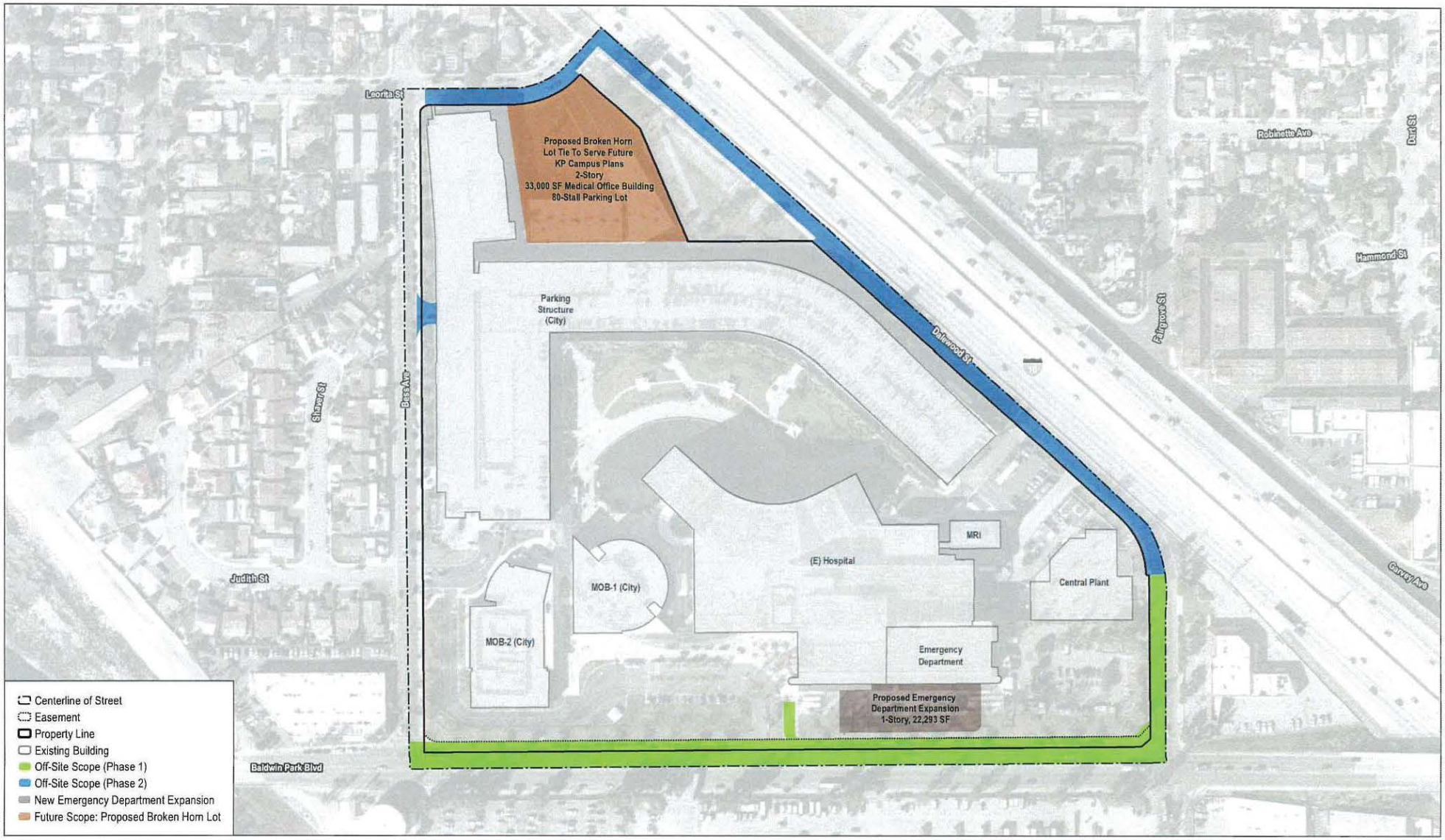


SOURCE: Bing Maps 2020; HMC Architects 2021

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**FIGURE 1**

Overall Site Plan

Kaiser Baldwin Park

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The Gabrielino Tribal Council - San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

October 5,2022

Project Name: Kaiser Permanente Baldwin Park Emergency Department Project located: 1011 Baldwin Park Boulevard

Dear Ron Garcia,

Thank you for your letter dated September 28,2022 regarding AB52 consultation. The above proposed project location is within our Ancestral Tribal Territory; therefore, our Tribal Government requests to schedule a consultation with you as the lead agency, to discuss the project and the surrounding location in further detail.

Please contact us at your earliest convenience. ***Please Note:AB 52, "consultation" shall have the same meaning as provided in SB 18 (Govt. Code Section 65352.4).***

Thank you for your time,

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians – Kizh Nation
1(844)390-0787

Andrew Salas, Chairman | Nadine Salas, Vice-Chairman | Dr. Christina Swindall Martinez, secretary
Albert Perez, treasurer I | Martha Gonzalez Lemos, treasurer II | Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 admin@gabrielenoindians.org

Planning Division
14403 E. Pacific Avenue
Baldwin Park, CA 91706

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September 28, 2022

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P.O. Box 487
San Jacinto, CA 92581

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, Formal Notification of Proposed Kaiser Permanente Baldwin Park Emergency Department Project

Dear Mr. Vivanco,

Pursuant to California Assembly Bill (AB) 52, the City of Baldwin Park is providing you with formal notification of the Kaiser Baldwin Park Emergency Department Project (proposed project),located in the City of Baldwin Park, California. The City of Baldwin Park, as lead agency, is reaching out to all groups listed on the California Native American Heritage Commission (NAHC)Sacred Lands File Contact List in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. The present notice includes:

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Sincerely,

For: Ron Garcia

Ron Garcia | Director of Community Development
City of Baldwin Park | Community Development Department 14403 E. Pacific Avenue | Baldwin Park, California 91706
T 626.960.4011 Ext.475
RGarcia@baldwinpark.com

Attachments:
Figure 1. Overall Site Plan Map

SOURCE: Bing Maps 2020; HMC Architects 2021

DUDEK 0 80 160 Feet

**FIGURE 1**

Overall Site Plan

Kaiser Baldwin Park

September 28, 2022

Soboba Band of Luiseno Indians
Joseph Ontiveros, Tribal Historic Preservation Officer
P.O. Box 487
San Jacinto, CA 92581

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, Formal Notification of Proposed Kaiser Permanente Baldwin Park Emergency Department Project

Dear Mr. Ontiveros,

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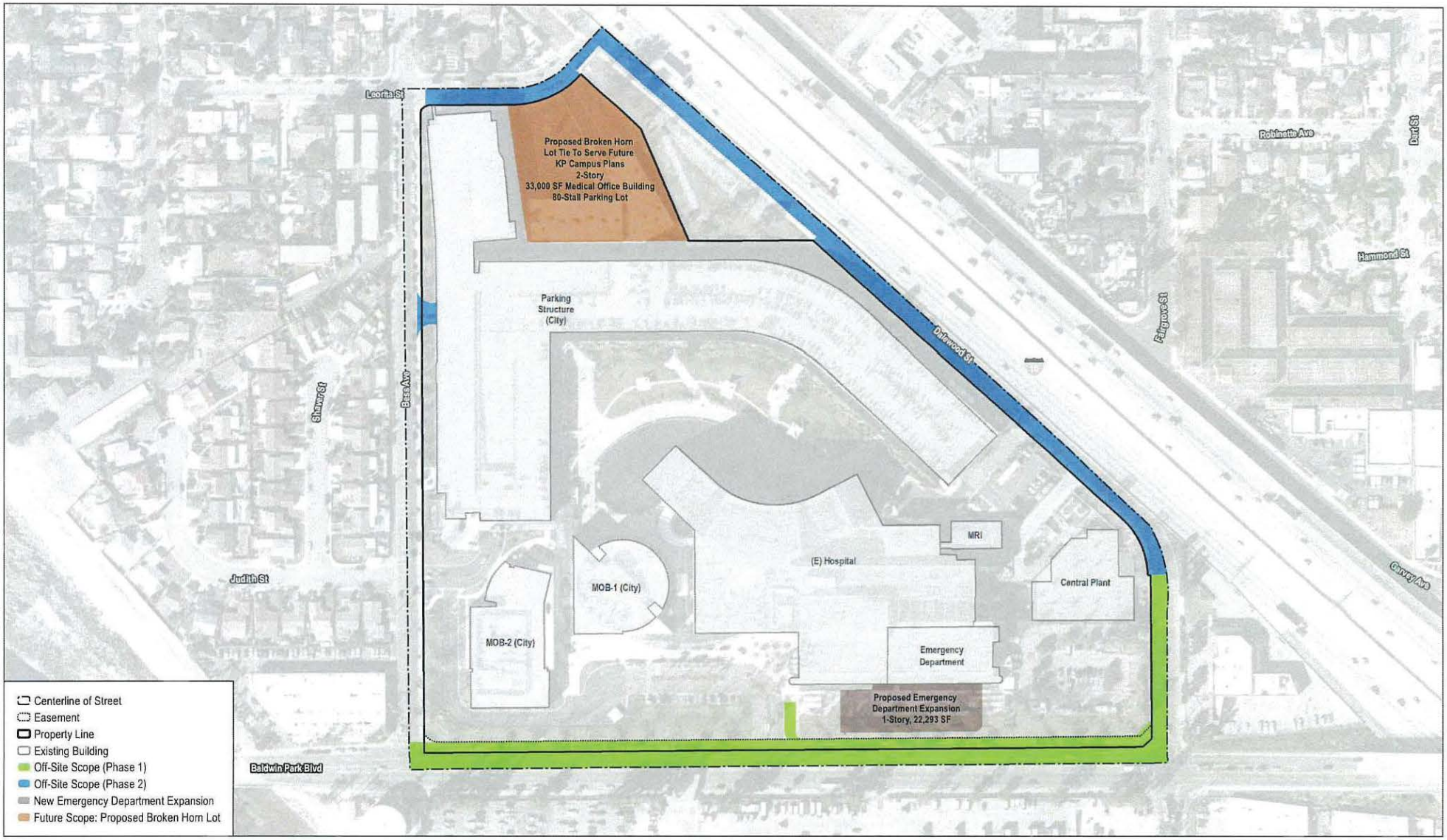


SOURCE: Bing Maps 2020; HMC Architects 2021

DUDEK 0 80 160 Feet

**FIGURE 1**

Overall Site Plan

Kaiser Baldwin Park