Appendix E-1

Response Plan, Former Riverside Scrap and Iron Metal Property, 2993 6th Street, Riverside, CA 92507

GSI Environmental

November 4, 2024

RESPONSE PLAN

FORMER RIVERSIDE SCRAP IRON & METAL PROPERTY
2993 6th Street
Riverside, California 92507
Department of Toxic Substances Control Docket No HAS-FY21/22-032

Issued: November 4, 2024

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This Response Plan was prepared by the staff of GSI Environmental Inc., under the supervision of the Engineer(s) and/or Geologist(s) whose signatures appear hereon.

The findings, recommendations, specifications, or professional opinions were prepared in accordance with generally accepted professional engineering and/or geologic practice. No warranty is expressed or implied.

Issued: November 4, 2024

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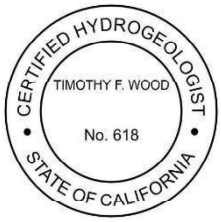

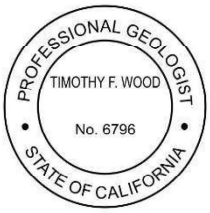

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Senior Geologist

RESPONSE PLAN
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Riverside, California 92507

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1.0 INTRODUCTION

On behalf of Iron Lofts LLC (Iron Lofts), GSI Environmental Inc. (GSI) has prepared this Response Plan based on the results of the Site Assessment and Report of Findings (Report of Findings) dated August 3, 2022, for the former Riverside Scrap Iron & Metal (RSIM) property located at 2993 6th Street in Riverside, California (the Site; Figures 1 and 2).

The Site has been the subject of numerous subsurface investigations, which have identified that shallow soil at the Site is impacted with polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and metals (primarily lead and arsenic) at concentrations exceeding regulatory screening levels for residential use and/or regional background concentrations. In addition, VOCs have been detected in Site soil vapor at concentrations above residential screening levels.

This Response Plan will support the multi-family residential redevelopment of the Site by Iron Lofts.

1.1 Objectives of the Response Plan

The objectives of this Response Plan are to:

- summarize existing Site conditions, future land uses, completed investigation activities, and constituents of concern (COCs) that were previously presented in the Report of Findings.
- establish appropriate remedial action objectives (RAOs) for protection of human health and the environment;
- evaluate alternatives and select remedial actions for the Site that are protective of human health and the environment; and
- provide a scope of work to implement the selected remedy at the Site.

1.2 Current Regulatory Status

A Revised Remedial Action Plan (RAP) for the Site, dated January 2, 2020, was prepared by GSI on behalf of the prior Site owner, RSIM, and submitted to DTSC to summarize additional activities completed at the Site and to propose a remedial action consisting of Excavation and Off-Site Disposal. The RAP was not implemented because the property was sold, and the current Site owner has entered into a California Land Reuse and Revitalization Act of 2004 (CLRRA) agreement with the Department of Toxic Substances Control (DTSC) providing regulatory oversight (Appendix A). Based on the presence of PCBs at the Site, United States Environmental Protection Agency (USEPA) is providing supplemental regulatory oversight, specific to PCBs and requirements of the federal Toxic Substances Control Act (TSCA), in coordination with DTSC. The CLRRA agreement requires a Site Assessment and Report of Findings (Appendix A – Section 5.3) and a Response Plan (Appendix A – Section 5.4). The Site Assessment and Report of Findings was submitted to DTSC on August 3, 2022. This Response Plan provides information required under Health and Safety Code (HSC) Section 25395.96(a) and (b), included as Exhibit 1.1.

Exhibit 1-1. Requirements of Health and Safety Code (HSC) Section 25395.96(a) and (b)

(Agency-specific tasks identified with gray text)

HSC	HSC Text	Corresponding Section of This Report
25395.96(a)	If, upon review of the site assessment prepared pursuant to this article, the agency determines that a response action is necessary to prevent or eliminate an unreasonable risk, the bona fide purchaser, innocent landowner, or contiguous property owner shall submit a response plan to the agency to conduct a response action at the site, in conformance with the agreement entered into pursuant to Section 25395.92. The response plan shall include all of the following:	
(1)	The response plan shall provide for an opportunity for the public, other agencies, and the host jurisdiction to participate in decisions regarding the response action, taking into consideration the nature of the community interest, and shall include all of the following: (A) Thirty days before taking action pursuant to the response plan, the agency shall take all of the following actions: (i) Notify all other appropriate governmental entities and local agencies, including, but not limited to, the department, the regional board, or a redevelopment agency, that is not a party to the response plan regarding the proposed response plan. (ii) Place a notice in a newspaper of general circulation, in the area of the site, including, but not limited to, a community-based newspaper, as appropriate. (iii) Post notice of the proposed response plan on the site. (B) All of the following methods for public participation shall be included in the response plan: (i) Thirty days' prior public notice in a factsheet format of the proposed response plan, in English and in any other language commonly spoken in the area of the site. (ii) Access, at both the agency and at local repositories, to the proposed response plan, site assessment, addenda, and any other supporting documentation, including materials listed as references in the response plan and site assessment. (iii) Procedures for providing a reasonable opportunity to comment on the plan and related documents specified in clause (ii). (iv) If a public meeting is requested, the holding of a public meeting by the agency in the area to receive comments. (v) The agency's consideration of any comments received before taking any action regarding the response plan. (C) The response plan may also provide for, but is not limited to, proposing the use of other methods for public participation, including the use of public notices, direct notification of interested parties, electronic copies of the response plan, site assessment addenda, and other supporting documentation, including materials listed as references in the response plan and site assessment, electronic comment forms, forming advisory groups, as appropriate, to disseminate information and assist the agency in gathering public input, additional public meetings or public hearings, and an opportunity to comment on the proposed response plan prior to approval. (D) The agency, as part of its communications with affected communities, shall provide information regarding the process by which decisions about the site are made and the recourse that is available for those who may disagree with an agency decision. (E) The agency shall consider the issue of environmental justice, as defined in subdivision (e) of Section 65040.12 of the Government Code, for communities most impacted, including low-income and racial minority populations, before taking action on the response plan. (F) To the extent possible, the agency shall coordinate its public participation activities with those undertaken by the host jurisdiction and other agencies associated with the development of the property, to avoid duplication to the extent feasible. (G) It is the intent of the Legislature that the public participation process established pursuant to this paragraph ensures full and robust participation of a community affected by this chapter.	Section 10
(2)	Identification of the release or threatened release that is the subject of the response plan and documentation that the plan is based on an adequate characterization of the site.	Section 3
(3)	An identification of the response plan objectives and the proposed remedy, and an identification of the reasonably anticipated future land uses of the site and of the current and projected land use and zoning designations. This identification shall include confirmation by the host jurisdiction that the anticipated future land uses and current and projected land uses and zoning designations are accurate.	Section 1.1, Section 2, and Section 5
(4)	A description of activities that will be implemented to control any endangerment that may occur during the response action at the site.	Section 8,

HSC	HSC Text	Corresponding Section of This Report
(5)	A description of any land use control that is part of the response action.	Section 8
(6)	A description of wastes other than hazardous materials at the site and how they will be managed in conjunction with the response action.	Sections 8.5 and 8.6
(7)	Provisions for the removal of containment or storage vessels and other sources of contamination, including soils and free product, that cause an unreasonable risk.	Sections 8.5 and 8.6
(8)	Provisions for the agency to require further response actions based on the discovery of hazardous materials that pose an unreasonable risk to human health and safety or the environment that are discovered during the course of the response action or subsequent development of the site.	Section 8.4
(9)	Any other information that the agency determines is necessary	N/A
25395.96(b)	The agency shall evaluate the adequacy of the plan submitted pursuant to subdivision (a) and shall approve the plan if the agency makes all of the following findings:	
(1)	The plan contains the information required by subdivision (a).	N/A
(2)	When implemented, the plan will place the site in a condition that allows it to be used for its reasonably anticipated future land use without unreasonable risk to human health and safety and the environment.	N/A
(3)	The plan addresses any public comments.	N/A
(4)	If applicable, the plan provides for long-term operation and maintenance, including land use and engineering controls, that are part of the remedy contained in the response plan.	N/A

N/A = Not Applicable

This Response Plan was developed in accordance with DTSC/CalEPA – Proven Technologies and Remedies Guidance Remediation of Metals in Soil, August 29, 2008 (DTSC, 2008). Additionally, this Response Plan was prepared in a manner consistent with the federal Comprehensive Environmental Response Compensation and Liability Act (CERCLA, 42 U.S.C. 9601 et seq.), as amended; the National Contingency Plan (NCP, 40 Code of Federal Regulations [CFR] Part 300), as amended; applicable USEPA guidance (USEPA, 1988); and other applicable State and local laws and regulations.

2.0 SITE DESCRIPTION

The Site is approximately 7 acres in size and is identified as "light industrial" by the Riverside County Assessor's Office. Surrounding properties are mixed commercial/residential and have historically been mixed commercial/residential/industrial in nature (Geomatrix, 2005). The Site is located within the former Marketplace Brownfields Study Area in the City of Riverside, bound by Commerce Street to the northwest, Mission Inn Avenue and 7th Street on the southwest, and by 4th Street on the northeast. The Marketplace Brownfields Study Area was comprised of 26 parcels that were grouped into 23 "Areas" based on parcel configuration ownership and current or historical use during a Phase I ESA (Geomatrix, 2005). This numbering system has been maintained for continuity. The RSIM Site includes only those areas owned or used by RSIM (Areas 8a-8h, 10a, 10b, 12 of the Marketplace Brownfields Study Area). Redevelopment of the Site for multi-family residential use, similar to surrounding recent redevelopment projects is being planned. The current layout of the Site is shown on Figure 2.

2.1 Current and Historical Uses

The Site was used as a scrap metal recycling yard for over 45 years, and Site structures included a main office (Area 8a), a former machine shop (Area 8b), a storage building (Area 8d), and an office/maintenance building (Area 10a). The Site formerly maintained underground and aboveground storage tanks on the southwestern portion of the Site (Area 8e) that were used to store and dispense fuel and oil. Historical railroad operations were conducted in Areas 8f, 8g, and 12. The scrap metal and recycling business ceased operations in 2015. By August 2015, the Site had been cleared of utilities and most mixed trash, debris and scrap metal, and currently consists

mostly of unpaved bare earth and paved surfaces with some remaining debris. Surrounding land uses to the north and west are primarily commercial. Residential housing is located along the eastern border of the Site and across Mission Inn Avenue to the south.

2.2 Site Geology and Hydrogeology

The Site is located in the Riverside-Arlington Subbasin of the Upper Santa Ana River Groundwater Basin and within the Peninsular Ranges Geomorphic Province of California. The subbasin is bounded by the impermeable rocks on the south by Arlington Mountain, on the southeast by the Box Springs Mountains, on the northwest by the La Sierra Heights and Mount Rubidoux, and on the north by the Jurupa Mountains. The northeast boundary is defined as the Rialto-Colton fault, and a portion of the groundwater divide beneath the city of Bloomington and the Santa Ana River flows over the northern portion of the subbasin (Department of Water Resources [DWR], 2004).

Groundwater in the subbasin is dominantly found in young Quaternary-aged alluvial deposits from the lateral migration of the Santa Ana River over time and consists chiefly of sand, gravel, silt, and clay. The geology in the surrounding mountains and basement rock consists of Quaternary alluvium, Pleistocene nonmarine, and Mesozoic granitic rocks (California Division of Mines and Geology [CDMG], 1965). Soils beneath the Site consist primarily of silty sand and sandy silt with occasional thin layers of clay from near surface to 20 feet below ground surface (bgs), the maximum depth of exploration (AMEC, 2015).

In December 2009, the depth to groundwater ranged from 114 to 125 feet bgs with a southwestern groundwater gradient direction at the former Ken's Arco property, located approximately 650 feet southeast of the Site at 2871 University Avenue (as reported by Pacific Edge Engineering, Inc. and referenced in AMEC's 2015 Soil and Soil Vapor Investigation). Based on the general drought conditions since this measurement was taken, currently groundwater levels would be expected to be deeper than reported in December 2009.

2.3 Site Vicinity

The Site is surrounded by commercial, industrial and residential properties. The Riverside Downtown Train Station is located approximately 0.25 mile to the south-southwest of the Site.[1] A 2019 investigation documented concentrations of tetrachloroethene (PCE) ranging to 4,000 ug/m^3 in soil vapor samples at depths of 5 and 15 feet (Ninyo & Moore, 2020).

2.4 Site Development Plan

The Site is proposed to be developed with with two new multifamily buildings consisting of one four-story on-grade building and one two-story on-grade townhome building along the western portion of the Site. The buildings will consist of 50 studio units, 152 one-bedroom units, and 99 two-bedroom units (301 total units). Parking will include 378 residential surface parking spaces along with 10 garage parking spaces. The development plans include a lobby, leasing office, amenities, and a dog park. The northern parcel will not be developed at this time.

Iron Lofts has decided to include vapor intrusion mitigation systems (VIMS) at the future development. This will include installation, testing, and operation, maintenance, and monitoring (OM&M) of VIMS at the proposed building at the Site development. The VIMS will include:

[1] https://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002763

- Robust building slabs – buildings will be constructed with 10.5-inch thick, post-tension slabs that are more resistant to cracking.
- Sub-slab venting (SSV) system – Horizontal soil-vapor collector and venting piping will be installed beneath the building slabs within a sand layer to collect and vent any VOCs in soil vapor from beneath the slab.
- VIMS – A spray-applied, composite membrane vapor barrier system will be installed directly beneath the building slabs and above the SSV system. The vapor barrier will be composed of a 40-mil spray-on membrane system placed between a geomembrane and protective layer. The vapor barrier system will extend beneath the entire building footprint, including building footings that are in contact with subsurface soil and utility penetrations and other slab penetrations to mitigate vapor migration pathways.
- Utility penetration seals – utility penetrations through the building slab and sub-slab VIMS will be sealed as part of the VIMS installations (protocols for sealing utility penetrations will be described in the VIMS design drawings).
- Modern HVAC systems – the building HVAC systems will be programmed to maintain a balanced interior pressure, in accordance with building mechanical and energy codes, which will not induce vapor intrusion.

One existing historic building located at 3596 Commerce Street will be repurposed for use as amenity space. At this building, the existing crawl space will be vented passively with sub-slab venting (SSV), and the structure will be improved and built out, including installation of a modern HVAC system.

3.0 SITE CHARACTERIZATION

Site use as a scrap metal recycling yard for over 45 years has resulted in impact of COCs to the shallow subsurface. Site investigation and characterization has been conducted since 2011 to characterize the extent of impact at the Site resulting from historical operations.

3.1 Site Investigation

Site characterization activities have been conducted at the Site since 2011 and are summarized in the documents listed below.

- 2011 – Phase II Environmental Site Assessment, Ami Adini & Associates, Inc.
- 2015 – Additional Phase II Environmental Site Assessment Report, Riverside Scrap Iron & Metal Site, AMEC Foster Wheeler
- 2017 – Off-Site Preliminary Environmental Assessment, Hillmann Consulting (Hillman)
- 2018 – PCB Sampling and Analysis, GSI Site Assessment and Report of Findings (2022)
- 2020 – Revised Remedial Action Plan, GSI
- 2021 – Phase I Environmental Site Assessment, Hillman
- 2022 – Site Assessment Plan and Report of Findings, GSI
- 2023 – Soil Vapor Investigations, GSI (Appendix G1 and G2)

Data summaries for metals, PAHs, and PCBs in soil for all investigations are included in Appendix B. Soil vapor data and sample locations are identified in Appendix C. Off-Site sampling

locations are identified in Appendix E. Recent PCB delineation investigation results are identified in Appendix F.

In addition to the Site investigation documents listed above, a RAP dated January 2, 2020 and a Phase I Environmental Site Assessment dated September 21, 2022 have been completed for the Site.

3.1.1 2011 Phase II Investigation

In 2011, Ami Adini & Associates (AA&A) conducted a subsurface investigation at the Site (AAA, 2011). The investigation included the collection of 56 soil samples at depths of 0.5 to 1-foot bgs and the deployment and collection of passive, GORE-SORBER® soil vapor samples. Shallow soil samples were analyzed for total petroleum hydrocarbons (TPH), PAHs, PCBs, semi-volatile organic compounds (SVOCs), and metals. The passive soil vapor samples were analyzed for volatile TPH and VOCs.

Soil vapor analysis using GORE-SORBER® samplers identified volatile TPH and VOCs in soil vapor at depths of 0.5 to 1 foot below ground surface (bgs) at various locations across the RSIM Site; however, the passive soil-gas sampling technology used did not provide data suitable for comparison with risk-based screening levels.

Shallow soil analytical results indicated that PAHs, including benzo[a]anthracene, benzo[b]fluoranthene, benzo(a)pyrene, dibenz[a,h]anthracene, and indeno(1,2,3-cd)pyrene were detected in several shallow soil samples at concentrations exceeding their respective residential screening levels. These PAHs were detected in soil across the Site; however, elevated PAH concentrations were detected primarily in the maintenance yard, scrap storage, roll-off bin storage, and machine shop areas.

PCB concentrations were detected in 35 samples across the Site. During this investigation, three locations reported PCB concentrations in excess of 50 mg/kg of PCBs (A8b-SB1, A8e-SB4, and A10b-SB4).

AA&A reported several metals (antimony, arsenic, beryllium, cadmium, cobalt, copper, lead, mercury, nickel and vanadium) at concentrations above residential screening levels and/or background. Arsenic was detected at concentrations between 12 and 166 milligrams per kilogram (mg/kg) in Areas 8c, 8f, and 8g. All other areas did not identify soil with arsenic above 12 mg/kg, the upper bound background concentration (DTSC, 2008). Lead was detected in shallow soil at concentrations up to 4,260 mg/kg. Concentrations of other metals reported above the residential screening levels are generally co-located with elevated arsenic and lead concentrations at the Site.

Soil analytical result tables for metals, PAHs, and PCBs are included in Appendix B.

3.1.2 2015 Additional Phase II Investigation

In August-October 2015, AMEC Foster Wheeler (AMEC) conducted a supplemental investigation at the property. AMEC indicated that the objectives of the additional Phase II sampling were to address data gaps (i.e., vertical and lateral extent of COCs in soil and soil vapor) to support preparation of a RAP to address known impacts to soil from operations related to scrap metal recycling at the Site. The objective was also to collect data on PCB concentrations in shallow soil near the boundary between the Site and adjacent residential properties and evaluate the potential need for characterization of PCBs in soil at these off-Site properties (AMEC, 2015).

A total of 22 borings were installed with soil sampling conducted at 0.25, 1, 2.5, 5, 10, and 15 feet bgs at most locations. The soil samples were analyzed for total petroleum hydrocarbons (TPH speciated in gasoline, diesel, and oil ranges), VOCs, metals, PCBs, PAHs, and SVOCs. The

borings were completed with soil vapor sampling probes installed at two depths: one at 5 feet bgs and one at 11-15 feet bgs.

Overall, the results indicate the upper 1 foot of soil across the Site is impacted with lead, PCBs, and PAHs, which are present in concentrations that exceeded residential screening levels, with soil impacts extending deeper at some locations to 2.5 feet bgs.[2] COCs were only identified in excess of residential screening levels in one soil sample location deeper than 2.5 feet (NS20 in Area 8h). Soil in this area appears to have been disturbed historically and surficial soils may have been mixed into underlying soil at this location. Elevated TPH was identified in this area at the location of sample S8 at depths of up to 5 feet bgs. PCB concentrations in excess of 50 mg/kg of PCBs was reported at three locations (NS2, S14, and S6).

The soil vapor sampling results from 2015 identified relatively low concentrations of VOCs; however, trichloroethene (TCE) and PCE were detected in soil vapor at concentrations exceeding residential screening levels.[3] The maximum concentration of TCE (570 micrograms per cubic meter [µg/m^3]) reported in soil vapor exceeded the residential screening levels for current (240 µg/m^3) and future (480 µg/m^3) land use. PCE was detected at a maximum concentration of 2,000 µg/m^3, exceeding the residential screening levels for current (230 µg/m^3) and future (460 µg/m^3) land use. The analytical results for 2015 soil vapor samples are summarized in data tables and figures showing the distributions of PCE and TCE in soil vapor in Appendix C.

The AMEC investigation included a soil sampling program along the southeast property line, which borders four residential properties. The PCB concentrations in most fence line boring soil samples were in excess of residential screening levels, primarily at 0.25 feet bgs.

The results of the additional Site investigation indicated that the vertical and horizontal extent of lead, arsenic, and PAHs had been adequately characterized (on-Site) to depths of less than 2.5 feet bgs, with the exception of the location of NS20 samples in Area 8h (AMEC, 2015).[4] In addition, soil and soil vapor sampling results at the former ASTs and USTs suggest no significant impact to soil. The results of this work are presented in AMEC's "Additional Phase II Environmental Site Assessment Report" dated December 9, 2015.

AMEC recommended no additional sampling, except for what may be required to characterize possible impact to the nearby residential properties.

Soil analytical results tables for metals, PAHs, and PCBs are included in Appendix B. Figures identifying AMEC sampling locations are included in Appendix D.

3.1.3 2017 Off-Site Preliminary Environmental Assessment

To address possible impact to the off-Site residential properties, Hillmann prepared a Technical Memorandum (Tech Memo) proposing a scope of work for off-Site and perimeter soil sampling dated November 8, 2016. The proposed scope of work included sampling on the adjoining residential properties located along the southeast property line at 2981 Mission Inn Avenue, 2968 6th Street, 2981 6th Street, and 2980 5th Street. In addition, the Tech Memo proposed testing of the soil just outside the Site perimeter, including near the pathways used by trucks that enter and exit the Site. This work was required by USEPA to determine if impacted material might have spread to greenway areas near the outer gates of the parcels, as these areas intersect with

[2] USEPA Region 9 Regional Screening Levels for industrial and residential soil, June 2015.
[3] USEPA Region 9 regional screening levels, June 2015, were adjusted for a default attenuation factor of 0.001 (DTSC, 2011)
[4] Note that PCBs were further characterized (pre-remedial confirmation sampling) during the 2018 investigation in accordance with USEPA TSCA requirements (40 CFR 761.61).

sidewalks and pathways accessible to the community. The Tech Memo was approved by DTSC by letter dated December 2, 2016.

To attempt to define the lateral extent of contamination on the off-Site residential properties, Hillmann proposed to advance eight soil borings on each of the four boundary residential properties, and a separate series of borings in boundary greenway areas. Prior to conducting the investigation, the RSIM property owner secured access to three of the four off-Site residences; the most northeastern property (2980 5th Street) did not grant access for the investigation.

In February 2017, Hillmann advanced a total of 40 soil borings at the locations proposed in the Tech Memo. Borings S1 through S24 were installed on the three residential properties where access had been permitted. These borings were installed along parallel lines to the property line and previous fence line borings. Each residential Site included soil borings installed approximately 3 and 10 feet from the property line, in accessible areas. The Site boundary borings were installed in accessible, non-paved, greenway locations along the property easement with public right-of-way areas near the scrap yard driveways. Borings S25 to S28 were installed along the Mission Inn Avenue edge of the property; borings S29 to 33 were installed in access points along 5th Street and borings S34-S40 were installed along 6th Street access points.

Investigation results from borings on the two southwest residential properties (2981 Mission Inn Ave. and 2968 6th Street) identified two locations at each property with lead concentrations greater than 80 mg/kg with a maximum concentration of 183 mg/kg in sample S1-0.25. Sample S8-0.25, located approximately 10 feet from the Site in line with boring S1, had a reported lead concentration of 95.5 mg/kg. Samples S9-0.25 and S12-0.25 (located at 2968 6th Street) had reported lead concentrations of 153 and 86.1 mg/kg, respectively. In addition, one sample collected approximately 10 feet from the fence line at 2968 6th Street had PAH concentrations in excess of residential screening levels, though none of the samples obtained closer to the fence line had reported concentrations of PAHs above residential screening levels. These results suggest that targeted remedial excavation to 1-foot bgs at these two sites could be reasonably completed with confirmation soil sampling used to ensure that the impacted soil had been adequately removed (Hillmann, 2017a).

Six soil samples collected at the 2981 6th Street residence (located just northeast of the other residences, across 6th Street) reported COCs greater than residential screening levels. Five samples had lead concentrations greater than 80 mg/kg, including the 0.25-foot samples from borings S19, S20, S22, and S23. The highest lead concentration was detected in sample S20-0.25 at 976 mg/kg. This sample also contained PCBs slightly above residential screening levels with 0.25 mg/kg Aroclor 1260 (slightly exceeding the current 0.24 mg/kg residential screening level). Only one of the deeper samples collected at this property had COC concentrations in excess of the residential screening levels; sample S19-1 had a reported lead concentration of 193 mg/kg. The deeper sample from this location, sample S19-2.5, was subsequently analyzed for lead and the reported lead concentration was 6.54 mg/kg, defining the vertical extent of impacts in this area (Hillmann, 2017a).

The adjacent property located at 2980 5th Street could not be sampled because access was not granted. Prior to implementation of remedial actions outlined in this Response Plan, an additional attempt will be made to gain access to this property for soil sampling.

Soil analytical result tables for metals, PAHs, and PCBs are included in Appendix B and Sample locations are identified in Appendix E.

3.1.4 2018 Additional On-Site PCB Sampling and Analysis

Procedures for conducting soil sampling for PCBs at the Site under TSCA were summarized in the Revised Technical Memorandum Workplan for Delineation of RCRA Level PCB-Impacted Soil

prepared by Hillman in October 2017 (PCB Work Plan; Hillmann, 2017b). GSI was subsequently retained in November 2017 by RSIM to implement the PCB Work Plan. In early December 2017, GSI, USEPA, and DTSC corresponded to confirm the TSCA procedures for delineation and removal of PCB-impacted soil.[5]

Six historical sample locations with PCB concentrations exceeding 50 mg/kg were identified in the PCB Work Plan for further characterization in accordance with TSCA requirements (Figure 3). Additional soil sampling and analysis was conducted by GSI in 2018 to define the extent of PCB impacts in soil in these areas (Figures 4A and 4B). Soil samples were collected on a 1.5-meter grid pattern at stepped-out locations from the six identified locations, with samples from each location collected at depths from the surface (0.25 feet), 1.0, 2.5 and 5.0 feet bgs. Expansion of the grid continued until concentrations of PCBs equal to or greater than 50 mg/kg were defined vertically and laterally. Soil delineation "step out" sampling events were conducted accordingly on the following dates:

January 23, 2018;
May 18, 2018;
July 27, 2018;
August 3, 2018;
September 27, 2018; and
December 20, 2018.

During the six sampling events, soil samples were collected from approximately 115 step-out borings from the six locations where PCBs had been detected above 50 mg/kg in shallow soil (A10b-SB4, S14, A8b-SB1, A8e-SB4, S6, and NS2). Soil samples were collected at one or more depths of 0.5, 1, 2.5, and 5 feet bgs. In general, lateral (step-out) and vertical (deeper) samples were collected and placed on hold. If a primary sample reported PCB concentrations exceeding 50 mg/kg, then the corresponding step-out and/or deeper sample was analyzed.

The soil samples collected were analyzed for soil moisture using USEPA Method 9045D, and PCBs using USEPA Method 8082A and the Soxhlet extraction method USEPA Method 3540C. Concentrations in soil samples were reported on a dry-weight basis as mg/kg, as indicated in the PCB Facility Approval Streamlining Toolbox (FAST; USEPA, 2017). Soil analytical results are included in Appendix E.

After the December 20, 2018 sampling event, all six PCB-impacted areas were delineated laterally and vertically with the exception of one sample location (KK26), where concentrations of PCBs exceeded 50 mg/kg (Figure 4A). On February 5, 2019, USEPA and DTSC concurred that the Site was characterized for PCBs and that no further sampling was necessary to complete preparation of the RAP, and further, that confirmation soil sampling could be conducted in the area south of KK26 to document that remedial excavation goals for PCBs are met at that location.[6]

Results of PCB-delineation sampling are included in Appendix F and on Figures 4A and 4B.

3.1.5 2020 Revised Remedial Action Plan

A RAP was completed for the Site on January 2, 2020. This document summarizes the nature and extent of contamination for the Site and provides a feasibility study that identifies remedial alternatives including: 1) No Further Action; 2) Containment through Surface Capping; or

[5] In accordance with 40 CFR 761.61.
[6] Conference call between GSI, RSIM, USEPA, and DTSC representatives and e-mail from USEPA dated February 8, 2019.

3) Excavation and Off-Site Disposal. Alternative 3, Excavation and Off-Site Disposal, was selected as the remedy, and the RAP identified Site-wide excavation depths and targeted excavations based on COC concentrations that were compared to applicable residential screening levels. A Remedial Action Implementation plan was included in the RAP.

3.1.6 2021 Phase I ESA

A Phase I Environmental Assessment (ESA) was completed for the Site on September 21, 2021 (Hillman, 2021). Recognized environmental conditions (RECs) identified for the Site included the following:

RECOGNIZED ENVIRONMENTAL CONDITIONS	
REC #1	Riverside Scrap Iron and Metal-2993 6th Street, was listed in numerous regulatory databases for site contamination resulting for the historic use as a scrap metal yard. This site is currently subject to a voluntary cleanup agreement with the DTSC to conduct further investigations and remediation. The contaminants of concern were indicated to include arsenic, lead, PCBs, poly-nuclear aromatic hydrocarbons, tetrachlorethylene and total petroleum hydrocarbons.
REC#2	The known contamination left in place after three (3) UST closures at 2993 6th Street, is considered to be a REC in connection with the Property.
REC #3	Hillmann observed several rails and wood ties within the former railroad right-of-way supporting the possibility that railroad ties may be present just below the surface soil. Railroad ties are known to be treated with oil-based and tar-based chemicals such as creosote, and railroad spurs are commonly treated with pesticides for weed control. The buried railroad line/spur is considered to be a REC in connection with the Property.
HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS	
HREC #1	Various UST closures at the Property have left contamination in place including a 10,000-gallon diesel UST at 3033 5th Street, analysis of soils beneath the tank indicated 62 mg/kg TPHd kept in place, which
	is below residential cleanup levels, and is therefore considered to be a HREC in connection with the Property. The closure of a reported 1,000-gallon UST at the southeast corner of the warehouse at 3596 Commerce Street with a known release, reported cleanup with regulatory closure is also considered to be a HREC in connection with the Property.
CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS	
	No CRECs were identified.
SIGNIFICANT DATA GAPS	
	No SDGs were identified.

The recommended response actions for the identified RECs are as follows:

REC RESPONSE ACTION SUMMARY TABLE	
REC	**Response Action**
REC #1, 2, 3	Complete the cleanup as laid out in the Remedial Action Plan prepared by GSI for the DTSC and seek out closure from appropriate regulatory agencies.
HREC #1	No response action recommended at this time.

The Phase I ESA RECs #1 and #2 both reference potential impact from low concentrations of petroleum hydrocarbons originating from former fuel USTs at the Site that were removed in the year 2000 in the vicinity of Area 8b (Figure 2). In August 2015, soil samples collected from depths of 2.5, 5, 15, and 20 feet below grade at a location approximately 10 feet south of the former UST excavation, were analyzed for VOCs, including gasoline-range organics, and no compounds were identified above the laboratory reporting limit in any sample collected. Additionally, gasoline-range organics were not identified in approximately 90 soil samples collected from depths between 2.5 and 20 feet at 46 locations across the Site (AMEC, 2015; Figure 2 and Table 4). Implementation

of the proposed remedial action plan is contemplated to address shallow soil impacts above residential land use criteria.

3.2 2022 Site Assessment Plan and Report of Findings

The Site Assessment and Report of Findings (GSI, 2022) is required under the CLRRA agreement between Iron Lofts and DTSC that was entered into for redevelopment of the Site. Iron Lofts purchased the property after the 2020 RAP was submitted to DTSC. The Site Assessment and Report of Findings is a summary of the Site and Site investigations (listed in the Sections above) and presents information related to the nature and extent and contamination at the Site. Based on the historical data available for the Site, the Site Assessment and Report of Findings recommended the preparation of a Response Plan that will evaluate the alternatives for response actions necessary to "reduce COC concentrations to concentrations considered protective of human health for residential use."

3.3 2023 Soil Vapor Investigation Reports

Soil vapor sampling was completed at locations throughout the Site in November 2022 and May 2023 to evaluate PCE and TCE in soil vapor and provide the additional assessment data required to support the planned multifamily redevelopment planning, design, and regulatory oversight, and for the evaluation of unrestricted Site use. The Soil Vapor Investigation Report and Addendum to the Soil Vapor Investigation Report have been included as Appendix G.

Analytical results for soil vapor samples are evaluated by comparison to risk-based screening levels for residential and commercial/industrial Site use. Screening levels for soil vapor are developed by applying an attenuation factor to screening levels for indoor air:

$$\text{Soil Vapor Screening Level } (SL_{sv}) = \frac{SL_{ia}}{AF}$$

Where:

SLsv	=	Soil vapor screening level (µg/m^3)
SLia	=	Indoor air screening level (µg/m^3)
AF	=	Attenuation factor (unitless)

Soil vapor screening levels were calculated using the default attenuation factor published by DTSC for residential and commercial use (0.03; DTSC & State Water Resources Control Board [SWRCB], 2023); these soil vapor screening levels are referred to in this report as the "DTSC-SLs." Soil vapor data are evaluated by comparison to the DTSC-SLs for an initial screening of soil vapor data.

As shown in Appendix G, PCE, TCE, 1,2-dichloroethene (1,2-DCA), and chloroform were the only VOCs detected in at least one soil vapor sample at a concentration exceeding its DTSC-SL, and the results for these VOCs are summarized below:

- PCE was detected in all soil vapor samples collected at concentrations ranging from 63 to 850 µg/m^3. The highest PCE concentrations in soil vapor were observed in the soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel (850 µg/m^3 at VP-1-30 REP, 810 µg/m^3 at VP-1-30, 640 µg/m^3 at VP-9-30, and 840 µg/m^3 at VP-19-30) and southeastern property boundary of the central parcel (780 µg/m^3 at VP-20-30). All soil vapor samples exceed the DTSC-SL of 15 µg/m^3.
- TCE was detected in 22 of 23 total soil vapor samples at concentrations ranging from 6 to 2,100 µg/m^3. The highest TCE concentrations in soil vapor were also observed in the soil

vapor samples with the highest PCE concentrations. Specifically, TCE was detected at the highest concentrations in the soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel (2,000 µg/m^3 at VP-1-30 REP and 1,900 µg/m^3 at VP-1-30, 1,600 µg/m^3 at VP-9-30, and 1,700 µg/m^3 at VP-19-30) and southeastern property boundary of the central parcel (2,100 µg/m^3 at VP-20-30). All soil vapor samples with detections of TCE except for one (6 µg/m^3 at VP-9-5) exceed the DTSC-SL of 16 µg/m^3.

- 1,2-DCA was detected in one soil vapor samples at a concentration of 17 µg/m^3, which exceeds the DTSC-SL of 3.7 µg/m^3. The low concentration of 1,2-DCA was not reproduced in any other soil vapor samples collected in 2022 and 2023.
- Chloroform was detected in four soil vapor samples at concentrations ranging from 19 to 24 µg/m^3, all of which exceed the DTSC-SL of 4.0 µg/m^3. Chloroform is commonly detected in soil vapor samples since chloroform is a disinfection byproduct and present in municipal water (Agency for Toxic Substances and Disease Registry [ATSDR], 1997).

During the November 2022 sampling event, 47 primary soil vapor samples were collected from 21 locations installed at depths ranging between 5 and 30 feet. During the May 2023 sampling event, 23 primary soil vapor samples were collected from 8 of the locations previously identified with higher concentrations of PCE and/or TCE relative to the other probes at the Site. PCE and TCE were the primary VOCs detected in soil vapor samples during both sampling events. PCE was detected in every soil vapor sample, but at relatively low concentrations (up to 850 µg/m^3). TCE was detected less frequently, but at slightly higher concentrations (up to 2,100 µg/m^3).

In general, PCE and TCE concentrations during the November 2022 sampling event increased with depth at all soil vapor sample locations (i.e., higher concentrations were detected in deeper soil vapor samples) with the exception of two locations (VP-4 and VP-5). The highest PCE and TCE concentrations in soil vapor were observed from soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel and southeastern property boundary of the central parcel. The results of the May 2023 sampling event were consistent with the November 2022 sampling event.

The results of the November 2022 sampling event were compared to the results of the May 2023 sampling event to evaluate the temporal variability of PCE and TCE in soil vapor at the Site. Results presented in the Addendum to the Soil Vapor Investigation Report and in Exhibit A and B, below and discussed further in the Addendum, do not indicate any significant temporal variation in PCE or TCE concentrations between the November 2022 and May 2023 data.

Exhibit 3-1. Temporal Trends for PCE – November vs. May

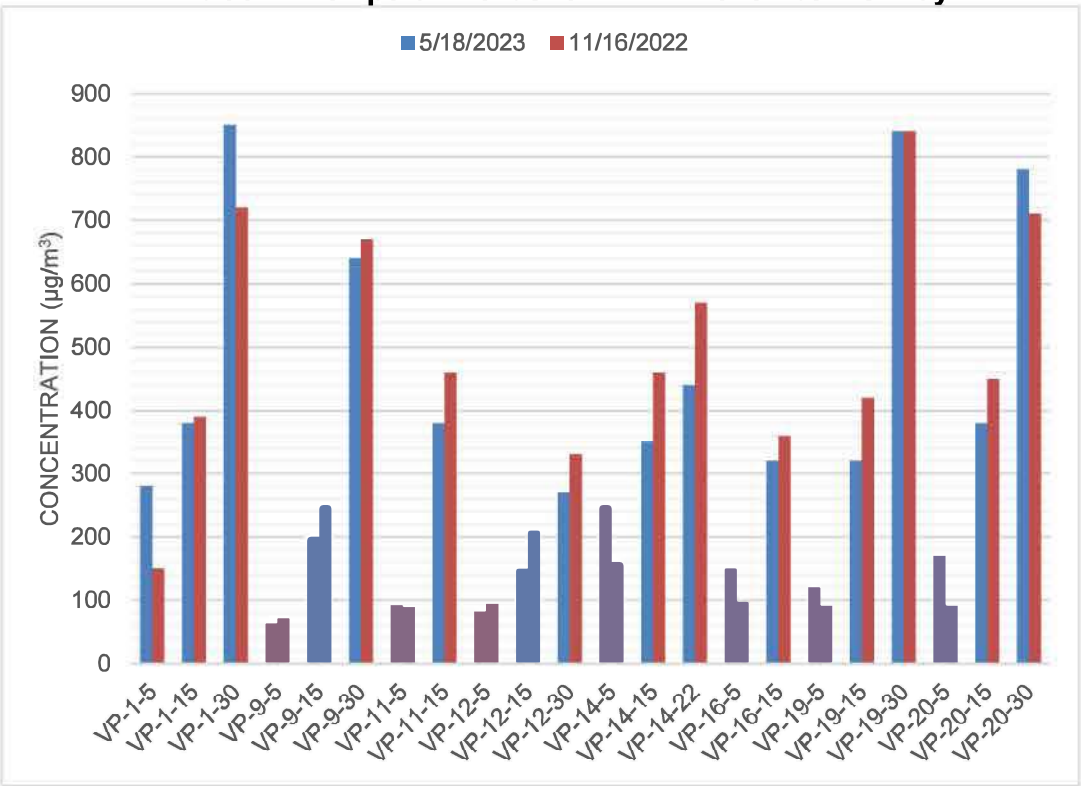
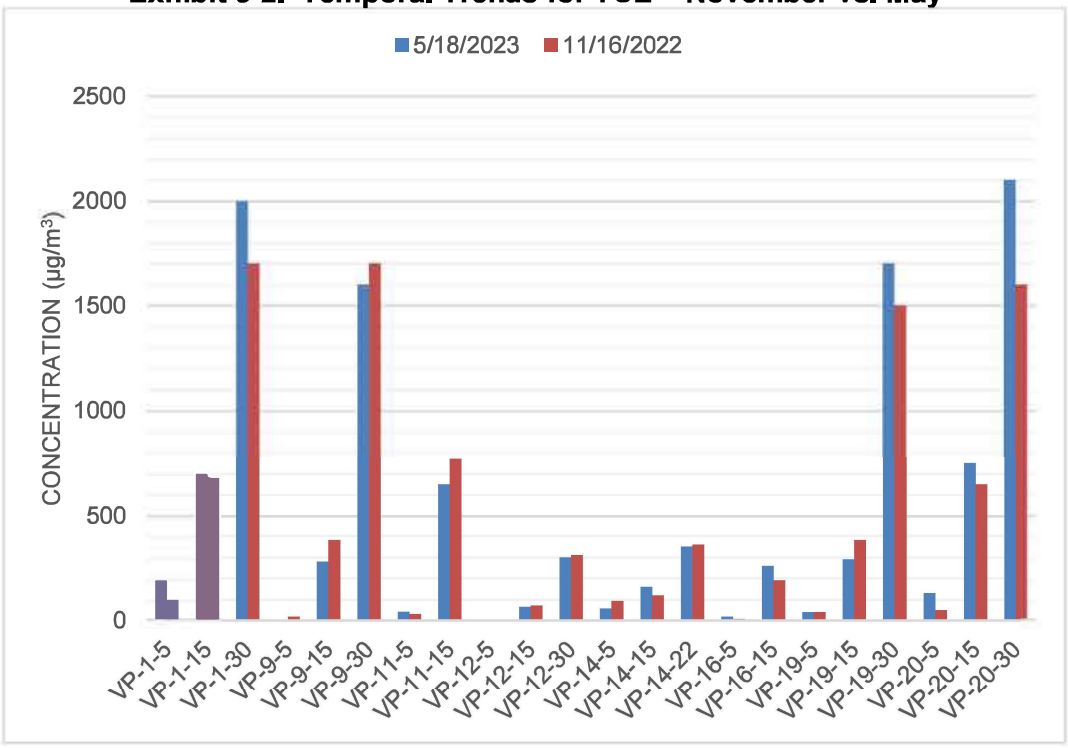


Exhibit 3-2. Temporal Trends for TCE – November vs. May



Thus, only low concentrations of PCE and TCE were detected in soil vapor samples collected and analyzed during the November 2022 and May 2023 sampling events. The analytical results for soil vapor samples collected in November 2022 and May 2023 also are generally consistent with soil vapor sampling results from 2015. PCE and TCE were detected at concentrations up to 2,000 and 570 µg/m^3, respectively, in samples collected in 2015 (Appendix C), which is slightly greater than the range for PCE and less than the range for TCE detected in 2022 and 2023. These low concentrations are stable, as similar PCE and TCE concentrations were observed in November 2022 and May 2023. Although the possibility of small on-Site releases of PCE and TCE cannot be ruled out, the soil vapor results are consistent with an off-Site source of PCE and TCE.

4.0 NATURE AND EXTENT OF CONTAMINATION

Site use as a scrap metal yard for over 45 years has resulted in impact of COCs to the shallow subsurface. Soil sampling has identified PCBs, metals (arsenic and lead), and PAHs in shallow soil at concentrations above USEPA and DTSC-recommended residential screening levels. In addition, VOCs have been detected in Site soil vapor at concentrations above residential screening levels. However, the concentrations detected are relatively low and although the possibility of small on-Site releases of PCE and TCE cannot be ruled out, the soil vapor results are consistent with an off-Site source of PCE and TCE. Minor releases of VOCs, most notably PCE and TCE, associated with historical Site use, also may be a source of VOCs in on-Site soil vapor. Based on historical Site investigation results, groundwater does not appear to have been impacted by COCs in shallow soil at the Site.

4.1 Soil

COCs (PCBs, metals, and/or PAHs) in soil are present within the top approximately 1 foot of soil across the Site, with a few detections at depths of 2.5 or 5 feet. Historical sample locations with concentrations of COCs that exceed screening levels are identified in Table 7 and Figure 7.

Although the specific source(s) of contamination at the Site have not been identified, the historical Site use as a scrap yard is considered the likely source of impact.

PCBs identified at the Site primarily include Aroclors 1242, 1248, 1254, and 1260. These Aroclors are commonly found in hydraulic fluid and polyvinyl acetate (paints and adhesives). The following table summarizes some potential sources for each of the Aroclors identified at the Site, some of which may be associated with historical Site operations.[7]

Exhibit C. Potential Sources for Aroclors Identified at the Site

Aroclor	Potential Source
1242	Carbonless copy paper
	Gas transmission turbines
	Heat transfer
1248	Epoxy resins - Increased resistance to oxidation and chemical attack; better adhesive properties
1254	Capacitors
	Chlorinated rubber - Enhanced resistance, flame retardant, electrical insulation properties
	Cutting oils
	Ethylene vinyl acetate – Pressure-sensitive adhesives
	Inks
	Pesticide extenders
	Sealants and caulking compounds
	Styrene-butadiene co-polymers

[7] https://www.oregon.gov/deq/FilterDocs/ph-SourcePCBs.pdf

	Synthetic resins
1260	Polyester resins - Stronger fiberglass; reinforced resins and economical fire retardants
	Varnish - Improved water and alkali resistance

Multiple Aroclors	Potential Source
1242, 1248	Rubbers
1242, 1248, 1254, 1260	Hydraulic fluid
1242, 1248, 1254, 1260	Polyvinyl acetate - Improved quick-track and fiber-tear properties
1242, 1254	Wax extenders
1242, 1254, 1260	Transformers
1248, 1254	Vacuum pumps
1254, 1260	Dedusting agents

4.2 Soil Vapor

Soil vapor sampling completed across the Site in 2015, 2022 and 2023 indicate that PCE and TCE concentrations generally increase to the total depth explored of 30 feet (i.e., higher concentrations were detected in deeper soil vapor samples). Only low concentrations of VOCs were detected in soil vapor samples collected at the Site, and no VOCs were detected in soil vapor samples collected at depths of 5 to 15 feet bgs at concentrations exceeding 1,000 µg/m^3.

The highest PCE and TCE concentrations in soil vapor were observed from soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel and southeastern property boundary of the central parcel.

For soil vapor samples collected in 2022 and 2023, only low concentrations of PCE and TCE were observed in shallow soil vapor samples, with higher concentrations observed in soil vapor samples collected at 22 to 30 feet bgs:

Exhibit B. 2022 and 2023 Maximum Concentrations of PCE and TCE by Depth (µg/m^3)

	PCE	TCE
Maximum Detected Concentration (All depth)	***850***	***2,100***
Soil Vapor Samples collected at 5 feet bgs	280	190
Soil Vapor Samples collected at 13 to 15 feet bgs	460	770
Soil Vapor Samples collected at 22 to 30 feet bgs	850	2,100

These results indicate that the primary source of PCE and TCE to soil vapor is associated with an off-Site release of PCE and TCE, and that PCE and TCE concentrations decrease in shallow soil vapor compared to deeper soil vapor.

- Thorough soil and soil vapor sampling investigations were completed and a source of PCE or TCE to soil vapor was not identified on the Site.
- Concentrations increase with depth at all resampled soil vapor sample locations (i.e., higher concentrations were detected in deeper soil vapor samples).
- The highest PCE and TCE concentrations in soil vapor were observed from soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel and southeastern property boundary of the central parcel.

Analysis of three rounds of soil vapor investigation does not identify a source of PCE and TCE at the Site. Additionally, no evidence of significant temporal variability in concentrations of PCE or TCE is identified in the samples analyzed from 2015 to 2023. Low concentrations of PCE and TCE detected in soil vapor samples and increasing concentrations with depth are not indicative

of an on-Site release. It is possible that the low concentrations are attributed to minor releases associated with historical on-Site operations and/or an off-Site release that is migrating in deeper soil vapor or groundwater to the Site.

5.0 CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) presents information about Site conditions and potential impacts to receptors (DTSC, 2015).

COCs (PCBs, metals, and/or PAHs) in soil are present within the top approximately 1 foot of soil across the Site. PCBs were detected at concentrations exceeding residential screening levels in soil samples collected primarily in the upper 1 foot of soil, and at a few locations at depths up to 2.5 or 5.0 feet bgs the Site (Table 1). Based on historical Site investigation results, deeper soils and groundwater do not appear to have been impacted by historical operations at the Site, and co-solvency of PCBs with other COCs at the Site is not suggested from the extensive sampling and limited vertical extent of PCBs in soil.

PCE and TCE have been detected in soil vapor at concentrations exceeding residential DTSC-SLs. In general, PCE and TCE concentrations in soil vapor are low and no specific source areas have been identified. It is anticipated that remedial soil removal will be performed as the initial step for residential Site redevelopment, which is expected to remove some concentrations of these VOCs in shallow soil.

Potential Contaminant Sources

Although the specific source(s) of contamination at the Site have not been identified, the historical Site use as a scrap yard is considered the likely source of PCBs, metals, and PAHs in shallow soil. A source of PCE or TCE to soil vapor was not identified on the Site and the low concentrations of PCE and TCE detected in soil vapor samples and increasing concentrations with depth are not indicative of an on-Site release. It is possible that the low concentrations are attributed to minor releases associated with historical on-Site operations and/or an off-Site release that is migrating in deeper soil vapor or groundwater to the Site.

Potential sources of COCs in soil from the scrap yard operations for 45 years could include older electrical equipment; cable/wire insulation; oil used in motors and hydraulic systems; demolition waste; fluorescent light ballasts; caulk; water proofing materials; asphalt roofing materials; thermal insulation material including fiberglass, felt, foam, and cork; adhesives and tapes; oil-based paint; old electrical devices; appliances containing PCB capacitors; and metal composite siding or roofing materials.

Potential Contaminant Release and Transport

- COCs were released at the Site associated with the historical use of the Site as a scrap yard, primarily on unpaved surfaces and with trucks and heavy equipment moving scrap around the yard.
- COCs at the Site are primarily present within the top approximately 1 foot of soil. At few locations, PCBs in soil above remedial goals extend past 1 foot to 2.5 or 5.0 feet bgs.
- Based on historical Site investigation results, deeper soils or groundwater do not appear to have been impacted by historical operations at the Site and co-solvency of PCBs with other COCs at the Site is not suggested from the limited vertical extent of PCBs in soil.
- Soil vapor sampling at the Site indicate the presences of low concentrations of volatile COCs that are likely associated with an off-Site source.

Potential Receptors

The following receptors or users of the Site are identified for the current and future scenarios:

- Current Land Use – The Site is currently vacant, unused, and fenced. Based on current land use at the Site, a commercial worker, occasional Site visitor, and maintenance worker are the only current potential receptor populations identified.
- Future Land Use – Residential development of the Site is planned. Consistent with DTSC PEA Guidance Manual, a hypothetical baseline (residential) scenario will be considered to determine whether restrictions on development of the Property are warranted to protect human health without further environmental actions.

Potential Exposure Pathways

Exposure pathways are considered "complete" for a particular receptor scenario when it can be demonstrated that a receptor may reasonably be expected to have the potential to come in contact with contaminants in certain environmental media (e.g., surface soils).

The primary exposure pathway identified for the Site is direct contact with the shallow soil. Under current land use, the Site is mostly unpaved and on-Site commercial/industrial workers have the potential to be exposed to contaminants in soil via incidental ingestion of soil, dermal contact with soil, and/or inhalation of particulates and volatile chemicals. Currently, the Site is vacant and not used for commercial/industrial or any other purposes. A hypothetical future resident may also contact soils if the Site is redeveloped. Note that residential redevelopment likely would involve multi-family units, which would limit contact with soils. However, as a conservative evaluation and in accordance with DTSC PEA guidance, future Site use is assumed to include a residential development with unpaved areas. Thus, potential soil exposures by a future commercial worker, current maintenance worker, and hypothetical resident will be evaluated in an HHRA following implementation of this Response Plan.

Future receptors also may come into contact with VOCs detected in soil vapor via the vapor intrusion pathway. Several lines of evidence indicate that vapor intrusion does not pose an unacceptable health risk to future residents at the Site.

1. The highest PCE and TCE concentrations in soil vapor were observed from soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel and southeastern property boundary of the central parcel.
2. PCE and TCE concentrations in soil vapor were delineated laterally during the following three sampling events:
    - 2015 (22 locations; 44 samples analyzed) – Soil vapor samples collected from depths of 5 and 15 feet.
    - 2022 (21 locations, 49 samples analyzed) – Soil vapor samples collected from depths of 5 and 15 feet. Deeper soil vapor samples were additionally collected from depths of up to 30 feet from 6 locations.
    - 2023 (8 locations; 23 samples analyzed) – Soil vapor sample collection and analysis was duplicated at eight locations that were originally sampled in 2022.
3. A source of PCE or TCE to soil vapor was not identified on the Site and the low concentrations of PCE and TCE detected in soil vapor samples and increasing concentrations with depth are not indicative of an on-Site release. No VOCs were detected in soil vapor samples collected at depths of 5 to 15 feet bgs at concentrations exceeding 1,000 µg/m^3 in samples collected in 2022 and 2023. It is possible that the low concentrations are attributed to minor releases

associated with historical on-Site operations and/or an off-Site release that is migrating in deeper soil vapor or groundwater to the Site.

4. Consistently, low concentrations of VOCs were observed in soil vapor over an approximately 8-year soil vapor sampling period, indicating that VOC concentrations are stable in soil vapor.
5. Based the lines of evidence listed above, mitigation measures may not be needed to address the potential for low concentrations of PCE and TCE detected in soil vapor to migrate to indoor air at the Site development. However, as described in Section 2.4, Iron Lofts has decided to include the installation and operation of a VIMS at the proposed building at the Site development, and the planned VIMS will be constructed with features that will minimize the potential for vapor intrusion.

The lines of evidence described above apply to the vapor intrusion pathway evaluation at the existing historical building located at 3596 Commerce Street. As part of the repurposing of the existing historic building for use as amenity space, existing crawl spaces will be vented passively, and the structure will be improved and built out, including installation of a modern HVAC system. Following completion of building improvements, indoor air samples will be collected to confirm the effectiveness of the vapor mitigation measures.

As part of the HHRA that will be completed following implementation of this Response Plan, potential vapor intrusion exposures by future receptors will be evaluated for completeness.

6.0 REMEDIAL ACTION OBJECTIVES

RAOs define qualitative goals and quantitative levels of cleanup and are based on a future residential land use of the Site.

6.1 Remedial Action Objective for Soil

Site characterization has identified the presence of COCs in soil at the Site. The development of several multi-story residential buildings following completion of the remedial activities are outlined in this Response Plan. The RAOs for this Site is based upon the current environmental conditions and the current and reasonably anticipated future uses of the Site:

1. Reduce COC concentrations in soil to concentrations considered protective of human health for residential use.
2. Prevent volatile COCs in soil vapor from migrating to indoor air at concentrations exceeding DTSC-SLs at on-Site buildings (i.e., future Site redevelopment buildings and the historic existing building).

Based on the RAO, cleanup goals were developed that establish specific concentrations of chemicals in environmental media that are protective of both human health and the environment.

6.2 Applicable or Relevant and Appropriate Requirements and To Be Considered Criteria

In addition to evaluating the technical aspects of various options for their suitability as potential remedial action alternatives, environmental laws and regulations must be reviewed to determine whether the option meets the environmental requirements. These applicable or relevant and appropriate requirements (ARARs) are developed under the CERCLA process guidance. The following section presents an overview of the ARARs process and identifies ARARs affecting the RAOs. Additional "to be considered" (TBC) criteria that are meant to complement the use of ARARs are presented herein.

6.2.1 Overview of ARARs

Identification of ARARs is a Site-specific determination involving a two-part analysis: first, a determination of whether a given requirement is applicable; then if it is not applicable, whether it is relevant and appropriate. Applicable requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that specifically address the situation at a particular site. The requirement is applicable if the jurisdictional prerequisites of the standard show a direct correspondence when objectively compared to the conditions at the Site. If the requirement is not legally applicable, then the requirement is evaluated to determine whether it is relevant and appropriate. Relevant and appropriate requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that, while not applicable, address problems or situations sufficiently similar to the circumstances of the proposed response action and are well suited to the conditions of a site (USEPA, 1988). A requirement must be substantive in order to constitute an ARAR for activities conducted on-Site. Procedural or administrative requirements, such as permits and reporting requirements are not ARARs. ARARs are promulgated, or legally enforceable federal and state requirements.

A summary of the potential ARARs that may pertain to the proposed remedial alternatives for the Site is included in Table 2.

6.2.2 Overview of TBC Criteria

TBC criteria includes non-promulgated criteria, advisories, guidance, and proposed standards issued by federal or state governments. Because TBC criteria are not potential ARARs, they are neither promulgated nor enforceable, and their identification and use are not mandatory. Rather, TBC criteria are meant to complement the use of ARARs, not to compete or replace them. For instance, many ARARs have broad performance criteria but do not provide specific instructions for implementation and those instructions are contained in supplemental program guidance. It may be necessary to consult TBC criteria to interpret ARARs, or to determine preliminary remediation goals when ARARs do not exist for particular contaminants.

A summary of the potential TBC criteria that may pertain to the proposed remedial alternatives for the Site is included in Table 2.

6.3 Remedial Goals

Results of previous Site investigations suggest that historical operations have generally impacted the shallow soil with PCBs, metals (arsenic and lead), and PAHs at concentrations above DTSC-SLs.

To achieve the established RAO, risk-based screening levels and regional estimates for background threshold values were selected as remedial goals.

The table below and Table 3 presents the remedial goals identified for Site COCs, including:

1. DTSC-SLs for residential soil, which are the lower (more conservative) of the values published by USEPA in the RSL tables (USEPA, 2022) and DTSC in HHRA Note 3 (2022b);

2. Background threshold values established for arsenic and carcinogenic PAHs (as benzo[a]pyrene equivalent) in soil, by the DTSC (2009, 2020); and

3. San Francisco Bay Regional Water Quality Control Board (SFRWQCB 2019). Environmental Screening Levels (ESLs) for TPH.

Individual PAHs will be evaluated in the upcoming health risk assessment in accordance with the HHRA Note 4 (DTSC, 2022a).

Exhibit C. Remedial Goals for PCBs, Metals (Arsenic and Lead), and PAHs (See Table 3 for Reference Information)

COC	Residential Remedial Goal (mg/Kg)
Metals	
Arsenic	12
Lead	80
Polycyclic Aromatic Hydrocarbons (PAHs)	
Benz[a]anthracene	1.1
Benzo(b)fluoranthene	1.1
Benzo[a]pyrene	0.11
Benzo[a]pyrene Equivalents	0.9
Dibenz[a,h]anthracene	0.028
Indeno(1,2,3-cd)pyrene	1.1
Naphthalene	2
Polychlorinated Biphenyls (PCBs)	
Aroclor 1016	4.0
Aroclor 1221	0.2
Aroclor 1232	0.17
Aroclor 1242	0.23
Aroclor 1248	0.23
Aroclor 1254	0.24
Aroclor 1260	0.24

Notes:
DTSC = California Department of Toxic Substances Control
mg/kg = milligram per kilogram
US EPA = United States Environmental Protection Agency
See Table 3 for References.

6.4 Areas Exceeding Remedial Goals

Areas where COCs exceed remediation goals are identified based on Site investigation data. Figures 4A, 4B, and 4C identify areas of targeted excavations for PCBs and lead at concentrations that require special handling (Total PCB at concentrations ≥50 mg/kg and lead at either ≥1,000 mg/kg or ≥5 mg/L soluble lead using the Waste Extraction Test [WET]). Figure 5 identifies the overall Site excavation including COCs in soil at concentrations exceeding remedial goals identified in Table 3. Figures 6A and 6B identify the overall excavation plan for off-Site residential properties.

COC concentrations reported in confirmation samples collected during planned excavation activities will be compared to the remedial goals identified in Table 3. For screening purposes,

the maximum concentration will be compared to remedial goals. Consistent with USEPA guidance (2002), the 95 percent upper confidence limit (95UCL) on the arithmetic mean of concentrations reported in confirmation samples will also be calculated to confirm that post-excavation conditions are protective of human health. According to USEPA (1989), although the 95UCL "does not reflect the maximum concentration that could be contacted at any one time, it is regarded as a reasonable estimate of the concentration likely to be contacted over time. This is because in most situations, assuming long-term contact with the maximum concentration is not reasonable." This evaluation is consistent with the planned redevelopment of the Site with multi-story residential buildings. At DTSC's request, the results of this evaluation will be confirmed with additional shallow soil samples at locations selected in collaboration with DTSC.

7.0 SUMMARY OF FEASIBILITY STUDY

The purpose of this Section of the Response Plan is to identify and screen possible remedial action alternatives (RAA) that may best achieve the RAO. This analysis was performed in accordance with the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (USEPA, 1988) and the nine evaluation criteria (40 CFR 300.430(e) (9)(iii)) of the NCP. The purpose of the analysis is to provide decision makers with sufficient information for comparing RAAs and selecting the preferred RAA for the Site. Selected RAAs must be protective of human health and the environment, cost-effective, use permanent solutions and alternative treatment technologies to the maximum extent practicable, and satisfy the preference for treatment that reduces toxicity, mobility and/or volume as a principal element. The nine evaluation criteria outlined in the NCP are the basis for conducting the detailed analysis. The criteria have been developed to meet the five statutory requirements of CERCLA Section 121, and technical, cost and institutional considerations that are considered important and appropriate for selecting RAAs. The nine evaluation criteria to be used in the detailed analysis of RAAs are listed below:

Threshold Criteria:

1. Overall protection of human health and the environment;
2. Compliance with ARARs;

Primary Balancing Criteria:

3. Long-term effectiveness and permanence;
4. Reduction of toxicity, mobility, and/or volume of hazardous constituents;
5. Short-term effectiveness;
6. Implementability;
7. Cost;

Modifying Criteria:

8. State acceptance; and
9. Public acceptance.

It is anticipated this Response Plan will be acceptable to the State based on discussions with DTSC and prior approval of the RAP; however, the final two criteria, State acceptance and public acceptance, cannot be fully evaluated at this time. These criteria consider the concerns of the State (technical and administrative) and public regarding the alternatives. The final two criteria

(Criteria 8 and 9) are usually evaluated following public comment on the Response Plan. These criteria are usually addressed when the DTSC makes its final remedial decision.

The nine criteria provide a uniform platform by which the technical and administrative merits of each RAA can be measured and are grouped into the following categories: "threshold criteria," "primary balancing criteria," and "modifying criteria." The RAAs are further evaluated against a set of specific questions and considerations ("analysis factors") that complement the analysis factors.

Any selected RAA must meet the threshold criteria and also be cost effective. Cost effectiveness is determined by examining whether the costs are proportional to the overall effectiveness of the remedy, as determined by evaluating the following three of the five primary balancing criteria: long-term effectiveness and permanence; reduction of toxicity, mobility, and/or volume through treatment; and short-term effectiveness. In addition, each RAA selected must accomplish permanent solutions to the maximum practicable extent. The following paragraphs briefly describe the factors addressed by each evaluation criterion.

Threshold Criteria. The overall protection of human health and environment, and compliance with ARARs are the two threshold criteria that a RAA must meet. Criterion 1 serves as a final check to assess whether a RAA provides adequate protection of human health and the environment.

Criterion 1 - Overall Protection of Human Health and the Environment. This criterion assesses whether each RAA meets the short-term and long-term requirement for overall protection of human health and the environment from unacceptable risks posed by the hazardous substances, pollutants, or contaminants present in the groundwater at the Site. The following factors are considered when evaluating alternatives against Criterion 1:

- How the alternative provides human health and environmental protection:
  - The level of protection to public health achievable, including the extent to which each alternative attains, exceeds or does not achieve ARARs or remedial action goals.
  - Potential for migration of harmful by-products into air and water during the Site remediation work.
- Potential environment impact from implementation of the alternative:
  - Impacts on the surrounding community, including but not limited to heavy truck traffic, noise, odors, and other aesthetic considerations.
  - Potential impacts to surface water from implementation of the alternative; including impacts on storm water run-off, soil erosion, and leaching.
  - Potential impacts to groundwater from implementation of the remedial action.
  - Potential restrictions on future uses of the Site after remedial action.

Criterion 1 is met if the RAA achieves the RAOs.

Criterion 2 - Compliance with ARARs. Criterion 2 is used to determine whether the RAA meets chemical-, action-, and location-specific ARARs previously identified above. This criterion is used to determine how effectively a RAA complies with the ARARs or, if a waiver is required because the ARARs cannot be met, how the waiver is justified. This assessment also addresses other advisories and guidance documents (TBCs).

Primary Balancing Criteria. The detailed analysis is based upon five primary balancing criteria which include long-term effectiveness and permanence, reduction of toxicity, mobility, and mass,

short-term effectiveness, implementability, and cost. Descriptions and analysis factors of the five primary balancing criteria against which the alternatives are evaluated, are discussed in the subsequent sections.

Criterion 3 - Long-Term Effectiveness and Permanence. This criterion considers the risk remaining at the Site after RAOs have been met and maintaining overall protection of human health and environment. Two major factors are considered: magnitude of residual risk and adequacy and reliability of controls. Magnitude of residual risk refers to risk remaining from untreated waste or treatment residuals. Adequacy d reliability of controls refers to the controls, if any, that are used to manage the residual risk identified. Technical components and institutional controls are evaluated, and, if a technical component needs replacement, the risk posed is also considered. The various remediation options have different levels of residual risk. The No Action RAA has the highest potential risk of residual chemicals in soil since no active contaminant reduction is considered.

Criterion 4 - Reduction of Toxicity, Mobility, and/or Volume of Hazardous Constituents. This criterion addresses how well the RAAs permanently and significantly reduce the toxicity, mobility, and/or volume of the hazardous substances. The evaluation based on this criterion focuses on the quantity of hazardous materials removed, destroyed or treated, the degree to which the remedial action is irreversible, the type and quantity of residuals that are remaining after the RAA is complete, and whether the RAA satisfies the statutory preference for treatment as a principal element of the remedy.

Criterion 5 - Short-term Effectiveness. Each alternative is evaluated based on its effectiveness in protecting human health and the environment during the construction and implementation period. The short-term effectiveness evaluation for each RAA focuses on protection to the Site workers and to the community during the construction and implementation phases of the RAA. The implementation phase is defined as the period of time required until the RAOs are met. The evaluation period will vary for each RAA.

Criterion 6 - Implementability. The implementability criterion includes both the technical and administrative feasibility of implementing a RAA. The technical feasibility refers to the ability to construct, reliably operate and maintain, and meet the cleanup levels for the proposed process options. Administrative feasibility refers to the ability to obtain approvals from other state and local offices and agencies; the availability and capacity of treatment, storage, and disposal services; and the availability of specific equipment and technical specialists.

The following factors are considered:

- ability to construct and operate the technology;
- Site considerations that may affect the remedial action (e.g. on-Site structures, drainage features);
- off-Site conditions and external considerations (e.g. rights-of-way, access, availability of land and equipment);
- reliability of the technology;
- ease of undertaking additional remedial actions, if necessary;
- ability to monitor effectiveness of the remedy;
- ability to obtain approvals from other agencies;
- coordination with other agencies;
- availability of off-Site treatment, storage and disposal services, and capacity;
- availability of necessary equipment and trained personnel;

- transportation requirements; and
- Site security.

Criterion 7 - Cost. The cost criterion includes capital costs and operating and maintenance (O&M) costs. Capital costs include direct expenses, such as construction, equipment, and disposal costs, and indirect expenses, such as engineering and design, legal and permitting, mobilization and start-up, and scope and bid contingency costs, as well as the costs of health and safety considerations and services during construction. Scope contingencies cover changes that invariably occur during final design and implementation and are intended to adjust the estimate so it can be used for budgetary purposes. Bid contingencies may cover unknown expenses associated with constructing a given project scope such as adverse weather conditions, geotechnical unknowns, and unfavorable market conditions for a particular project scope. O&M costs, calculated on an annual basis, include expenses for operating labor and materials, maintenance labor and parts, power requirements, sampling and analysis, administration, and periodic Site reviews.

The final costs of the project will depend on actual labor and material costs, actual Site conditions, productivity, competitive market conditions, final project scope, final project schedule, and other variable factors. As a result, the final project costs may vary from the estimates in this Response Plan.

Criterion 8 - State Acceptance. This criterion considers the preferences or apparent concerns of the State, both technical and administrative, regarding the RAAs. This section will be completed after DTSC has had the opportunity to review and comment on the Draft Response Plan.

Criterion 9 - Public Acceptance. This assessment will reflect the local community's preferences among the RAAs and concerns about the RAAs. This assessment will be completed after the public review and comment period is complete. Results of this assessment will be presented in the final Response Plan.

7.1 Remedial Action Alternatives – Soil

Three Remedial Action Alternatives were selected for further evaluation using the nine criteria presented above. The three Alternatives selected for further evaluation to address shallow soil impacts are:

- Alternative 1 - No Further Action;
- Alternative 2 - Containment through Surface Capping; and
- Alternative 3 - Excavation and Off-Site Disposal.

As described in DTSC's Proven Technologies and Remedies Guidance – Remediation of Metals in Soil (DTSC, 2008), "containment by capping" and/or "excavation and offsite disposal" were the most frequently selected cleanup alternatives in DTSC's evaluation of data for 188 sites where the primary contaminants were metals (primarily arsenic, chromium, lead, and mercury). Site COCs include the metals arsenic and lead as well as PCB and PAHs. Therefore, DTSC's proven technologies for remediation of metals are applicable to the evaluation and selection of remedial alternatives.

7.1.1 Alternative 1 - No Further Action

This alternative would require low or no cost and would be highly implementable from a technical feasibility perspective. The effectiveness of this alternative, however, would be poor; particularly with respect to long-term effectiveness, compliance with ARARs/TBCs, and overall protection of human health and the environment. This alternative would not achieve the RAOs and would not likely gain acceptance from the state and community.

7.1.2 Alternative 2 - Containment through Surface Capping

Containment of the contaminated soil would consist of capping the surface of the Site with an engineered cover, both on-Site and in the residential areas identified in the off-Site investigation. This alternative uses a geotextile membrane and engineered concrete cap over the Site to limit potential exposure of future Site occupants or construction workers through direct contact with the contaminants.

Impacted soil is generally present within the top 1 to 2 feet of soil across the majority of the Site. Redevelopment of the property likely will require removal of several inches to 1 foot or more of surface soil to facilitate the import of base material and foundation construction on the Site. This shallow soil generally contains the higher concentrations of COCs in Site soil and would require special handling and mitigation using specially trained personnel. If a protective cap were to be installed now, it would require disturbance and soil disposal for property re-use. As such, the cost for containment through surface capping would encompass the cost to excavate and dispose of the shallow impacted soil, but would additionally include costs for the installation of the cap; monitoring and mitigation of off-site migration of COCs during construction activities; ongoing monitoring of worker exposure during construction and resident exposure after construction; long-term operation and maintenance of the cap; and disturbance and remediation under the proposed redevelopment plan. In addition, residential properties impacted from the Site would have to agree to have portions of their unpaved yards capped.

Surface capping would necessitate a deed restriction on the Site, with requirements for additional activities before any future changes in Site use are approved.

The cost to implement Alternative 2 will essentially encompass the costs necessary to implement Alternative 3 (Excavation and Off-Site Disposal), but will add additional costs for construction monitoring, surface cap installation, residential exposure monitoring, long-term O&M of the surface cap, plus the unknown costs associated with the redevelopment of the property. Additionally, the value of the Site will be reduced due to the potential for deed restrictions and additional remedial requirements. A reasonable range in the cost for this option is from 2 to 3 times the cost of Alternative 3.

Alternative 2 does not guarantee that the remaining soil will meet residential screening criteria and does not guarantee long-term effectiveness and permanence. The cost is prohibitive when compared to the cost of excavation and off-Site disposal. It is unlikely that the stakeholders or the community would choose this alternative over the option for Excavation and Off-Site Disposal.

7.1.3 Alternative 3 - Excavation and Off-Site Disposal

The Excavation and Off-Site Disposal alternative would involve removal of approximately 28,200 cubic yards of soil from the Site, with an additional approximately 300 cubic yards removed from adjoining off-Site residential properties. This alternative would require a program of targeted removal followed by a broad Site-wide excavation plan. Targeted removal would be conducted to remove areas identified with elevated PCB and lead concentrations that require

special handling. Site-wide excavation would be proposed to depths necessary to remove soil with COCs exceeding applicable RSLs. Soil removal would primarily be performed to a depth of approximately 1.0 feet bgs and up to 2.5 or 5.0 feet in areas where COCs have been detected at depth, or where confirmation sampling identifies COCs in remaining soil above remedial goals.

Excavation activities would include traditional and readily available excavation methods (i.e. excavator, backhoe, loader, etc.), and transportation of the impacted soil to approved off-Site facilities. No shoring or sloping of the overburden would be required for this task, but the waste would need to be segregated based on existing data and confirmation sampling. To remove and dispose of soil cost-effectively, the soil would be segregated into RCRA and California hazardous and non-hazardous waste, as applicable and pretreated as necessary to meet land disposal restrictions.

This plan offers the most cost-effective solution to mitigate the current Site conditions. When completed, the impacted material would be removed from the Site so that the remaining soil meets residential screening criteria and the Site could be redeveloped without soil handling restrictions. Permanent removal of the waste is expected to be acceptable to the Site owner, community, City of Riverside, USEPA, and DTSC.

Using each of the defined evaluation criteria, this alternative offers the most practical solution. Remedial Alternative 3 has been selected as the best remedial alternative.

The estimated cost of completing this task can be broken down into parts with a range of uncertainty for each. Waste hauling and disposal costs will likely range from $50 to $250 per ton of soil. The net waste disposal will depend on the amount of total waste material generated and its ultimate destination.

Task	Estimate
Health and Safety, Permitting, Mobilization, Staging, Water Meter, Health and Safety Coordination and Contracting, Project Management.	$65,000
Fencing, Security, Traffic Management Plan	$55,000
Storm Water Plan and Best Management Practices Plan	$40,000
Limited Geotechnical Letter Report Requirement for Grading Permit	$5,000
Demolition (Portland-cement and asphaltic concrete slabs, equipment pedestals)	$150,000
Management and Stockpiling of Surface Debris	$15,000
Excavation of Targeted Soil Removal Areas	$15,000
Excavation and Confirmation Soil Sampling, and Stockpile Sampling	$350,000
Soil Loading	$65,000
Soil Disposal (assumes RCRA Haz, Cal-Haz, and Non-Haz waste streams)	$2,750,000
Post Soil Sampling Human Health Risk Assessment	$15,000
Clean up, Demobilization, and Reporting	$30,000
Sub-Total	$3,555,000
20% Contingency	$711,000
Total	**$4,266,000**

7.2 Remedial Action Alternatives – Soil Vapor

Three Remedial Action Alternatives were selected for further evaluation using the nine criteria presented above. As described in Section 2.4, Iron Lofts has voluntarily elected to install and operate VIMS at future on-Site buildings and install and operate passive SSV at the existing historical building. As such, the baseline Remedial Action Alternative (or No Further Action) includes the installation and testing of vapor intrusion mitigation measures.

The four Alternatives selected for further evaluation to address potential vapor intrusion concerns are:

- Alternative A - Vapor Intrusion Mitigation Measures at All on-Site Buildings;
- Alternative B - Excavation of Soil with VOCs in Soil Vapor and Off-Site Disposal;
- Alternative C - Soil Vapor Extraction (SVE); and
- Alternative D - Vapor Intrusion Mitigation Measures at All on-Site Buildings with Institutional Controls.

7.2.1 Alternative A - Vapor Intrusion Mitigation Measures at All on-Site Buildings

This alternative includes the installation of VIMS at the new buildings and the installation of passive SSV at the existing historic building. Since Iron Lofts has elected to perform these mitigation measures regardless of the results of this FS evaluation, this alternative is considered to have low or no cost and would be highly implementable from a technical feasibility perspective.

The effectiveness of this alternative is uncertain, since the vapor intrusion mitigation measures would not be tested and may not be effective long-term if the VIMS and SSV systems are not maintained. This alternative would likely achieve the RAOs, but may not gain acceptance from the state and community. As such, this alternative is not retained.

7.2.2 Alternative B - Excavation of Soil with VOCs in Soil Vapor and Off-Site Disposal

Excavation in the area where PCE and TCE in soil vapor concentrations could pose a risk of vapor intrusion would require removing soil over an area of approximately 7 acres (~300,000 square feet) to a depth of greater than 30 feet below the pre-development grade (>330,000 cubic yards of soil just to 30 feet). Excavation can be an effective technology where analytical results indicate a discrete impact that serves as the primary source to the presence of VOCs in soil vapor. However, a source of PCE or TCE to soil vapor was not identified on the Site despite extensive soil vapor sampling, and it is possible that the low VOC concentrations are attributed to an off-Site release that is migrating in deeper soil vapor or groundwater to the Site. Excavation is not practical to address impacts to soil vapor due to 1) the considerable lateral extent and depth at which excavation could be required to remove impacted vapor entrapped in shallow soil, and 2) the negative impacts to the surrounding neighborhood. These negative impacts include increased traffic, dust generation, noise, and a much longer project schedule associated with this type of deeper excavation. An extended project schedule also would result in considerable financial impacts to the overall development project. Excavation of the soil with VOC-impacted soil vapor would not be effective as a stand-alone action in the long term if the source of VOCs in soil vapor is off-Site or the impacted soil vapor could not be removed, which may not be possible depending on the depth and lateral extent to which soil removal could be required. Given the impracticability and extreme cost to remove the source to the impacted soil vapor at depth, it is likely that there

would be residual impacted soil vapor at the excavation limits and backfilled soil following excavation would become impacted with VOCs again over time. As such, this alternative is not retained.

7.2.3 Alternative C - Soil Vapor Extraction (SVE)

Active remediation technologies, such as SVE, would not be effective at the Site given the low and wide-spread concentrations of VOCs detected in soil vapor and lack of identified source to VOCs in soil vapor to 30 feet across the Site. Concentrations of VOCs in soil vapor at the Site in 2015, 2022, and 2023 are consistent and increase with depth with the highest concentrations across the Site at 30 feet below grade. Similar impacts have been identified at other properties in the area and these concentrations may be attributable to off-Site source(s). Significant effort was extended through soil and soil vapor sampling across the Site over several phases of investigation, including the 2015, 2022, and 2023 soil vapor sampling events. No source of VOCs has been identified to remove with SVE. As discussed in Section 2.2, groundwater is present beneath the Site at a depth of more than 100 feet. An SVE system would require numerous wells located across the 7-acre Site and would have a high capital cost. Annual operation and maintenance are also expected to have a high cost. SVE will not be effective at remediating the distal end of an unidentified source and may require pulsed operation of the SVE for extended period of time as VOC concentrations continue to rebound. As such, this alternative is not retained.

7.2.4 Alternative D - Vapor Intrusion Mitigation Measures at All on-Site Buildings with Institutional Controls

This alternative is the same as Alternative A with the inclusion of institutional controls, such as a land use covenant (LUC), to ensure the Site use does not change, building design remains the same, and VIMS and SSV are not modified. The LUC would encompass the entire Site, and the LUC prohibitions and requirements would be recorded with the Riverside County Recorder's Office..

Two rounds of post-construction indoor air sampling will be conducted to provide additional lines of evidence that vapor intrusion is not occurring at the Site. Additional indoor air sampling will be performed, if necessary, based on the sampling results.

The effectiveness of this alternative is considered high. VIMS and passive SSV systems are highly effective, and the effectiveness for sites with low and wide-spread contamination of VOCs can be confirmed with post construction testing and maintained with an LUC and VIMS/SSV OM&M Plan. This alternative would achieve the RAOs and would likely gain acceptance from the state and community. As such, this alternative is retained.
The estimated cost of this alternative is approximately $20 per square foot of building foundation area.

7.3 Recommended Remedial Alternatives

Based on the discussion of each of the three RAA's, Alternative 3, Excavation and Off-Site Disposal, and Alternative D, Installation and Testing of Vapor Intrusion Mitigation Measures at All on-Site Buildings with Institutional Controls, have been chosen as the most reasonable alternatives for the Site.

8.0 REMEDIAL ACTION IMPLEMENTATION

Implementation of Alternative 3 includes excavation and removal of the on-Site impacted surficial soil to a depth of approximately 1.0 to 2.5 feet bgs, followed by soil confirmation sampling. Impacted soil is present across approximately 5.5 acres of the Site. The expected volume of soil to be removed is approximately 20,000 cubic yards. Assuming 13 cubic yards of material per truckload, this would equate to approximately 1,500 one-way truck trips from the Project Site or approximately 43 truckloads leaving the Site per day over a period of 35 days. A similar volume of clean fill soil may be imported to the Site for grading.

A small portion of the total volume is highly impacted material that may be classified as RCRA waste, which requires special handling and is more costly to dispose. The remainder of the material may be classified as California hazardous waste or non-hazardous waste. The objective of this program is to remove soil impacted with COCs above residential criteria and dispose of it cost-effectively and safely. This will require a program of targeted removal followed by a broad Site-wide excavation plan. The off-Site residential areas will be excavated during the targeted on-Site excavation work and the impacted soil will be brought on-Site to be temporarily staged prior to off-Site disposal.

8.1 Excavation Plan

The Excavation Plan calls for targeted removal in the vicinity of on-Site sample locations that contain impacted soil with either PCBs or lead concentrations that exceed or may exceed hazardous waste levels (Tables 4 and 5). The plan is designed to address these higher concentration areas first, followed by Site-wide excavation of the remainder of Site with lower concentrations of COCs in soil.

Excavation from the targeted PCB and lead areas will be conducted using a backhoe excavator and the soil will be placed on and covered with plastic sheeting. The excavated areas will initially extend to approximately 1.0 foot. Confirmation soil samples will be obtained from the side walls and base of the lead target excavation areas to verify that the remaining in-place soil is below the target concentrations, and based on confirmation data, the excavations will be expanded as necessary. The targeted PCB-impacted locations have undergone in-place pre-remedial confirmation sampling in accordance with TSCA guidelines.

Generated waste soil will be stockpiled on and covered with plastic sheeting or placed in roll-off bins for temporary staging pending off-Site disposal. Waste soil will be profiled for disposal in accordance with receiving facility requirements and procedures outlined in the USEPA Test Methods for Evaluating Soil Waste (SW-846), Chapter Nine (1986), and ASTM International Standard Guide for Sampling Waste Piles (Reapproved in 2006), as applicable. Waste profiling activities for excavated soils and will be documented and will consider prior Site sampling data.

8.1.1 Soil Impacted with PCBs exceeding 50 mg/kg

Six areas of PCB-impacted soil with reported concentrations that exceed 50 mg/kg will be excavated prior to commencement of the Site-wide excavation program, in accordance with TSCA regulations. This soil will be disposed of as RCRA waste. These excavations are defined based on the 2018 pre-remedial PCB delineation data summarized in Table 1 and are identified on Figures 4A and 4B. Soil will be excavated using a backhoe excavator and loaded directly into a truck for off-Site disposal.

Approximately 485 cubic yards of PCB-impacted soil above 50 mg/kg are anticipated for removal.

8.1.2 Soil Impacted with RCRA Levels of Lead

Areas where soil is impacted by lead at RCRA-level concentrations will be excavated prior to the commencement of the Site-wide excavation program and may be treated on-Site by a DTSC-permitted transportable treatment unit (TTU) prior to off-Site transportation and disposal. These areas are defined based on the information included in Table 5 and shown on Figure 4C.

One area of RCRA-level waste lead concentrations was identified at location S14 based on TCLP testing (>5 mg/L).

Fifteen sample locations are identified with California-hazardous waste level lead concentrations (<1,000 mg/kg total lead and > 5 mg/L soluble lead by WET) and several other samples have high lead or concentrations that meet the criteria for California hazardous waste based on TTLC test results (>1,000 mg/kg lead) and/or STLC guidelines based on WET results (5 mg/L).

Approximately 2,260 cubic yards of lead-impacted soil above RCRA Hazardous Waste levels are anticipated for removal. However, some of this volume of soil is co-located with PCB impacted soil identified in Section 8.1.1.

8.1.3 Lead, PCB, Arsenic and PAH exceeding Residential Soil RBSLs

Based on historical data included in Appendix B.1, B.2, and B.3, COCs at the Site are present in the top approximately 1 foot of soil at the Site. Lead is present above RBSLs across a large portion of the Site and encompasses the areas where the other COCs are identified. As such, lead concentrations will primarily dictate the removal of soil. One exception is Area 8g, where the soil excavation area is dictated by elevated concentrations of arsenic in soil. Figure 5 identifies the overall excavation plan for the Site.

8.1.4 Residential Property Excavations

The off-Site excavations on the residential properties will include targeted excavations intended to eliminate the impacted soil in these areas. This includes the immediate area around borings S1 and S8 (at 2981 Mission Inn), S9 and S12 (at 2968 6th Street), and S19, S20, S22, S23, and S24 (at 2981 6th Street) (Table 6, Figure 6A and Figure 6B). Off-Site excavation activities may require additional soil removal at the 2980 5th Street property in area(s) that could not be sampled but may have COC-impacted soil based on available data collected at the RSIM Site.

The off-Site residential excavations will be completed to 1-foot bgs over the area identified in Figures 6A and 6B. Approximately 300 cubic yards of soil is anticipated removal. Confirmation soil sampling will be used to ensure that the impacted soil had been adequately removed. If confirmation sampling suggests that soil with COCs above remedial goals has not been adequately removed, deeper targeted excavation will be conducted, and additional confirmation samples will be collected.

8.1.5 Indoor Air

Only low concentrations of PCE and TCE have been detected in soil vapor samples. Although the possibility of small on-Site releases of PCE and TCE cannot be ruled out, the soil vapor results are consistent with an off-Site source of PCE and TCE.

As part of the repurposing of the existing historic building for amenity space, existing crawl spaces will be vented passively, and the structure will be improved and built out, including installation of a modern HVAC system. The building renovation plans will be provided in a vapor intrusion mitigation plan prior to building occupancy or addendum to the Response Plan.

8.2 Permitting

It is expected that the following permits may be required for excavation operations:

- A grading permit from the City; and
- An Air District Rule 1466 permit may be required due to the concentrations of COCs in the soil.

The excavation and soil handling will be conducted by a qualified, HAZWOPER-trained, contractor using conventional earthwork equipment. The contractor will prepare a Site-specific HASP, which will address identification of hazards, hazard mitigation, safe work practices and emergency response procedures for the project.

The following sections discuss permitting and compliance requirements to implement the remedial activities. The selected remedial contractor will be responsible for compliance monitoring and meeting the requirements described below.

8.2.1 SCAQMD Rules 401, 403, and 1466

To control fugitive dust emissions from earth-moving activities at sites containing soil with applicable toxic air contaminants, which include Site COCs, and to be in compliance with requirements contained in SCAQMD Rules 403 and 1466, several measures will be performed at the Site during the remedial activities, including:

- Notification to SCAQMD of planned earth-moving activities in compliance with Rule 1466;
- Documentation of Rule 1466 procedures implemented using SCAQMD Rule 1466 record keeping logs.
- Application of water to control dust generation at the working face and other points of dust/odor generation;
- Stockpile control – covers, wetting;
- Cease work conditions – wind speed, odor, or particulate monitoring thresholds;
- Truck loading and covering procedures; and
- Housekeeping (street cleaning as necessary).

To further control dust emissions and to comply with SCAQMD Rules 401, 403, and 1466 requirements, rumble strips consisting of metal plates with raised rails may be utilized to remove bulk material from tires and vehicle undercarriages, if necessary. The rumble strips would be placed at the egress point where the Site meets a paved public road. Rumble strips are only anticipated if clean import soils are required to grade the area to facilitate design specification and drainage for paving. Contractor bid selection documents will require that contractors demonstrate their ability to implement remedial activities in compliance with applicable SCAQMD regulations, including Rule 1466.

8.2.2 Surface Runoff Control

Surface runoff and storm water will be prevented from leaving the Site by implementing the Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will provide a plan for controlling potential run off during excavation activities. Best management practices (BMPs) will be implemented as outlined in the SWPPP during Response Plan activities.

8.2.3 Waste Transportation and Disposal Documentation, and Transporter Requirements

Regulations regarding documentation necessary for the transportation and disposal of hazardous waste are included under 40 CFR Part 262 and transporter requirements are included under 40 CFR Part 263.

8.3 Site Preparation and Utility Clearance

Prior to remediation activities, the selected contractors will conduct initial mobilization activities. These activities include:

- Identification of overhead and subgrade utilities that may be affected by the proposed remedy;
- Underground Service Alert/Dig Alert notification to identify underground utility lines that may conflict with the proposed paving activities.
- Dig Alert will mark each utility with the proper identification and coloring. A geophysical survey contractor may be used to locate utilities at the Site.
- Identification of access/egress for staff, vehicles and equipment, and
- Placement of temporary construction signage along roadways utilized for access/egress to and from the Site.

8.4 Field Variances

As conditions in the field can vary, it may be necessary to implement minor modifications to the recommended procedures presented in this Response Plan. Field personnel will notify the property owner, USEPA, and DTSC when deviations from the Response Plan are necessary, and a verbal or written concurrence, as appropriate, will be obtained before implementing the modification, if substantive. If encountered field conditions dictate the need for a significant modification to the procedures outlined in this Response Plan, such as the discovery of an unexpected area of contamination requiring remedial action or a major unidentified utility, the USEPA and DTSC will be notified for consultation and concurrence with any project modifications before proceeding. The property owner and DTSC will respond to all requests for review and/or concurrence in a timely manner to minimize potential impacts to the project schedule. Modifications to the approved Response Plan will be documented in the field variances section of the Response Completion Report (RCR) that will be prepared at the conclusion of remedial activities.

8.5 Waste Profiling and Classification

Soil waste that is not immediately loaded and removed from the Site will be stockpiled, sampled and analyzed for proper waste profiling, transportation and off-Site disposal.

GSI will collect representative waste characterization samples from each soil stockpile in general accordance with Chapter 9 of USEPA publication SW-846, Test Methods for Evaluation Solid Waste, Physical/Chemical Methods (SW-846) and prior to waste disposal under manifest. The waste characterization samples will be submitted to a State-certified laboratory and will be analyzed for the following constituents, at a minimum, or additional constituents if required by a receiving facility:

- Metals using USEPA Method 6010/7471;
- PCBs using USEPA Method 8082;
- PAHs using USEPA Method 8270 or 8310;

- VOCs using USEPA Method 8260B; and
- Petroleum hydrocarbons using USEPA Method 8015.

The excavated waste soil will be managed and disposed off-Site in compliance with applicable requirements. Selection of the appropriate waste disposal facility will be based on results of waste characterization, receiving facility acceptance criteria, and the availability for the facilities identified in the Transportation Plan to accept such waste at the time of disposal.

8.6 Investigation Derived Waste

The types of investigation derived waste (IDW) that may be generated during field activities include but are not limited to disposable personal protective equipment (nitrile gloves and booties), rags, and equipment decontamination wastewater. These types of waste shall be contained and disposed of in accordance with 40 C.F.R. § 761.61(a)(5)(v).

Labels will be placed on drums or other containers storing PCB-related and other IDW that are pending laboratory analysis for disposal. Accumulation start dates will be identified on all drums or other containers used to hold IDW. Labels will be replaced when worn or illegible. Generation of hazardous IDW is not anticipated, however, if hazardous IDW is generated, it will be separated from non-hazardous IDW, if possible, to minimize the volume of hazardous IDW that must be properly managed.

8.7 Health and Safety

Contractor will develop their own Site-specific HASP for work conducted at the Site as required pursuant to the regulations in 29 CFR Part 1910.120 and California Code of Regulations (CCR), Title 8, Section 5192. The HASP will be prepared for the work described in this Response Plan and will include the details regarding physical and chemical hazards that could be encountered at the Site. The HASP will address the safety and health hazards of each activity in the removal design, including the requirements and procedures for worker protection. The implementation of the HASP is the responsibility of the designated Site Health and Safety Officer. The HASP will also include a map showing directions between the Site and the local hospital or emergency center.

9.0 CONFIRMATION SAMPLING

Soil confirmation sampling will be conducted at the Site.

9.1 Soil Sampling

Pre-excavation in-place confirmation samples were collected for the >50 mg/kg PCB-impacted areas. As discussed between GSI, USEPA, and DTSC during sampling activities, in accordance with 40 CFR 761.61(a)(5)(i)(B)(2), bulk PCB remediation waste that exceeds 50 mg/kg total PCBs shall be disposed of at a hazardous waste landfill permitted by EPA under section 3004 of RCRA or a State authorized disposal facility under section 3006 of RCRA. For soils containing PCBs that are detected above the action level but below 50 mg/kg, the bulk remediation waste may be disposed of in accordance with 40 CFR 761.61(a)(5)(v)(A), which includes a municipal solid waste landfill that is permitted, licensed, or registered by a State, among other options.

PCB-impacted areas that exceed 50 mg/kg have been delineated in-place with one exception; the area to the south of sample location (KK26) where concentrations of PCBs exceed 50 mg/kg.

Additional confirmation sampling was postponed at this location to complete the original RAP. DTSC and USEPA concurred that confirmation soil sampling could be conducted after targeted PCB removal in the area south of KK26 to document that remedial excavation goals for PCBs are met during the planned excavation event.[8] Note that targeted lead excavation areas were not delineated "in-place" and will have confirmation sampling performed to document achievement of the remedial goal for lead.

Confirmation soil samples will be collected from the base of the excavation in a grid pattern with samples collected every 60 feet. The sample locations where COCs have historically exceeded RSLs and their closest associated confirmation sample node are included in Table 7. Sidewall samples will be collected along the perimeter of the Site excavation, co-located near the planned bottom sample. In addition, four sidewall samples will be collected from deeper excavations.

Excavation will be performed on the off-Site properties to remove surface soil with COCs above remedial goals as identified in Table 3. Progress and confirmation soil samples will be collected, as shown on Figure 6A and 6B, to confirm the lateral and vertical extent of soil with COCs above remedial goals is removed. Additional sampling will be performed on the 2981 Mission Inn Avenue property adjacent to an on-Site soil removal area to confirm PCB-impacted soil on-Site along the property boundary has been removed. Off-Site residential excavations will have confirmation samples collected approximately every 10 feet along bottoms and/or sidewalls to confirm remedial objectives are met for the residential properties.

All confirmation sampling will be documented in the Response Completion Report (RCR). The results of confirmation sampling will be compared to the remedial goals presented in Table 3. The locations of the proposed confirmation soil samples for on-Site excavations are shown on Figure 7. The proposed confirmation samples for off-Site excavations are shown on Figures 6A and 6B.

Confirmation soil samples will be collected using manual or direct-push sampling methods in appropriate sampling containers for the requested analyses. Confirmation samples will be analyzed for Title 22 (CAM-17) metals, PCBs, and PAHs across the Site and for TPH in TPH removal areas. Any sampling of PCBs, whether for purposes of confirmation sampling or waste profiling, shall include the Soxhlet Extraction Method (EPA Method 3541 [SW-846]).

In areas where confirmation sampling suggests that soil with COCs above remedial goals has not been adequately removed, deeper targeted excavation will be conducted, and additional confirmation samples will be collected.[9]

9.2 Indoor Air Sampling

Two rounds of post-construction indoor air sampling will be conducted to provide additional lines of evidence that vapor intrusion is not occurring at the Site. Additional indoor air sampling will be performed, if necessary, based on the sampling results.

[8] Conference call between GSI, RSIM, USEPA, and DTSC representatives and e-mail from USEPA dated 8 February 2019.

[9] Step-out samples will be identified as in the following example: If analysis of confirmation sample "9-6" indicates that lead is present above residential screening criteria, step out samples may be collected 10 feet in each direction into (continued) the north quadrant, south quadrant, east quadrant, and west quadrant. As such, these samples would be identified as "9-6N-10", "9-6S-10", "9-6E-10", and "9-6W-10". The appropriate step-out distance from the original sample will be determined in the field and approved by USEPA and DTSC.

9.3 Human Health Risk Assessment

Following completion of confirmation soil sampling, GSI will prepare an HHRA and include in the Response Action Completion Report to confirm attainment of remedial objectives and evaluate whether additional post-Response Plan implementation mitigation measures are necessary to support the proposed future residential redevelopment of the Site.

Two rounds of post-construction indoor air sampling will be conducted to provide additional lines of evidence that vapor intrusion is not occurring at the Site. Additional indoor air sampling will be performed, if necessary, based on the sampling results.

10.0 PUBLIC PARTICIPATION AND CEQA DOCUMENTATION

An administrative record for the Site is maintained by the State Water Resources Control Board (SWRCB) and DTSC and is publicly accessible via SWRCB's Geotracker website and DTSC's Envirostor website.[10,11] The administrative record includes Site history information, environmental data, investigation and remediation reports, and regulatory orders and correspondence for public access, review and/or comment. The Response Plan and all related technical documents will be placed on the DTSC Envirostor website.

A Community Survey (in both English and Spanish) was mailed to local residents within 0.25-mile of the Site, and stakeholders on December 11, 2022. The Community Survey noted that a Community Update would be distributed in the future to provide a summary of proposed activities and an opportunity to review and comment on the draft Response Plan.

The Community Update will be distributed with 30 days public notice to interested local residents within 0.25-mile of the Site, and stakeholders in a factsheet format of the proposed response plan, in English and Spanish. Once the 30-day public comment period ends, DTSC will respond in writing to all public comments in a Response to Comments (RTC) document that will be mailed to all individuals who submitted a comment. Further, DTSC staff will be available to respond to community phone calls and email communication as related to the RTC. If a public meeting is deemed necessary, it will be coordinated with DTSC.

The Response Plan will be revised, as necessary, to address comments received. If significant changes to the Response Plan are required, it will be revised and be resubmitted to DTSC for public review and comment. If significant changes are not required to the Response Plan, it will be modified, as necessary, and DTSC will approve the modified Response Plan for implementation.

In compliance with the California Environmental Quality Act (CEQA), DTSC is currently reviewing an Initial Study (IS) in support of a Mitigated Negative Declaration (MND). CEQA is a statute that requires State and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if possible. The IS and MND documents will evaluate if there will be any significant environmental impacts that may result from this project. The draft IS and MND documents will be made available for public review at a later date.

[10] https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000005690
[11] https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60002350

11.0 PROJECT SCHEDULE

The following is a general proposed schedule for implementation of this Response Plan following DTSC approval of the remedial alternative proposed. The indicated number of days are presumed to follow completion of the preceding task; however, tasks that may occur concurrently may be performed simultaneously as appropriate. The schedule begins upon DTSC approval of a remedial alternative, and at the close of the required public comment period.

Exhibit 12-1. Project Schedule

Date to Complete*	Task
7/15/24-10/23/24	Response Plan Approval; Public Participation (notice preparation, comment period, and review of comments); Public Notice and Fact Sheet; Contractor Solicitation, Bidding, and Selection; Response Plan Implementation Planning; Permitting
10/24/24-12/18/24	Site Preparation, Mobilization, and Implementation of Response Plan
12/19/24-2/19/24	Compile Response Completion Report (RCR) for submittal to DTSC.

*The implementation schedule is contingent upon the time necessary to procure necessary permits.

12.0 REFERENCES

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TABLES

Table 1. Polychlorinated Biphenyls (PCBs) in Soil

Table 2. Applicable or Relevant and Appropriate Requirements (ARARs) and To-be-considered Criteria (TBCs)

Table 3. Remedial Goals for Chemicals of Concern (COCs) in Soil

Table 4. Targeted Polychlorinated Biphenyls (PCB) Excavations

Table 5. Targeted Lead Excavations

Table 6. Off-Site Excavations

Table 7. Constituents Exceeding Residential Screening Levels

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TABLE 1. POLYCHLORINATED BIPHENYLS (PCBs) in SOIL

Remedial Action Plan
Former Riverside Scrap Iron & Metal Property
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)							
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
Area 8A													
A8a-SB1	8a	SB1	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.199	<0.05	0.199
A8a-SB2	8a	SB2	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.79	<0.05	0.79
A8a-SB3	8a	SB3	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	2.96	2.66	<0.05	5.62
A8a-SB4	8a	SB4	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8a-SB5	8a	SB5	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	8.15	4.6	<0.05	12.75
A8a-SB6	8a	SB6	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	26.8	5.95	<0.05	32.75
NS9	8a	NS9	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S12	8a	S12	NA	8/12/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S9	8a	S9	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	.120J	<0.02UJ	0.280J	0.130J	0.53
S11	8a	S11	NA	8/13/2015	0.25	<0.2	<0.2	<0.2	1.6	<0.2	1.4J	0.43	3.43
S11	8a	S11	NA	8/13/2015	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	All ND
S11	8a	S11	NA	8/13/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S8	8a	S8	NA	8/13/2015	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	All ND
S13	8a	S13	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	4.2	<0.02	1.6	0.3	6.1
NS7	8a	NS7	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	0.055	<0.02	0.11	0.058	0.223
NS8	8a	NS8	NA	8/21/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	2.2J	<0.02UJ	.350J	0.110J	2.66
NS8	8a	NS8	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
Area 8B													
A8b-SB2	8b	SB2	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8b-SB3	8b	SB3	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	0.18	0.274	<0.05	0.454
A8b-SB4	8b	SB4	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.903	<0.05	0.903
ES2	8b	ES2	NA	8/14/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	22J	22
ES2	8b	ES2	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S16	8b	S16	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
A8b-SB1	8b	SB1	Initial >50 Sample	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	369	125	<0.05	**494**
A8b-SB1X-2.5	8b	SB1	X	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8b-SB1A-1	8b	SB1	A	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
A8b-SB1A-2.5	8b	SB1	A	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
A8b-SB1B-1	8b	SB1	B	1/23/2018	1	<0.054	0.25	<0.054	<0.054	<0.054	<0.054	<0.054	0.25
A8b-SB1B-2.5	8b	SB1	B	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8b-SB1C-1	8b	SB1	C	1/23/2018	1	<0.055	<0.055	<0.055	<0.055	0.26	0.14	<0.055	0.4
A8b-SB1C-2.5	8b	SB1	C	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8b-SB1D-1	8b	SB1	D	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
A8b-SB1D-2.5	8b	SB1	D	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND

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TABLE 1. POLYCHLORINATED BIPHENYLS (PCBs) in SOIL

Remedial Action Plan
Former Riverside Scrap Iron & Metal Property
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)							
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
Area 8C													
A8c-SB1	8c	SB1	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8c-SB2	8c	SB2	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	10.4	1.4	<0.05	11.8
A8c-SB3	8c	SB3	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	24.3	2.67	<0.05	26.97
A8c-SB4	8c	SB4	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
NS14	8c	NS14	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS15	8c	NS15	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	1.5	<0.02	1.6	0.29	3.39
NS15	8c	NS15	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS10A	8c	NS10A	NA	8/21/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	.110J	<0.02UJ	.200J	0.100J	0.41
Area 8D													
A8d-SB1	8d	SB1	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8d-SB2	8d	SB2	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	5.84	<0.05	5.84
A8d-SB3	8d	SB3	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.903	<0.05	0.903
A8d-SB4	8d	SB4	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.372	<0.05	0.372
NS25	8d	NS25	NA	8/18/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	1.3J	0.140J	1.44
NS25	8d	NS25	NA	8/18/2015	1	<0.02	<0.02	<0.02	<0.02	<0.02	0.042	<0.02	0.042
NS26	8d	NS26	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	0.32J	<0.02UJ	12J	1.600J	13.92
NS26	8d	NS26	NA	8/12/2015	1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS27	8d	NS27	NA	8/12/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.012	0.097	0.109
NS28	8d	NS28	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	2.0J	<0.02UJ	0.86J	.180J	3.04
NS28	8d	NS28	NA	8/12/2015	1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS29	8d	NS29	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	0.058J	<0.02UJ	0.11J	0.089J	0.257
NS30	8d	NS30	NA	8/21/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	0.044J	0.045J	0.089
S4	8d	S4	NA	8/18/2015	0.25	<0.02	<0.02	<0.02	0.14	<0.02	0.94	0.071	1.151
S4	8d	S4	NA	8/18/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S5	8d	S5	NA	8/12/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.17	0.093	0.263
S5	8d	S5	NA	8/12/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS2	8d	NS2	NA	8/18/2015	0.25	<0.02	<0.02	<0.02	8.6	<0.02	28	2.3J	38.9
NS2	8d	NS2	Initial >50 Sample	8/18/2015	1	<0.02UJ	<0.02UJ	<0.02UJ	62J	<0.02UJ	290J	34J	**386**
NS2	8d	NS2	Initial >50 Sample	8/18/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	0.023	<0.02	0.023
NS2A-1	8d	NS2	A	1/23/2018	1	<55	<55	<55	<55	500	670	<55	**1170**
NS2A-2.5	8d	NS2	A	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	0.21	0.41	<0.054	0.62
NS2B-1	8d	NS2	B	1/23/2018	1	<53	<53	<53	<53	350	520	<53	**870**
NS2B-2.5	8d	NS2	B	1/23/2018	2.5	<0.27	<0.27	<0.27	<0.27	1.3	1.8	<0.27	3.1
NS2C-1	8d	NS2	C	1/23/2018	1	<5.7	<5.7	<5.7	<5.7	39	71	<5.7	**110**
NS2C-2.5	8d	NS2	C	1/23/2018	2.5	<0.28	<0.28	<0.28	<0.28	0.65	1.5	<0.28	2.15
NS2D-1	8d	NS2	D	1/23/2018	1	<55	<55	<55	<55	150	280	<55	**430**
NS2D-2.5	8d	NS2	D	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	0.12	0.2	<0.055	0.32
NS2E-0.5	8d	NS2	E	5/18/2018	0.5	<5.4	<5.4	<5.4	<5.4	17	23	<5.4	40
NS2E-1	8d	NS2	E	5/18/2018	1	<0.55	<0.55	<0.55	<0.55	1.1	1.8	<0.55	2.9
NS2F-0.5	8d	NS2	F	5/18/2018	0.5	<0.053	<0.053	<0.053	<0.053	0.2	0.11	<0.053	0.31
NS2F-1	8d	NS2	F	5/18/2018	1	<5.6	<5.6	<5.6	<5.6	11	13	<5.6	24
NS2G-0.5	8d	NS2	G	5/18/2018	0.5	<0.55	<0.55	<0.55	<0.55	4.3	8.3	<0.55	12.6

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TABLE 1. POLYCHLORINATED BIPHENYLS (PCBs) in SOIL

Remedial Action Plan
Former Riverside Scrap Iron & Metal Property
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Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)							
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
NS2G-1	8d	NS2	G	5/18/2018	1	<5.3	<5.3	<5.3	<5.3	13	28	<5.3	41
NS2H-0.5	8d	NS2	H	5/18/2018	0.5	<5.4	<5.4	<5.4	<5.4	210	330	<5.4	**540**
NS2H-1	8d	NS2	H	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	7.3	14	<2.7	21.3
NS2I-0.5	8d	NS2	I	5/18/2018	0.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
NS2I-1	8d	NS2	I	5/18/2018	1	<0.51	<0.51	<0.51	<0.51	0.78	2	<0.51	2.78
NS2K-0.5	8d	NS2	K	5/18/2018	0.5	<0.051	<0.051	<0.051	<0.051	0.21	0.12	<0.051	0.33
NS2K-1	8d	NS2	K	5/18/2018	1	<5.3	<5.3	<5.3	<5.3	43	67	<5.3	**110**
NS2KK-2.5	8d	NS2	KK	8/3/2018	2.5	<0.053	<0.053	<0.053	<0.053	0.082	0.16	<0.053	0.242
NS2KK1-1	8d	NS2	KK1	8/3/2018	1	<2.6	<2.6	<2.6	<2.6	6.8	29	<2.6	35.8
NS2L-0.5	8d	NS2	L	5/18/2018	0.5	<0.11	<0.11	<0.11	<0.11	0.49	0.26	<0.11	0.75
NS2L-1	8d	NS2	L	5/18/2018	1	<0.54	<0.54	<0.54	<0.54	75	280	<0.54	**355**
NS2LL-2.5	8d	NS2	LL	8/3/2018	2.5	<0.26	<0.26	<0.26	<0.26	<0.26	1.2	<0.26	1.2
NS2M-0.5	8d	NS2	M	5/18/2018	0.5	<5.4	<5.4	<5.4	<5.4	98	86	<5.4	**184**
NS2M-1	8d	NS2	M	5/18/2018	1	<0.57	<0.57	<0.57	<0.57	1.4	3	<0.57	4.4
NS2N-0.5	8d	NS2	N	5/18/2018	0.5	<0.5	<0.5	<0.5	<0.5	3.2	<0.5	<0.5	3.2
NS2N-1	8d	NS2	N	5/18/2018	1	<54	<54	<54	<54	410	670	<54	**1080**
NS2NN1-1	8d	NS2	NN	8/3/2018	1	<1.1	<1.1	<1.1	<1.1	5.3	12	<1.1	17.3
NS2NN-2.5	8d	NS2	NN	8/3/2018	2.5	<5.3	<5.3	<5.3	<5.3	14	30	<5.3	44
NS2O-0.5	8d	NS2	O	5/18/2018	0.5	<0.51	<0.51	<0.51	<0.51	3.9	<0.51	<0.51	3.9
NS2O-1	8d	NS2	O	5/18/2018	1	<5.2	<5.2	<5.2	<5.2	21	43	<5.2	**64**
NS2OO1-1	8d	NS2	OO	8/3/2018	1	<0.53	<0.53	<0.53	<0.53	4.5	4	<0.53	8.5
NS2OO-2.5	8d	NS2	OO	8/3/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	0.065	<0.054	0.065
NS2P-0.5	8d	NS2	P	5/18/2018	0.5	<0.054	<0.054	<0.054	<0.054	0.19	<0.054	<0.054	0.19
NS2P-1	8d	NS2	P	5/18/2018	1	<5.4	<5.4	<5.4	<5.4	44	25	<5.4	**69**
NS2PP1-1	8d	NS2	PP	8/3/2018	1	<5.3	<5.3	<5.3	<5.3	88	53	<5.3	**141**
NS2PP-2.5	8d	NS2	PP	8/3/2018	2.5	<0.054	<0.054	<0.054	<0.054	0.11	0.13	<0.054	0.24
NS2PP1-2.5	8d	NS2	PP1	8/3/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
NS2PP2-1	8d	NS2	PP2	8/3/2018	1	<0.52	<0.52	<0.52	<0.52	3.4	3.5	<0.52	6.9
NS2PP3-1.0	8d	NS2	PP3	9/27/2018	1	<5.2	<5.2	<5.2	<5.2	42	37	<5.2	**79**
NS2PP3-2.5	8d	NS2	PP3	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
NS2PP4-1.0	8d	NS2	PP4	9/27/2018	1	<0.52	<0.52	<0.52	<0.52	1.9	4.3	<0.52	6.2
NS2PP5-1.0	8d	NS2	PP5	9/27/2018	1	<55	<55	<55	<55	630	760	<55	**1390**
NS2PP5-2.5	8d	NS2	PP5	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	1.2	<0.054	1.2
NS2PP6-1.0	8d	NS2	PP6	9/27/2018	1	<5.4	<5.4	<5.4	<5.4	310	600	<5.4	**910**
NS2PP6-2.5	8d	NS2	PP6	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	0.19	0.25	<0.054	0.44
NS2PP7-1.0	8d	NS2	PP7	9/27/2018	1	<0.053	<0.053	<0.053	<0.053	<0.053	0.12	<0.053	0.12
NS2PP7-2.5	8d	NS2	PP7	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
NS2PP0-1	8d	NS2	PP9	9/27/2018	1	<0.052	<0.052	<0.052	<0.052	0.61	1	<0.052	1.61
NS2PP9-2.5	8d	NS2	PP9	9/27/2018	2.5	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	All ND
NS2PP10-1.0	8d	NS2	PP10	9/27/2018	1	<0.053	<0.053	<0.053	<0.053	11	19	<0.053	30
NS2PP10-2.5	8d	NS2	PP10	9/27/2018	2.5	<0.052	<0.052	<0.052	<0.052	0.13	0.1	<0.052	0.23
NS2Q-0.5	8d	NS2	Q	5/18/2018	0.5	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	All ND
NS2Q-1	8d	NS2	Q	5/18/2018	1	<0.054	<0.054	<0.054	<0.054	0.075	0.068	<0.054	0.143
S6	8d	S6	Initial >50 Sample	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	16J	<0.02UJ	51J	6.10J	**73.1**

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						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
S6X-2.5	8d	S6	X	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	0.4	0.52	<0.054	0.92
S6A-1	8d	S6	A	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	0.062	<0.054	0.062
S6A-2.5	8d	S6	A	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	0.12	<0.054	0.12
S6B-1	8d	S6	B	1/23/2018	1	<0.053	<0.053	<0.053	<0.053	0.096	0.44	<0.053	0.536
S6B-2.5	8d	S6	B	1/23/2018	2.5	<0.053	<0.053	<0.053	<0.053	0.078	0.32	<0.053	0.398
S6C-1	8d	S6	C	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
S6C-2.5	8d	S6	C	1/23/2018	2.5	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	All ND
S6D-1	8d	S6	D	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	0.39	0.66	<0.054	1.05
S6D-2.5	8d	S6	D	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
Area 8E													
A8e-SB1	8e	SB1	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.219	<0.05	0.219
A8e-SB2	8e	SB2	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.109	<0.05	0.109
A8e-SB3	8e	SB3	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8e-SB5	8e	SB5	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8e-SB6	8e	SB6	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	1.43	<0.05	1.43
A8e-SB7	8e	SB7	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8e-SB8	8e	SB8	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
NS1	8e	NS1	NA	8/10/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.094	0.057	0.151
NS24	8e	NS24	NA	8/10/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.024	0.021	0.045
NS24	8e	NS24	NA	8/10/2015	2.5	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	All ND
NS4	8e	NS4	NA	8/10/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	0.13	0.033	0.163
NS6	8e	NS6	NA	8/10/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S1	8e	S1	NA	8/11/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S1	8e	S1	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S2	8e	S2	NA	8/12/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.051	<0.02	0.051
S2	8e	S2	NA	8/12/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
A8e-SB4	8e	SB4	Initial >50 Sample	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	62.8	**62.8**
A8e-SB4X-2.5	8e	SB4	X	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8e-SB4A-1	8e	SB4	A	1/23/2018	1	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
A8e-SB4A-2.5	8e	SB4	A	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8e-SB4B-1	8e	SB4	B	1/23/2018	1	<0.055	<0.055	<0.055	<0.055	0.35	0.39	<0.055	0.74
A8e-SB4B-2.5	8e	SB4	B	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
A8e-SB4C-1	8e	SB4	C	1/23/2018	1	<5.7	<5.7	<5.7	<5.7	48	76	<5.7	**124**
A8e-SB4C-2.5	8e	SB4	C	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8e-SB4D-1	8e	SB4	D	1/23/2018	1	<0.056	<0.056	<0.056	<0.056	0.16	0.39	<0.056	0.55
A8e-SB4D-2.5	8e	SB4	D	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8e-SB4E-0.5	8e	SB4	E	5/18/2018	0.5	<0.053	<0.053	<0.053	<0.053	0.17	0.2	<0.053	0.37
A8e-SB4E-1	8e	SB4	E	5/18/2018	1	<0.055	<0.055	<0.055	<0.055	0.11	0.072	<0.055	0.182
A8e-SB4F-0.5	8e	SB4	F	5/18/2018	0.5	<0.053	<0.053	<0.053	<0.053	0.18	0.25	0.11	0.54
A8e-SB4F-1	8e	SB4	F	5/18/2018	1	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	All ND
A8e-SB4G-0.5	8e	SB4	G	5/18/2018	0.5	<0.052	<0.052	<0.052	<0.052	0.17	0.71	<0.052	0.88
A8e-SB4G-1	8e	SB4	G	5/18/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND

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						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
Area 8F													
A8f-SB1	8f	SB1	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8f-SB2	8f	SB2	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.161	<0.05	0.161
A8f-SB3	8f	SB3	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	3.07	<0.05	3.07
NS3	8f	NS3	NA	8/10/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.047	0.043	0.09
NS5	8f	NS5	NA	8/10/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S3	8f	S3	NA	8/11/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.076	0.047	0.123
S3	8f	S3	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
Area 8G													
A8g-SB1	8g	SB1	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8g-SB2	8g	SB2	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8g-SB3	8g	SB3	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
S17	8g	S17	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	0.026	<0.02	0.06	0.03	0.116
S19	8g	S19	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S19	8g	S19	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
Area 8H													
A8h-SB1	8h	SB1	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8h-SB10	8h	SB10	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8h-SB2	8h	SB2	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	1.3	<0.05	1.3
A8h-SB3	8h	SB3	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	1.18	0.699	<0.05	1.879
A8h-SB4	8h	SB4	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	1.57	0.552	<0.05	2.122
A8h-SB5	8h	SB5	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A8h-SB6	8h	SB6	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	0.054	<0.05	<0.05	0.054
A8h-SB7	8h	SB7	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	1.73	1.81	<0.05	3.54
A8h-SB8	8h	SB8	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	1.49	0.536	<0.05	2.026
A8h-SB9	8h	SB9	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
ES3	8h	ES3	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	0.2	<0.02	0.41	0.17	0.78
S18	8h	S18	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS17	8h	NS17	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS18	8h	NS18	NA	8/21/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	.250J	<0.02UJ	.420J	0.150J	0.82
NS18	8h	NS18	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS19	8h	NS19	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS20	8h	NS20	NA	8/21/2015	2.5	<0.02UJ	<0.02UJ	<0.02UJ	3.2J	<0.02UJ	1.500J	1.1J	5.8
NS20	8h	NS20	NA	8/21/2015	5	<0.02UJ	<0.02UJ	<0.02UJ	1.1J	<0.02UJ	.480J	0.290J	1.87
NS21	8h	NS21	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
Area 10A													
A10a-SB1	10a	SB1	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A10a-SB2	10a	SB2	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
ES1	10a	ES1	NA	8/19/2015	0.25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	All ND
ES1	10a	ES1	NA	8/19/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND

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Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)							
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
Area 10B													
A10b-SB1	10b	SB1	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.112	<0.05	0.112
A10b-SB2	10b	SB2	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	2.19	1.29	<0.05	3.48
A10b-SB3	10b	SB3	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	7.12	<0.05	7.12
S15	10b	S15	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	0.230J	<0.02UJ	0.095J	0.023J	0.348
S15	10b	S15	NA	8/12/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0
NS11	10b	NS11	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	0.039	0.027	0.066
NS12	10b	NS12	NA	8/13/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS13	10b	NS13	NA	8/13/2015	2.5	<0.02	<0.02	<0.02	0.071	<0.02	0.076	0.032	0.179
S14	10b	S14	Initial >50 Sample	8/13/2015	1	<0.2	<0.2	<0.2	48J	<0.02	50J	18.0J	**116**
S14	10b	S14	Initial >50 Sample	8/13/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	0.038	<0.02	0.038
S14	10b	S14	Initial >50 Sample	8/13/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	2.9J	<0.02UJ	15J	9.30J	27.2
S14A-1	10b	S14	A	1/23/2018	1	<5.7	<5.7	<5.7	<5.7	50	33	22	**105**
S14A-2.5	10b	S14	A	1/23/2018	2.5	<0.057	<0.057	<0.057	<0.057	0.097	<0.057	<0.057	0.097
S14B-1	10b	S14	B	1/23/2018	1	<2.8	<2.8	<2.8	<2.8	14	13	10	37
S14B-2.5	10b	S14	B	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	0
S14C-1	10b	S14	C	1/23/2018	1	<0.54	<0.54	<0.54	<0.54	8.5	11	11	30.5
S14C-2.5	10b	S14	C	1/23/2018	2.5	<5.5	<5.5	<5.5	<5.5	82	47	8.9	**137.9**
S14C-5	10b	S14	C	1/23/2018	5	<0.055	<0.055	<0.055	<0.055	0.28	0.23	<0.055	0.51
S14D-1	10b	S14	D	1/23/2018	1	<3	<3	<3	<3	43	36	22	**101**
S14D-2.5	10b	S14	D	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
S14BB-0.5	10b	S14	BB	5/18/2018	0.5	<0.52	<0.52	<0.52	<0.52	9.3	7.8	8.3	25
S14BB-1	10b	S14	BB	5/18/2018	1	<0.54	<0.54	<0.54	<0.54	7.1	8.4	9.2	25
S14E-0.5	10b	S14	E	5/18/2018	0.5	<0.55	<0.55	<0.55	<0.55	6.7	<0.55	260	**270**
S14E-1	10b	S14	E	5/18/2018	1	<0.57	<0.57	<0.57	<0.57	39	13	4	**56**
S14F-0.5	10b	S14	F	5/18/2018	0.5	<5.2	<5.2	<5.2	<5.2	16	9.7	10	36
S14F-1	10b	S14	F	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	17	<2.7	37	**53**
S14G-0.5	10b	S14	G	5/18/2018	0.5	<2.6	<2.6	<2.6	<2.6	9.4	9.4	10	29
S14G-1	10b	S14	G	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	11	14	32	**57**
S14G-2.5	10b	S14	G	5/18/2018	2.5	<0.26	<0.26	<0.26	<0.26	0.6	2.5	5.2	8.2
S14H-0.5	10b	S14	H	5/18/2018	0.5	<2.5	<2.5	<2.5	<2.5	12	10	12	34
S14H-1	10b	S14	H	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	9.7	8	8.9	27
S14H-2.5	10b	S14	H	5/18/2018	2.5	<0.052	<0.052	<0.052	<0.052	0.23	0.32	0.52	1.1
S14I-0.5	10b	S14	I	5/18/2018	0.5	<5.4	<5.4	<5.4	<5.4	13	8.4	8.8	30
S14I-1	10b	S14	I	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	3.7	<2.7	12	16
S14I-2.5	10b	S14	I	5/18/2018	2.5	<2.7	<2.7	<2.7	<2.7	6.3	<2.7	28	34
S14J-0.5	10b	S14	J	5/18/2018	0.5	<0.053	<0.053	<0.053	<0.053	0.26	0.089	0.064	0.42
S14J-1	10b	S14	J	5/18/2018	1	<0.61	<0.61	<0.61	<0.61	1.1	<0.61	30	31
S14K-0.5	10b	S14	K	5/18/2018	0.5	<0.52	<0.52	<0.52	<0.52	4.3	3	3.5	11
S14K-1	10b	S14	K	5/18/2018	1	<6	<6	<6	<6	13	13	20	46
S14L-0.5	10b	S14	L	5/18/2018	0.5	<0.25	<0.25	<0.25	<0.25	1.4	<0.25	1.3	2.7
S14L-1	10b	S14	L	5/18/2018	1	<0.55	<0.55	<0.55	<0.55	6.1	<0.55	57	**64**
S14M-0.5	10b	S14	M	5/18/2018	0.5	<0.51	<0.51	<0.51	<0.51	5.7	<0.51	75	**81**

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Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)							
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
S14M-1	10b	S14	M	5/18/2018	1	<0.54	<0.54	<0.54	<0.54	3.5	<0.54	28	31
S14E1-0.5	10b	S14	E1	7/26/2018	0.5	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	7.2	7.2
S14EE-2.5	10b	S14	EE	7/26/2018	2.5	<0.052	<0.052	<0.052	<0.052	0.085	<0.052	<0.052	0.085
S14FF-2.5	10b	S14	FF	7/26/2018	2.5	<0.054	<0.054	<0.054	<0.054	1.6	1.1	0.43	3.1
S14FF1-1	10b	S14	FF1	7/26/2018	1	<2.6	<2.6	<2.6	<2.6	12	19	15	46
S14G1-1	10b	S14	G1	7/26/2018	1	<2.6	<2.6	<2.6	<2.6	12	15	12	39
S14G2-1	10b	S14	G2	7/26/2018	1	<2.6	<2.6	<2.6	<2.6	9.8	14	11	35
S14LL-2.5	10b	S14	LL	7/26/2018	2.5	<0.055	<0.055	<0.055	<0.055	0.17	<0.055	0.2	0.37
S14LL1-1	10b	S14	LL1	7/26/2018	1	<0.55	<0.55	<0.55	<0.55	3.3	3.3	2.7	9.4
S14LL2-1	10b	S14	LL2	7/26/2018	1	<0.54	<0.54	<0.54	<0.54	6.9	<0.54	1.3	8.2
S14LL3-0.5	10b	S14	LL3	7/26/2018	0.5	<0.52	<0.52	<0.52	<0.52	9.4	6.9	1.7	18
S14LL3-1	10b	S14	LL3	7/26/2018	1	<0.056	<0.056	<0.056	<0.056	15	12	13	40
S14M1-0.5	10b	S14	M1	7/26/2018	0.5	<2.5	<2.5	<2.5	<2.5	17	12	7.5	36
S14M1-1	10b	S14	M1	7/26/2018	1	<2.6	<2.6	<2.6	<2.6	44	<2.6	5	49
A10b-SB4	10b	SB4	Initial >50 Sample	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	73.8	**73.8**
A10b-SB4X-2.5	10b	SB4	X	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	0.087	<0.055	0.35	0.44
A10b-SB4A-1	10b	SB4	A	1/23/2018	1	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	37	37
A10b-SB4A-2.5	10b	SB4	A	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.14	0.14
A10b-SB4B-1	10b	SB4	B	1/23/2018	1	<28	<28	<28	<28	<28	<28	140	**140**
A10b-SB4B-2.5	10b	SB4	B	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	0.24	0.24
A10b-SB4C-1	10b	SB4	C	1/23/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	1.1	1.2
A10b-SB4C-2.5	10b	SB4	C	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.13	0.13
A10b-SB4D-1	10b	SB4	D	1/23/2018	1	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	19	19
A10b-SB4D-2.5	10b	SB4	D	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.12	0.12
A10b-SB4AA-0.5	10b	SB4	AA	5/18/2018	0.5	<0.52	<0.52	<0.52	<0.52	6.8	<0.52	87	**94**
A10b-SB4AA-1	10b	SB4	AA	5/18/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
A10b-SB4E-0.5	10b	SB4	E	5/18/2018	0.5	<1.1	<1.1	<1.1	<1.1	2.7	<1.1	26	29
A10b-SB4E-1	10b	SB4	E	5/18/2018	1	<0.28	<0.28	<0.28	<0.28	0.72	<0.28	21	22
A10b-SB4F-0.5	10b	SB4	F	5/18/2018	0.5	<0.056	<0.056	<0.056	<0.056	0.26	0.31	0.46	1
A10b-SB4F-1	10b	SB4	F	5/18/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.096	0.096
A10b-SB4G-0.5	10b	SB4	G	5/18/2018	0.5	<0.27	<0.27	<0.27	<0.27	0.91	1.8	2.1	4.8
A10b-SB4G-1	10b	SB4	G	5/18/2018	1	<27	<27	<27	<27	<27	<27	2600	**2600**
A10b-SB4J-0.5	10b	SB4	J	5/18/2018	0.5	<0.27	<0.27	<0.27	<0.27	0.32	0.64	1.3	2.2
A10b-SB4J-1	10b	SB4	J	5/18/2018	1	<0.055	<0.055	<0.055	<0.055	0.057	<0.055	0.13	0.19
A10b-SB4K-0.5	10b	SB4	K	5/18/2018	0.5	<0.054	<0.054	<0.054	<0.054	0.11	<0.054	2.4	2.5
A10b-SB4K-1	10b	SB4	K	5/18/2018	1	<27	<27	<27	<27	<27	<27	180	**180**
SB4AA1-0.5	10b	SB4	AA	7/26/2018	0.5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	55	**55**
SB4AA1-1	10b	SB4	AA	7/26/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.24	0.24
SB4AA2-0.5	10b	SB4	AA2	7/26/2018	0.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	50	**50**
SB4AA2-1	10b	SB4	AA2	7/26/2018	1	<0.53	<0.53	<0.53	<0.53	0.54	<0.53	2.4	2.9
SB4AA7-0.5	10b	SB4	AA7	9/27/2018	0.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	13	13
SB4AA7-1.0	10b	SB4	AA7	9/27/2018	1	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	All ND
SB4AA8-0.5	10b	SB4	AA8	9/27/2018	0.5	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	4.2	4.2
SB4AA8-1.0	10b	SB4	AA8	9/27/2018	1	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	All ND

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						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
SB4GG-2.5	10b	SB4	GG	7/26/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK1-1	10b	SB4	KK	7/26/2018	1	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	110	**110**
SB4KK-2.5	10b	SB4	KK	7/26/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
SB4KK1-2.5	10b	SB4	KK1	7/26/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK2-1	10b	SB4	KK2	7/26/2018	1	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	27	27
SB4KK3-1	10b	SB4	KK3	7/26/2018	1	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	21	21
SB4AA3-0.5	10b	SB4	AA3	8/3/2018	0.5	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	1.7	1.7
SB4AA3-1	10b	SB4	AA3	8/3/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.85	0.85
SB4AA4-0.5	10b	SB4	AA4	8/3/2018	0.5	<25	<25	<25	<25	<25	<25	140	**140**
SB4AA4-1	10b	SB4	AA4	8/3/2018	1	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	0.058	0.058
SB4AA5-0.5	10b	SB4	AA5	8/3/2018	0.5	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	0.1	0.1
SB4AA5-1	10b	SB4	AA5	8/3/2018	1	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	All ND
SB4AA6-0.5	10b	SB4	AA6	8/3/2018	0.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.072	0.072
SB4AA6-1	10b	SB4	AA6	8/3/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.31	0.31
SB4KK4-1	10b	SB4	KK4	8/3/2018	1	<27	<27	<27	<27	<27	<27	170	**170**
SB4KK4-2.5	10b	SB4	KK4	8/3/2018	2.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.06
SBKK5-1	10b	SB4	KK5	8/3/2018	1	<54	<54	<54	<54	70	<54	140	**210**
SB4KK5-2.5	10b	SB4	KK5	8/3/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	0.21	0.21
SB4KK6-0.5	10b	SB4	KK6	9/27/2018	0.5	<0.5	<0.5	<0.5	<0.5	4.5	2.9	2.1	9.5
SB4KK6-1.0	10b	SB4	KK6	9/27/2018	1	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	11	11
SB4KK7-0.5	10b	SB4	KK7	9/27/2018	0.5	<0.25	<0.25	<0.25	<0.25	1.6	0.81	0.69	3.1
SB4KK7-1.0	10b	SB4	KK7	9/27/2018	1	<5.4	<5.4	<5.4	<5.4	19	<5.4	87	**110**
SB4KK7-2.5	10b	SB4	KK7	9/27/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK8-0.5	10b	SB4	KK8	9/27/2018	0.5	<0.5	<0.5	<0.5	<0.5	2.2	1.1	0.84	4.1
SB4KK8-1.0	10b	SB4	KK8	9/27/2018	1	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	76	**76**
SB4KK9-0.5	10b	SB4	KK9	9/27/2018	0.5	<0.26	<0.26	<0.26	<0.26	1.5	0.39	<0.26	2.1
SB4KK9-1.0	10b	SB4	KK9	9/27/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.88	0.88
SB4KK11-0.5	10b	SB4	KK11	9/27/2018	0.5	<0.5	<0.5	<0.5	<0.5	30	7.7	4	41
SB4KK11-1.0	10b	SB4	KK11	9/27/2018	1	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	76	**76**
SB4KK11-2.5	10b	SB4	KK11	9/27/2018	2.5	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	All ND
SB4KK12-0.5	10b	SB4	KK12	9/27/2018	0.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
SB4KK12-1.0	10b	SB4	KK12	9/27/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK12-2.5	10b	SB4	KK12	9/27/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK13-0.5	10b	SB4	KK13	9/27/2018	0.5	<0.05	<0.05	<0.05	<0.05	0.45	0.43	0.37	1.3
SB4KK13-1.0	10b	SB4	KK13	9/27/2018	1	<2.8	<2.8	<2.8	<2.8	18	<2.8	59	**77**
SB4KK13-2.5	10b	SB4	KK13	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
SB4KK14-0.5	10b	SB4	KK14	9/27/2018	0.5	<0.05	<0.05	<0.05	<0.05	3.4	3	3.2	9.6
SB4KK14-1.0	10b	SB4	KK14	9/27/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	13	13
SB4KK14-2.5	10b	SB4	KK14	9/27/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK17-0.5	10b	SB4	KK17	12/20/2018	0.5	<0.055	<0.055	<0.055	<0.055	0.083	0.088	0.08	0.25
SB4KK17-1	10b	SB4	KK17	12/20/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK18-0.5	10b	SB4	KK18	12/20/2018	0.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	12	12
SB4KK18-1	10b	SB4	KK18	12/20/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.53	0.53
SB4KK19-0.5	10b	SB4	KK19	12/20/2018	0.5	<0.055	<0.055	<0.055	<0.055	1.9	2.8	2.9	7.6

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TABLE 1. POLYCHLORINATED BIPHENYLS (PCBs) in SOIL

Remedial Action Plan
Former Riverside Scrap Iron & Metal Property
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)							
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
SB4KK19-1	10b	SB4	KK19	12/20/2018	1	<0.055	<0.055	<0.055	<0.055	110	<0.055	7	**120**
SB4KK20-0.5	10b	SB4	KK20	12/20/2018	0.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	11	11
SB4KK20-1	10b	SB4	KK20	12/20/2018	1	<0.055	<0.055	<0.055	<0.055	90	<0.055	4.5	**95**
SB4KK19-2.5	10b	SB4	KK19	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	0.12	<0.056	<0.056	0.12
SB4KK19-5	10b	SB4	KK19	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	0.26	<0.056	0.12	0.38
SB4KK20-2.5	10b	SB4	KK20	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK20-5	10b	SB4	KK20	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK24-0.5	10b	SB4	KK24	12/20/2018	0.5	<0.056	<0.056	<0.056	<0.056	33	<0.056	1.8	35
SB4KK24-1	10b	SB4	KK24	12/20/2018	1	<0.056	<0.056	<0.056	<0.056	30	<0.056	1.7	32
SB4KK24-2.5	10b	SB4	KK24	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	0.32	<0.056	0.058	0.37
SB4KK24-5	10b	SB4	KK24	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	0.07	<0.056	<0.056	0.07
SB4KK25-0.5	10b	SB4	KK25	12/20/2018	0.5	<0.056	<0.056	<0.056	<0.056	0.83	<0.056	3.4	4.3
SB4KK25-1	10b	SB4	KK25	12/20/2018	1	<0.056	<0.056	<0.056	<0.056	7.5	<0.056	0.28	7.8
SB4KK25-2.5	10b	SB4	KK25	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK25-5	10b	SB4	KK25	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK26-0.5	10b	SB4	KK26	12/20/2018	0.5	<0.056	<0.056	<0.056	<0.056	0.91	3.1	2.5	6.5
SB4KK26-1	10b	SB4	KK26	12/20/2018	1	<0.056	<0.056	<0.056	<0.056	87	<0.056	6.4	**93**
SB4KK26-2.5	10b	SB4	KK26	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK26-5	10b	SB4	KK26	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
Area 12													
A12-SB1	12	SB1	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	23	23
A12-SB2	12	SB2	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	All ND
A12-SB3	12	SB3	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	0.123	<0.05	<0.05	0.123
A12-SB4	12	SB4	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	0.205	0.12	<0.05	0.325
A12-SB5	12	SB5	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	6.2	6.2
S10	12	S10	NA	8/11/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	1.4J	<0.02UJ	4.3J	3.50J	9.2
S10	12	S10	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
S7	12	S7	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND
NS16	12	NS16	NA	8/13/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	All ND

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TABLE 1. POLYCHLORINATED BIPHENYLS (PCBs) in SOIL

Remedial Action Plan
Former Riverside Scrap Iron & Metal Property
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)							
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs
Area 13													
A13-SB1	13	SB1	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.425	<0.05	0.425
A13-SB2	13	SB2	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	ALL ND
A13-SB3	13	SB3	NA	2/3/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	ALL ND
					RBSLs (Table 3)	**4.1**	**0.2**	**0.17**	**0.23**	**0.23**	**0.24**	**0.24**	**1.0**

Notes and Data Qualifiers
RBSL = Risk Based Screening Levels (Table 3)
Blue = Concentration exceeds listed RBSL
Bold Blue = Toal PCBs exceed 50 mg/kg
J = The analyte was detected at a concentration above the method detection limit, but below the reporting limit and is an approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the laboratory reporting limit but the reporting limit is approximate due either to the quality of the data generated because certain quality control criteria were not met or the sample was analyzed outside the holding time for extraction.
J-flagged results are included in the calculation of "Total PCBs"
The following PCB Arochlors were not detected in any sample above laboratory reporting limits: PCB-1016, PCB-1232, PCB-1262, and PCB-1268.

Note that some Aroclor's with higher concentrations required dilution to report within calibration range, which resulted in elevated laboratory reporting limits. During excavation confirmation sampling activities, chain-of-custody instructions will note to report each Arochlor at the lowest dilution possible that either has a reportable result or ND at the applicable reporting limit.
Abbreviations
bgs = Below ground surface
NA = Not applicable to 2018 investigation
< = Not detected at the reporting limit shown
PCBs = Polychlorinated biphenyls
RSL = Regional soil screening level
USEPA = United States Environmental Protection Agency
mg/kg = milligrams per kilogram

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TABLE 2. APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARs) AND TO-BE-CONSIDERED CRITERIA (TBC)

Remedial Action Plan
Former Riverside Scrap Iron & Metal Property
Riverside, California

Regulated Parameter	Criteria	Reference	Description	ARAR or TBC	Notes
Air	State	SCAQMD Regulation IV, Rule 403	Limits onsite activities so that fugitive dust at the property line shall not be visible and the downwind particulate concentration shall not be more than 100 micrograms per cubic meter, averaged over 5 hours, above the upwind particulate concentration. Also requires reasonable precaution to minimize fugitive dust and prevent and cleanup any material accidentally deposited on paved streets.	ARAR	Dust generated during removal actions will be controlled.
Air	State	SCAQMD Regulation IV, Rule 1466	Earthwork activities in soil with the presence of toxic air contaminants listed in Rule 1466 and a volume of greater than or equal to 50 cubic yards.	ARAR	Rule 1466 procedures will be followed, as applicable, during implementation of the proposed remedial alternatives. In addition, dust control measures will be implemented to further control dust emissions on Site within the work area.
Air	State	SCAQMD Regulation IV, Rule 1166	Earthwork activities in soil with the presence of volatile organic compound-impacted soil.	ARAR	Rule 1166 procedures will be followed, as applicable, during implementation of the proposed remedial alternatives.
Land Use	State	Title 22 CCR, Section 67391.1; Civil Code Section 1471; and HSC Section 25355.5.	Provisions regarding the issuance and recording of land use covenants and restrictions.	Potential TBC	TBC as institutional controls are not expected since the RAP proposes removal of impacted soil to residential criteria.
Soil	Federal	Toxic Substances Control Act (TSCA) (15 USC, Section 2601 et seq.); Federal PCB Regulations (40 CFR Part 761).	TSCA outlines procedures for sampling media, waste characterization, and disposal of PCB-impacted media.	ARAR	PCBs are present in soil at the Site and USEPA is providing oversight of TSCA regulations.
Soil	Federal	U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for soil.	USEPA-published risk-based screening levels (RBSLs) for soil that are protective of soil exposures under residential/ unrestricted land use.	TBC	If identified, contaminant levels in Site soils that exceed these risk-based criteria may require mitigation to be protective of residential/unrestricted land use. RSLs are proposed as remedial goals as outlined in Table 2 of the RAP.
Soil	State	California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC) modified screening levels (SLs) (published in Cal/EPA's Human Health Risk Assessment [HHRA] Note Number 3).	Cal/EPA-published risk-based screening levels for soil that are protective of soil exposures under residential/ unrestricted land use, and for a number of chemicals, are more protective than USEPA RSLs for residential soil.	TBC	If identified, contaminant levels in Site soils that exceed these risk-based criteria may require mitigation to be protective of residential/unrestricted land use. DTSC- modified SLs are proposed as remedial goals as outlined in Table 2 of the RAP.
Soil	State	California Regional Water Quality Control Board, San Francisco Bay Region, Region 2 (SFRWQCB), Environmental Screening Levels (ESLs) for TPH.	SFRWQCB-published screening levels for TPH in soil that are protective of direct exposures to TPH under residential/unrestricted land use.	TBC	If identified, TPH levels in Site soils that exceed these risk-based criteria may require mitigation to be protective of residential/unrestricted land use. SFRWQCB ESLs for TPH are proposed as remedial goals as outlined in Table 2 of the RAP.
Waste	State	Title 22 CCR, Sections 66261.10 through 66261.126.	Criteria for identifying the characteristics of hazardous wastes and associated record keeping.	ARAR	Based on Site data, generation of RCRA hazardous waste and other waste classifications are expected as part of the proposed remedial activities.
Waste	Federal	40 CFR, Part 260-280 and 22 CCR, Sections 66260-66280	Sets requirements for generators of hazardous waste concerning management, treatment, storage, and disposal. Authorizes California to enforce their own hazardous waste program under the California Hazardous Waste Act.	ARAR	Based on Site data, generation of RCRA hazardous waste and other waste classifications are expected as part of the proposed remedial activities.
Risk Assessment	State	DTSC Toxicity Criteria for Human Health Risk Assessment	Sets a narrative cleanup performance standard and adopts toxicity criteria for use in all human health risk assessments.	ARAR	This regulation is effective 9/4/18; https://dtsc.ca.gov/regs/toxicity-criteria-for-human-health-risk-assessment/

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TABLE 3. REMEDIAL GOALS FOR CHEMICALS OF CONCERN (COCs) IN SOIL

Remedial Action Plan
Former Riverside Scrap Iron & Metal Property
Riverside, California

COC	May 2019 Remedial Goal (mg/Kg)	Basis	2019 Source
Metals			
Antimony	31	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022)
Arsenic	12	Regional background threshold value	DTSC Advisory (DTSC, 2008)
Beryllium	16	Risk-based screening level for residential soil	DTSC-modified screening level (DTSC, 2022)
Cadmium	7.1	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022)
Cobalt	23	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022)
Copper	3,100	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022)
Lead	80	Risk-based screening level for residential soil	DTSC-modified screening level (DTSC, 2022)
Mercury	1	Risk-based screening level for residential soil	DTSC-modified screening level (DTSC, 2022)
Nickel	820	Risk-based screening level for residential soil	DTSC-modified screening level (DTSC, 2022)
Vanadium	390	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022)
Polycyclic Aromatic Hydrocarbons (PAHs)			
Benz[a]anthracene	1.1	Risk-based screening level for residential soil	DTSC-modified screening level (DTSC, 2022)
Benzo(b)fluoranthene	1.1	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022)
Benzo[a]pyrene	0.11	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022)
Benzo[a]pyrene Equivalents	0.9	Regional background threshold value	DTSC Advisory (DTSC, 2009)
Dibenz[a,h]anthracene	0.028	Risk-based screening level for residential soil	DTSC-modified screening level (DTSC, 2022)
Indeno(1,2,3-cd)pyrene	1.1	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022)
Naphthalene	2	Risk-based screening level for residential soil	DTSC-modified screening level (DTSC, 2022)
Total Petroleum Hydrocarbons (TPH)			
TPH-gasoline	430	Risk-based screening level for residential soil	SFRWQCB Environmental Screening Level (SFRWQCB 2019)
TPH-diesel	260	Risk-based screening level for residential soil	SFRWQCB Environmental Screening Level (SFRWQCB 2019)
TPH-motor oil	12,000	Risk-based screening level for residential soil	SFRWQCB Environmental Screening Level (SFRWQCB 2019)
Polychlorinated Biphenyls (PCBs)			
Aroclor 1016	4.1	Risk-based screening level for residential soil	US EPA regional screening level (US EPA, 2022), as endorsed by DTSC (2022)
Aroclor 1221	0.2		
Aroclor 1232	0.17		
Aroclor 1242	0.23		
Aroclor 1248	0.23		
Aroclor 1254	0.24		
Aroclor 1260	0.24		

Notes:
PAH = polycyclic aromatic hydrocarbons
PCBs = polychlorinated biphenyls
DTSC = California Department of Toxic Substances Control
mg/kg = milligram per kilogram

References:

California Department of Toxic Substances Control (DTSC), 2008. Determination of a Southern California Regional Background Arsenic Concentration in Soil, https://www.dtsc.ca.gov/upload/Background-Arsenic.pdf.

California Department of Toxic Substances Control (DTSC), 2009. Advisory - Use of PAH Studies in the MGP Site Cleanup Process, https://www.dtsc.ca.gov/assessingRisk/upload/MGP_PAH_Advisory_070109.pdf, July 1.

California Department of Toxic Substances Control (DTSC), 2022. Human Health Risk Assessment (HHRA) Note, HERO HHRA Note 3, DTSC-modified Screening Levels (DTSC-SLs). May.

San Francisco Bay Regional Water Quality Control Board (SFRWQCB), 2019. Environmental Screening Levels (ESLs). January. https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

United States Environmental Protection Agency (USEPA), 2022. Regional Screening Levels (RSLs). https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables. May.

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TABLE 4. TARGETED PCB EXCAVATIONS

Remedial Action Plan

Former Riverside Scrap Iron & Metal Property

Riverside, California

PCB Excavation Area	Historical Area Designation	Original Sample > 50 mg/kg (Table 1)	Approximate Area (square feet)	Approximate Maxium Excavation Depth (feet)	Estimated Excavation Volume (cy)	Maximum PCBs Identified (mg/kg)
PCB Area 1	10b	A10b SB4	1900	2.5	175.9	2600
PCB Area 2	10b	S14	975	2.5	90.3	270
PCB Area 3	8b	A8b SB1	225	2.5	20.8	494
PCB Area 4	8e	A8e SB4	400	2.5	37.0	120
PCB Area 5	8d	S6	225	2.5	20.8	73.1
PCB Area 6	8d	NS2	1500	2.5	138.9	1400
				Total cy	**483.8**	

Abbreviations

PCBs = Polychlorinated biphenyls

cy = cubic yards

mg/kg = milligram per kilogram

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TABLE 5. TARGETED LEAD EXCAVATIONS

Remedial Action Plan

Former Riverside Scrap Iron & Metal Property

Riverside, California

Historical Area Designation	Original Sample Designation	Sample Depth (feet)	Area (square feet)	Maxium Excavation Depth (feet)	Cubic yards	Lead (mg/kg)	Lead Soluable Result
10b	A10b SB3	1	3750	2.5	347.2	4,260	NA
10b	S14	0.25,1				1,500	180 (WET) 10(TCLP)
8a	A8a SB3	1	12000	2.5	1111.1	2,240	NA
8a	A8a SB4	1				2,700	NA
8a	A8a SB5	1				2,130	NA
8a	A8a SB6	1				1,240	NA
8a	S11	0.25				300	130 (WET) 0.56(TCLP)
A12	A12 SB1	1				3,980	NA
A12	A12 SB5	1				1,050	NA
8a	A8a SB2	1	850	2.5	78.7	3,790	NA
8c	A8c SB2	1	850	2.5	78.7	1,220	NA
8e	NS1	0.25	850	2.5	78.7	680	47 (WET)
8e	S1	0.25	850	2.5	78.7	480	21 (WET) ND(TCLP)
8h	A8h SB7	1	850	2.5	78.7	2,320	NA
				Total cy	**1773.1**		

Abbreviations

cy = cubic yards

mg/kg = milligram per kilogram

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TABLE 6. TARGETED OFF-SITE EXCAVATIONS

Remedial Action Plan

Former Riverside Scrap Iron & Metal Property

Riverside, California

Off-Site Location	Original Sample Designation	Sample Depth (feet)	Approximate Area (square feet)	Approximate Maxium Excavation Depth (feet)	Cubic yards	Lead (mg/kg)	Total PCBs Identified (mg/kg)	PAHs Identified (Appendix A-2)
2981 Mission Inn Residence	S1-0.25	0.25	1800	1	67	183	none	none
	S8-0.25	0.25				95.5	none	none
2968 6th Street	S9 0.25	0.25	3500	1	130	153	none	none
	S12 0.25	0.25				86.1	none	none
	S14 0.25	0.25				78.4	none	4 PAHs
2981 6th Street Resdience	S19-0.25	0.25	3000	1	111	121	none	benzo(a)pyrene
	S19 1	1				193	none	none
	S20 0.25	0.25				976	0.39	none
	S22 0.25	0.25				89.9	none	benzo(a)pyrene
	S23 0.25	0.25				105	none	benzo(a)pyrene
	S24 0.25	0.25				36	none	benzo(a)pyrene
				Total cy	**307**			

Abbreviations

PAHs = polycyclic aromatic hydrocarbons

PCBs = polycyclic biphenyls

none = no COCs were detected above the residential screening criteria (Table 3)

cy = cubic yards

mg/kg = milligram per kilogram

Notes

Samples S1 through S40 were collected at off-Site locations. Only samples with concentrations of COCs exceeding residential screening criteria identified in Table 3 are listed here.

Samples S25 through S28 were collected at the Mission Inn Entry. No COCs above screening levels were identified.

Samples S29 thorugh S33 were collected at the Riverside Scrap 5th Street Entry and will be included with the on-Site excavation.

Samples S34 through S40 were collected at the Riverside Scrap 6th Street Entry and will be included with the on-Site excavation.

Access was not granted to 2980 5th Street for sampling.

Deeper samples were analyzed at all sample locations with COC concentrations detected above screening levels. Concentrations of COCs above screening levels were not detected at a depth greater than 0.25 feet bgs, with the exception of sample S19, where lead was detected at 1 foot, but not at 2.5 feet bgs.

GSI ENVIRONMENTAL

TABLE 7. CONSTITUENTS EXCEEDING RSLs

Remedial Action Plan
Former Riverside Scrap Iron & Metal Property
Riverside, California

Constituents	Confirmation Sample Node (Figure 7)	Sample Location	Maximum Depth Detected
Area 8f			
PAH, Metals	3'1, 3'2	A8f-SB1	1
PAH, Metals	4'2, 4'2	A8f-SB2	1
PAH, Metals, PCBs[1]	6'1, 6'2	A8f-SB3	1
Metals	3'1, 3'2	NS3	3
Metals	2'1, 2'2	S3	2.5
Area 8e			
Metals, PCBs	2'2, 2'3	A8e-SB1	1
Metals	3'2, 3'3	A8e-SB2	1
PAH, Metals	5'2, 5'3	A8e-SB3	1
Metals	PCB Area 4	A8e-SB4	1
Metals, PCBs	4'4, 4'5	A8e-SB6	1
Metals	4'4, 4'5	A8e-SB7	1
Metals	6'3, 6'4	A8e-SB8	1
Metals	1'3, 1'4	NS1	0.25
Metals	1'2, 1'3	S1	0.25
Metals, PCBs	5'2,	S5	0.25
Area 8d			
PCBs, Metals	3'5, 3'6	A8d-SB2	1
PCBs, Metals	5'5, 5'6	A8d-SB3	1
PCBs	6'5, 6'6	A8d-SB4	1
PAH, PCBs	2'5, 2'6	NS2	0.25
PCBs	4'5, 4'6	NS25	0.25
PCBs	5'5, 5'6	NS26	0.25
PCBs	3'5, 3'6	S4	0.25
Off-Site - 2981 Mission Inn Residence			
Metals, PCBs[2]	MIR'1 through 4	S1 0.25	0.25
Metals, PCBs[2]	MIR'5 through 8	S8 0.25	0.25
Off-Site - 2968 6th Street Vacant Lot			
Metals	V6'1 through 4	S12 0.25	0.25
Metals and PAH	V6'5 through 8	S14-0.25	0.25
Metals	V6'9 through 12	S9 0.25	0.25
6th Street Entry			
Metals, PCBs	7'5, 7'6	S34 0.25	0.25
Metals, PCBs	7'5, 7'6	S35 0.25	0.25
Metals, PAH, PCBs	7'4, 7'5	S37 0.25	0.25
Metals, PAH, PCBs	7'3, 7'4	S38 0.25	0.25
Metals	7'2, 7'3	S39 0.25	0.25
Metals, PAH, PCBs	7'1, 8'1	S40 0.25	0.25
PAH	7'1, 8'1	S40 1	1

Constituents	Confirmation Sample Node (Figure 7)	Sample Location	Maximum Depth Detected
Area 10b			
PAH, Metals, PCBs	11'8, 11'1	A10b-SB2	1
PAH, Metals, PCBs	12'8, 12'1	A10b-SB3	1
Metals	12'7, 12'8	A10b-SB4	1
PAH, Metals	12'8, 12'1	S14	1
PCBs	10'8, 13'1	NS13	2.5
Area 12			
Metals, PCBs	9'1, 9'2	A12-SB1	1
PAH, Metals	10'1, 10'2	A12-SB2	1
PAH, Metals	11'1, 11'2	A12-SB3	1
PAH, Metals, PCBs	12'1, 12'2	A12-SB4	1
Metals, PCBs	13'1	A12-SB5	1
PCBs	10'1, 10'2	S10	1
Area 8a			
Metals, PCBs	9'5, 9'6	A8a-SB1	1
PAH, Metals, PCBs	10'5, 10'6	A8a-SB2	1
Metals, PCBs	9'2, 9'3	A8a-SB3	1
Metals	12'3, 12'4	A8a-SB4	1
PAH, Metals, PCBs	10'2, 10'3	A8a-SB5	1
PAH, Metals, PCBs	11'2, 11'3	A8a-SB6	1
PCBs	10'2, 10'3	NS7	2.5
PCBs	10'5, 10'6	NS8	0.25
PCBs	11'5, 11'6	NS28	0.25
TPH	9'2, 9'3	S8	5
PCBs	9'5, 9'6	S9	0.25
Metals	10'3, 10'4	S11	0.25
Metals	10'5, 10'6	S12	2.5
PCBs	12'3, 12'4	S13	0.25
Area 8b			
Metals, PCBs	13'4	A8b-SB1	1
Metals, PCBs	13'3, 13'4	A8b-SB3	1
Metals, PCBs	13'2, 13'3	A8b-SB4	1
Metals, PCBs	12'3, 13'3	ES2	0.25
Area 8c			
Metals	12'5, 12'6	A8c-SB1	1
Metals, PCBs	12'4, 13'4	A8c-SB2	1
Metals, PCBs	11'5, 12'5	A8c-SB3	1
PAH, Metals	12'5,12'6	A8c-SB4	1
PCBs	11'4, 11'5	NS10A	0.25
PCBs	12'6, 13'6	NS29	0.25
PCBs	13'5, 13'6	NS15	0.25
PCBs	12'5, 12'6	S15	0.25
Off-Site - 2981 6th Street Residence			
Metals and PAH	6R'1, 6R'2	S19 0.25	0.25
Metals	6R'1, 6R'2	S19 1	1
Metals, PCBs	6R'3, 6R'4	S20-0.25	0.25
Metals and PAH	6R'5, 6R'6	S22 0.25	0.25
Metals and PAH	6R'7, 6R'8	S23 0.25	0.25
PAH	6R'9, 6R10	S24 0.25	0.25

Constituents	Confirmation Sample Node (Figure 6)	Sample Location	Maximum Depth Detected
Area 8g			
Metals	15'1, 15'2	A8g-SB1	1
Metals	17'1, 17'2	A8g-SB2	1
PAH, Metals	18'1, 18'2	A8g-SB3	1
Area 8h			
PAHs, PCBs, TPH	16'4	NS20	5
PCBs	14'4, 15'4	ES3	0.25
PCBs	15'5, 16'5	NS18	0.25
PAH, Metals, PCBs	15'4, 15'5	A8h-SB2	1
PAH, Metals, PCBs	16'3, 16'4	A8h-SB3	1
PAH, Metals, PCBs	17'3, 17'4	A8h-SB4	1
Metals	19'2, 19'3	A8h-SB6	1
PAH, Metals, PCBs	17'2, 17'3	A8h-SB7	1
PAH, Metals, PCBs	15'2, 15'3	A8h-SB8	1
5th Street Entry			
Metals, PCBs	13'9, 13'10	S29 0.25	0.25
Metals, PAH	14'1, 14'2	S30 0.25	0.25
Metals, PAH, PCBs	14'3, 14'4	S31 0.25	0.25

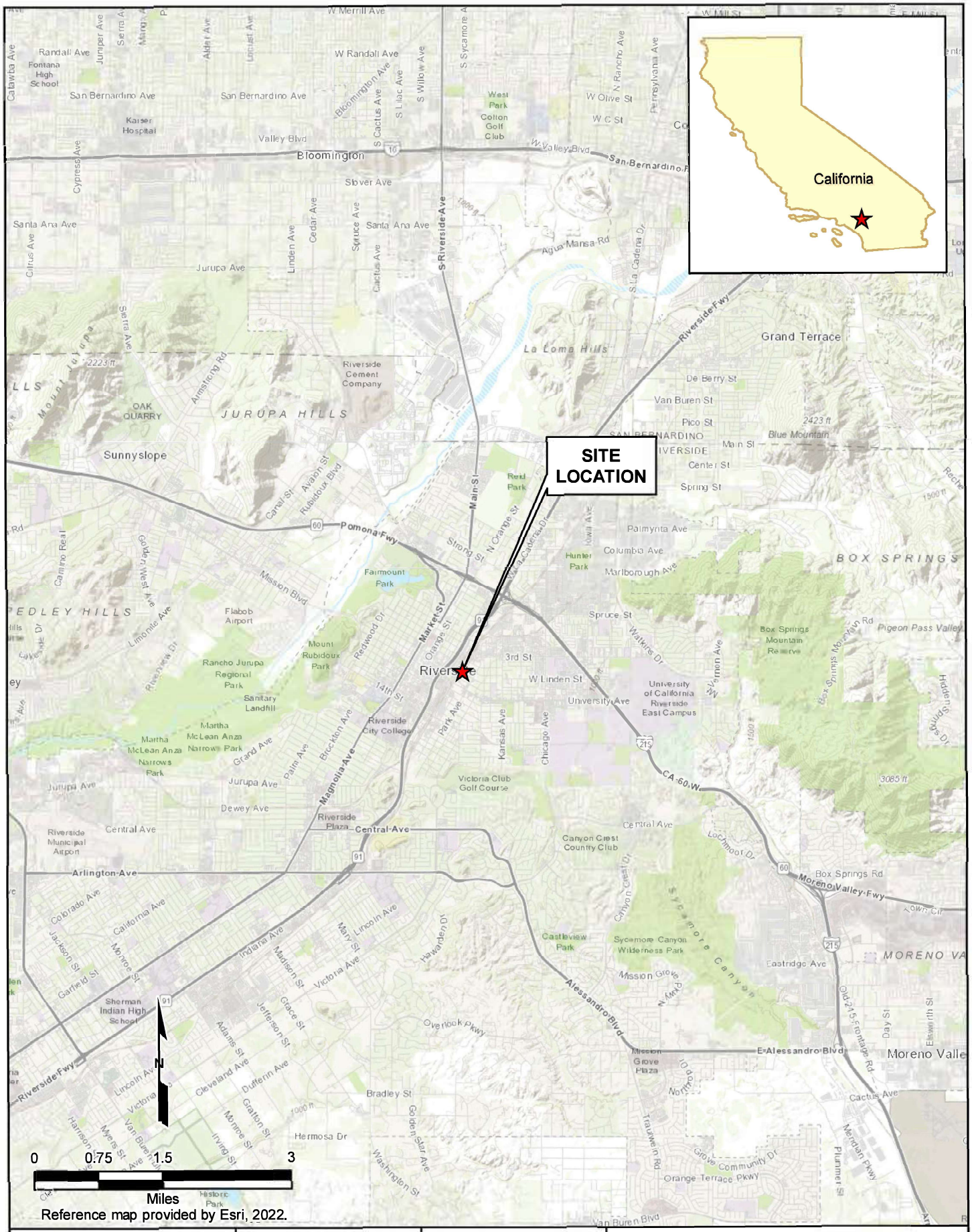
Notes:

1) Locations included in this table with PCB detections are >0.17 and <50mg/kg. Concentrations equal to or over 50 mg/kg and surrounding confirmation sample locations will be excavated during the TSCA excavation.

2) Locations did not report PCBs above the residential RSL. However, PCB Area 6 excavation is located adjacent to this area on the Site, so confirmation samples for PCBs will be collected.

FIGURES

Figure 1. Site Location Map
Figure 2. Site Map
Figure 3. Pre-Delineation Sampling Distribution of PCBs in Soil
Figure 4A. Post-Delineation Sampling Distribution of PCBs in Soil – Northern Areas
Figure 4B. Post-Delineation Sampling Distribution of PCBs in Soil – Southern Areas
Figure 4C. Proposed Target Lead Excavations
Figure 5. Proposed On-Site Excavation Plan
Figure 6A. Proposed Off-Site Excavations – Northern Areas
Figure 6B. Proposed Off-Site Excavations – Southern Areas
Figure 7. Proposed Confirmation Sampling Grid



GSI ENVIRONMENTAL	GSI Job No. 6239	Drawn by: AV	**SITE LOCATION MAP**
	Issued: 6-Feb-2023	Chk'd by: SC	Former Riverside Scrap Iron & Metal Property Riverside, California
	Revised:	Aprv'd by: TFW	
	Map ID: RS6239_SLM	**FIGURE 1**	

LEGEND

- 8h — Site Area Designation (Geomatrix, 2005)
- Area Designation Border
- Site Boundary

Note

Basemap downloaded from Google Earth Pro dated October 2016.

SCALE (Feet)

0 70 140

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

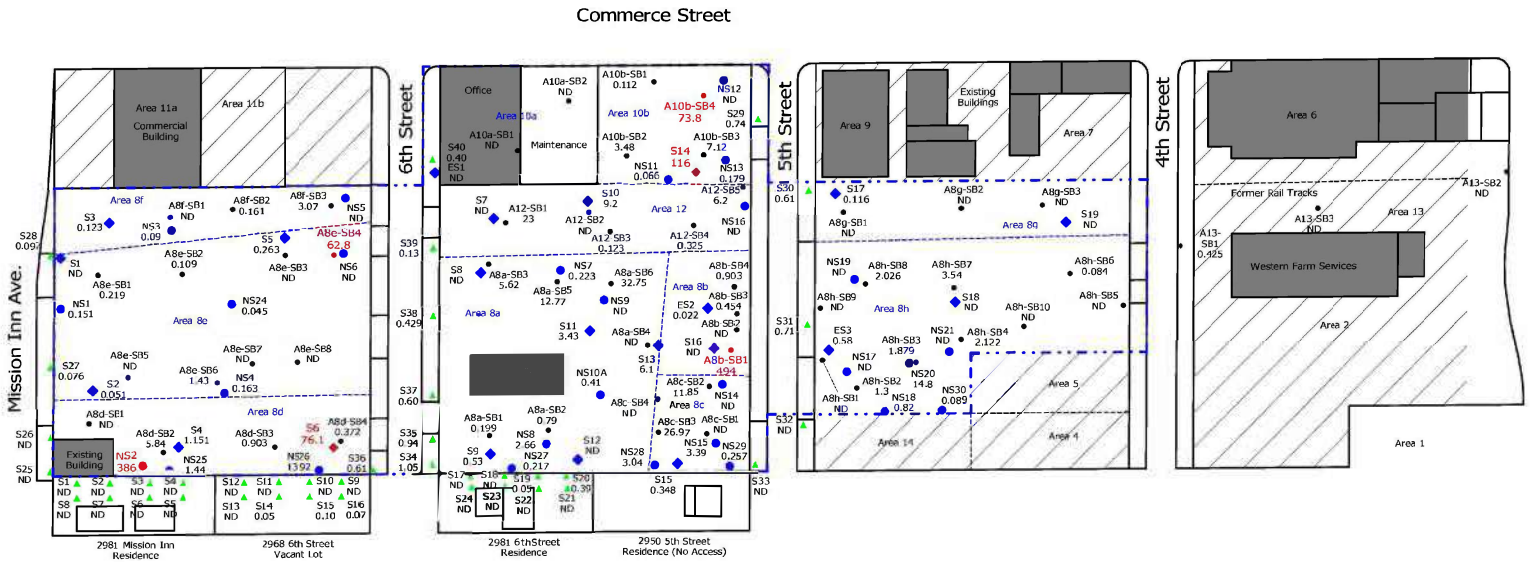
GSI ENVIRONMENTAL

SITE MAP

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	6-Feb-2023	Chk'd By:	SC
Map ID:	RS6239_SiteMap	Appv'd By:	SC

FIGURE 2



LEGEND

- Soil Sampling Location (Amec, 2015)
- Soil/Soil Gas Sampling Locations (Amec, 2015)
- Soil Sampling Locaton (AAA, 2011)
- Off-Site Sampling Locations (Hillmann, 2017)
- Site Boundary

Notes

1) Figure provided by Hillmann Consulting, "Draft Remedial Action Plan", Figure 5A, 8 May, 2017.
2) Maximum PCB Concentrations shown in mg/kg.
3) Concentration >50 mg/kg shown in red.

SCALE (Feet)
0 65 130

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

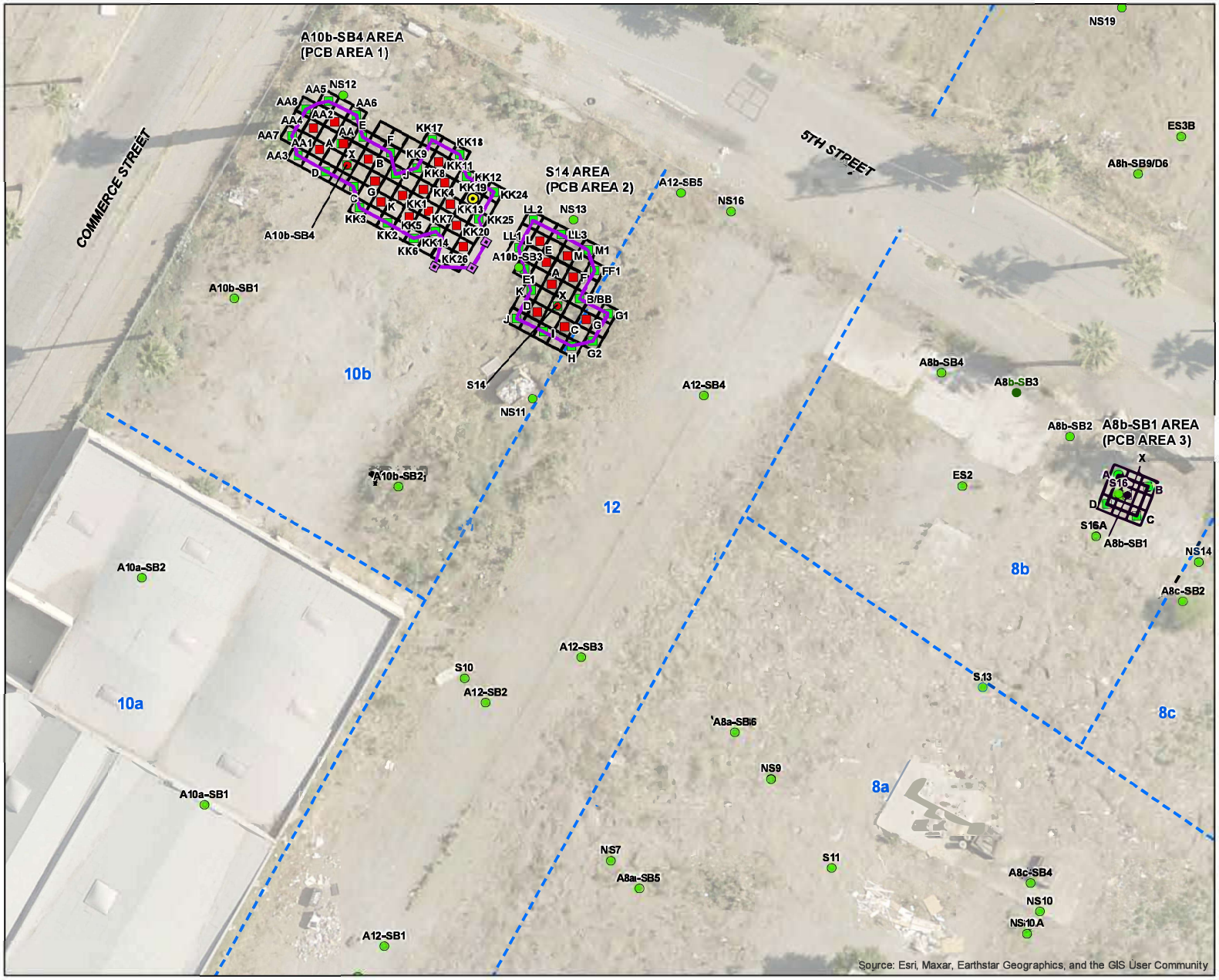
GSI ENVIRONMENTAL

PRE-DELINEATION SAMPLING DISTRIBUTION OF PCBs IN SOIL

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No. 6239	Drawn By: AV
Issued: 6-Feb-2023	Chk'd By: SC
Map ID: RS6239_PreDelPCBs	Appv'd By: SC

FIGURE 3



LEGEND

- Proposed Confirmation Sampling Location
- Previously Sampled Location (Ami Adini & Associates, 2011; AMEC, 2015) with Total PCB Arochlors Concentrations ≥50 mg/kg
- Previously Sampled Location (Ami Adini & Associates, 2011; AMEC, 2015) with Total PCB Arochlors Concentrations <50 mg/kg
- 2018 GSI Characterization Sample Location with Total PCB Arochlors Concentrations ≥50 mg/kg
- 2018 GSI Characterization Sample Location with Total PCB Arochlors Concentrations <50 mg/kg
- Soil in the Vicinity to be Excavated to a depth of ~5 feet bgs
- PCB Excavation to 2.5 ft bgs
- Area Designation Border
- 10b Site Area Designation (Geomatrix, 2005)
- 1.5 Meters x 1.5 Meters Grid

Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) PCB = Polychloride Biphenyl; mg/kg = milligrams per kilogram; ft bgs = feet below ground surface.

SCALE (Feet)
0 15 30

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

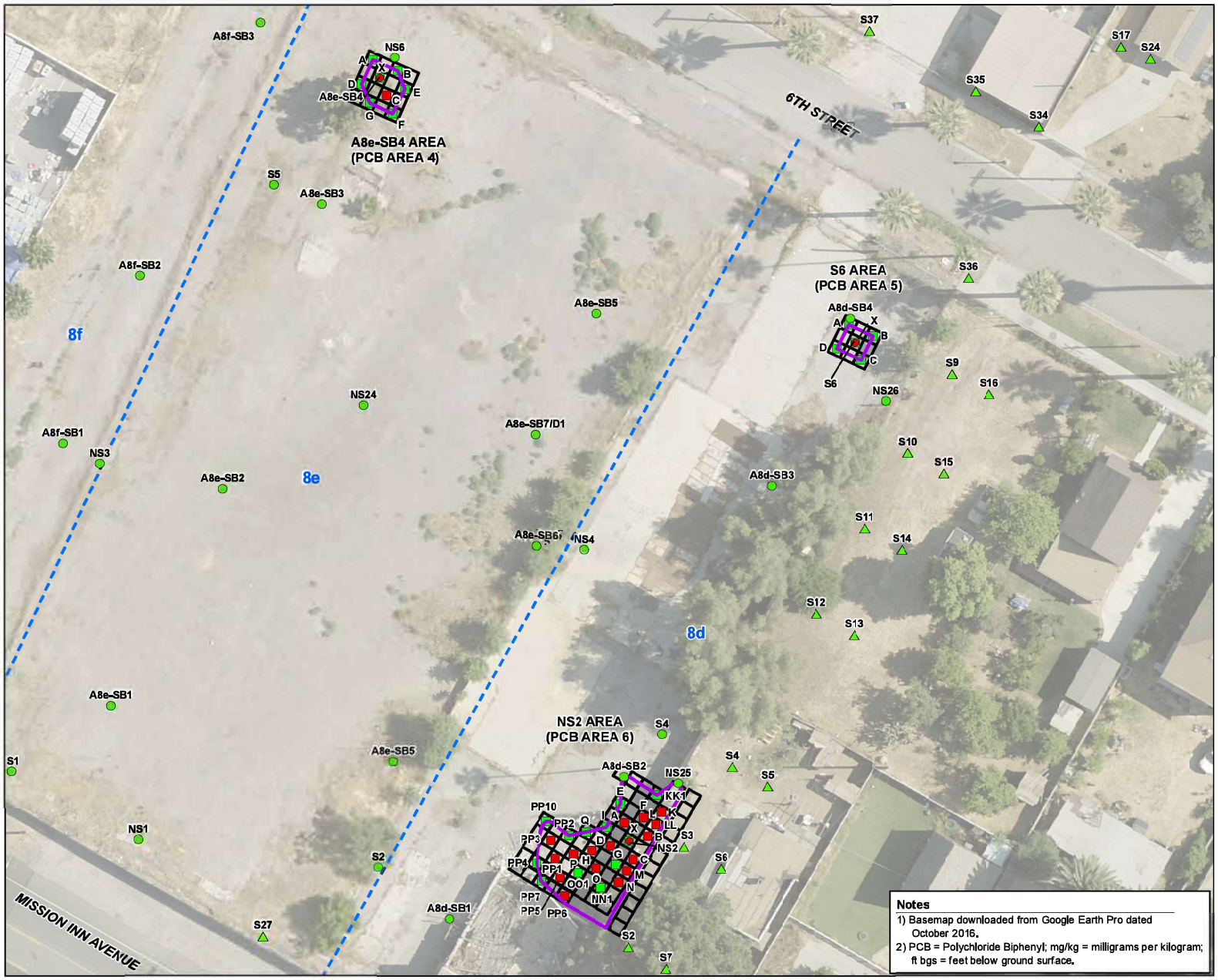
GSI ENVIRONMENTAL

POST-DELINEATION SAMPLING DISTRIBUTION OF PCBs IN SOIL – NORTHERN AREAS

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	6-Feb-2023	Chk'd By:	SC
Map ID:	RS6239_NPosDelPCBs	Appv'd By:	SC

FIGURE 4A



Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) PCB = Polychloride Biphenyl; mg/kg = milligrams per kilogram; ft bgs = feet below ground surface.

LEGEND

- Previously Sampled Location (Ami Adini & Associates, 2011; AMEC, 2015) with Total PCB Arochlors Concentrations ≥50 mg/kg
- Previously Sampled Location (Ami Adini & Associates, 2011; AMEC, 2015) with Total PCB Arochlors Concentrations <50 mg/kg
- 2018 GSI Characterization Sample Location with Total PCB Arochlors Concentrations ≥50 mg/kg
- 2018 GSI Characterization Sample Location with Total PCB Arochlors Concentrations <50 mg/kg
- Off-Site Sampling Location (Hillman Consulting, February 2017) with Total PCB Arochlors Concentrations <50 mg/kg
- PCB Excavation to 2.5 ft bgs
- Area Designation Border
- 8f Site Area Designation (Geomatrix, 2005)
- 1.5 Meters x 1.5 Meters Grid

SCALE (Feet)
0 17.5 35

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

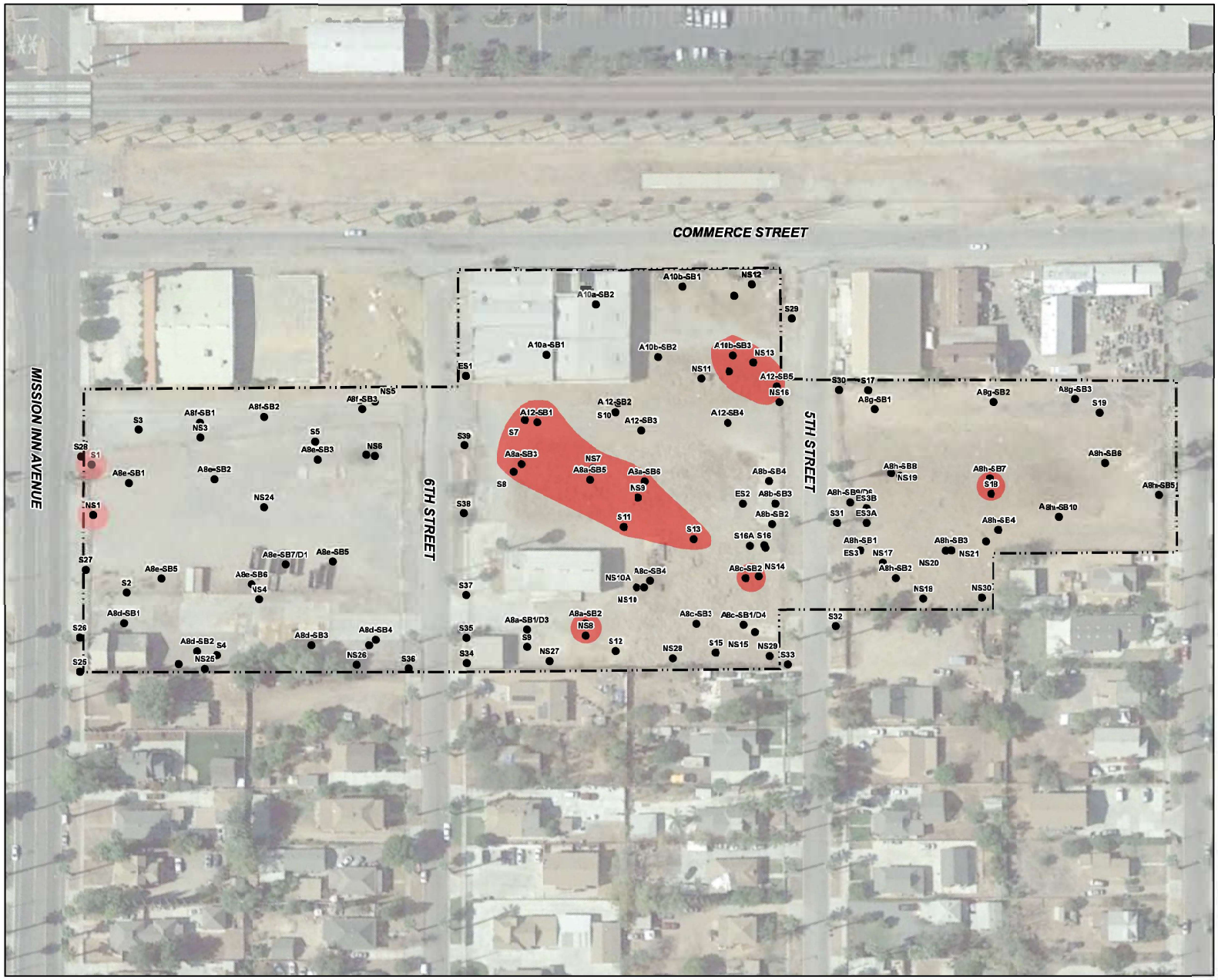
GSI ENVIRONMENTAL

POST-DELINEATION SAMPLING DISTRIBUTION OF PCBs IN SOIL – SOUTHERN AREAS

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	6-Feb-2023	Chk'd By:	SC
Map ID:	RS6239_SPosDelPCBs	Appv'd By:	SC

FIGURE 4B



LEGEND

- Previously Sample Location (AAA, 2011, AMEC, 2015, and Hillmann, 2017)

Targeted Excavation (Lead ≥1000 mg/kg or STLC ≥5mg/kg)

- 2.5 ft bgs
- 1.0 ft bgs
- 0.25 ft bgs
- Site Boundary

Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) ft bgs = feet below ground surface; mg/kg = milligrams per kilogram

SCALE (Feet)
0 50 100

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

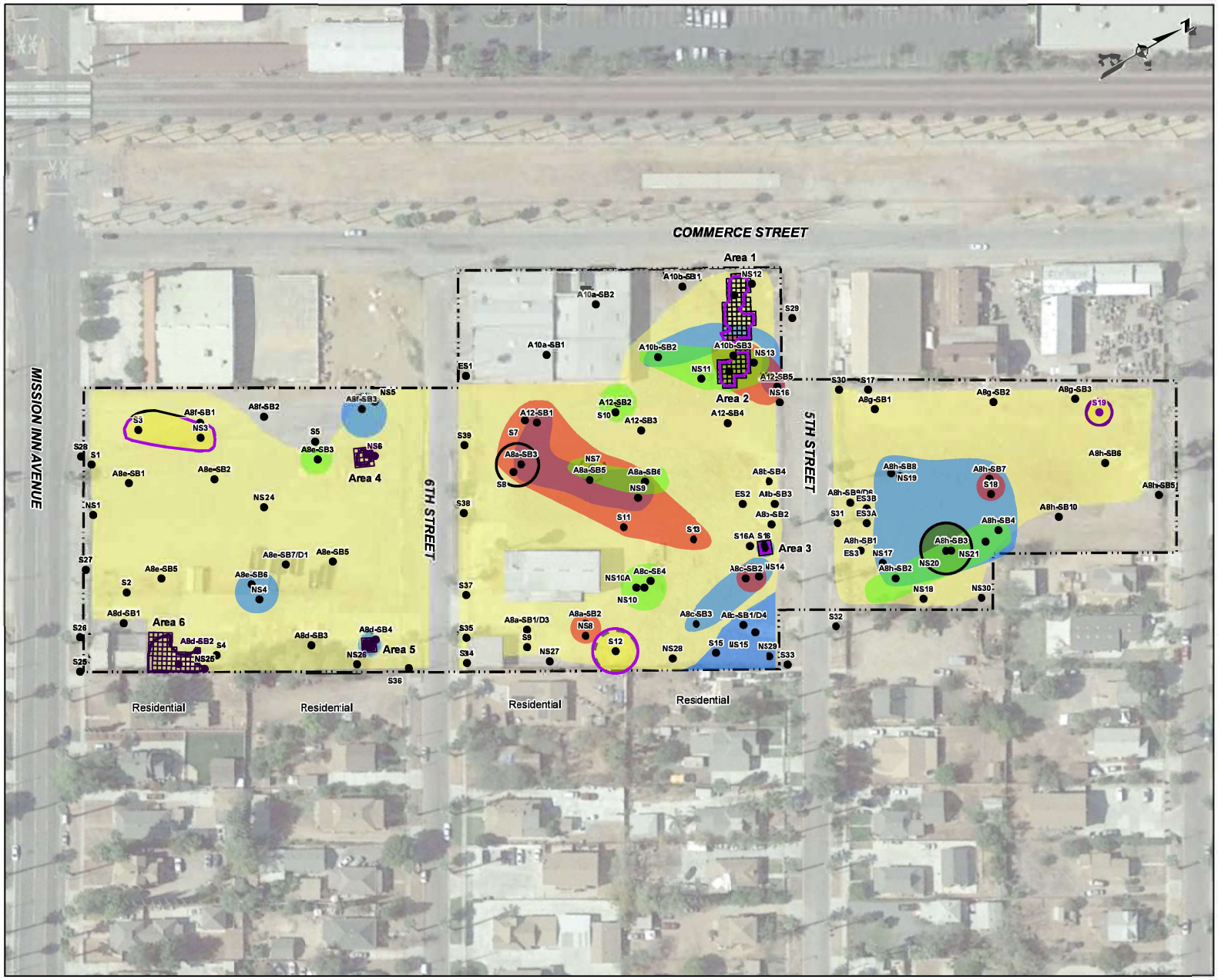
GSI ENVIRONMENTAL

PROPOSED TARGETED LEAD EXCAVATION AREAS ≥1000 mg/kg OR STLC ≥5 mg/kg

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	6-Feb-2023	Chk'd By:	SC
Map ID:	RS6239_PbExcavation	Appv'd By:	SC

FIGURE 4C



LEGEND

- Previously Sampled Location (Ami Adini & Associates, 2011; AMEC, 2015) with Total PCB Arochlors Concentrations ≥50 mg/kg
- Excavation to 2.5 ft bgs
- PCBs Excavations ≥50 mg/kg
  Grid is 1.5 Meters x 1.5 Meters

Excavation (TPH)
- 5.0 ft bgs

Excavation (One or More PAHs ≥RSL or Background)
- 2.5 ft bgs
- 1.0 ft bgs

Targeted Excavation (Lead ≥1000 mg/kg or STLC ≥5mg/kg)
- 2.5 ft bgs
- 1.0 ft bgs

Excavation (PCBs ≥Residental RBSL)
- 2.5 ft bgs
- 1.0 ft bgs

Excavation (One or More Metals ≥RSL or Background)
- 2.5 ft bgs
- 1.0 ft bgs
- Site Boundary

Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) PAH = Polycyclic Aromatic Hydrocarbons; PCB = Polychloride Biphenyl; ft bgs = feet below ground surface; mg/kg = milligrams per kilogram; RSL = residential screening levels; RBSL = risk-based screening levels.

SCALE (Feet)
0 50 100

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

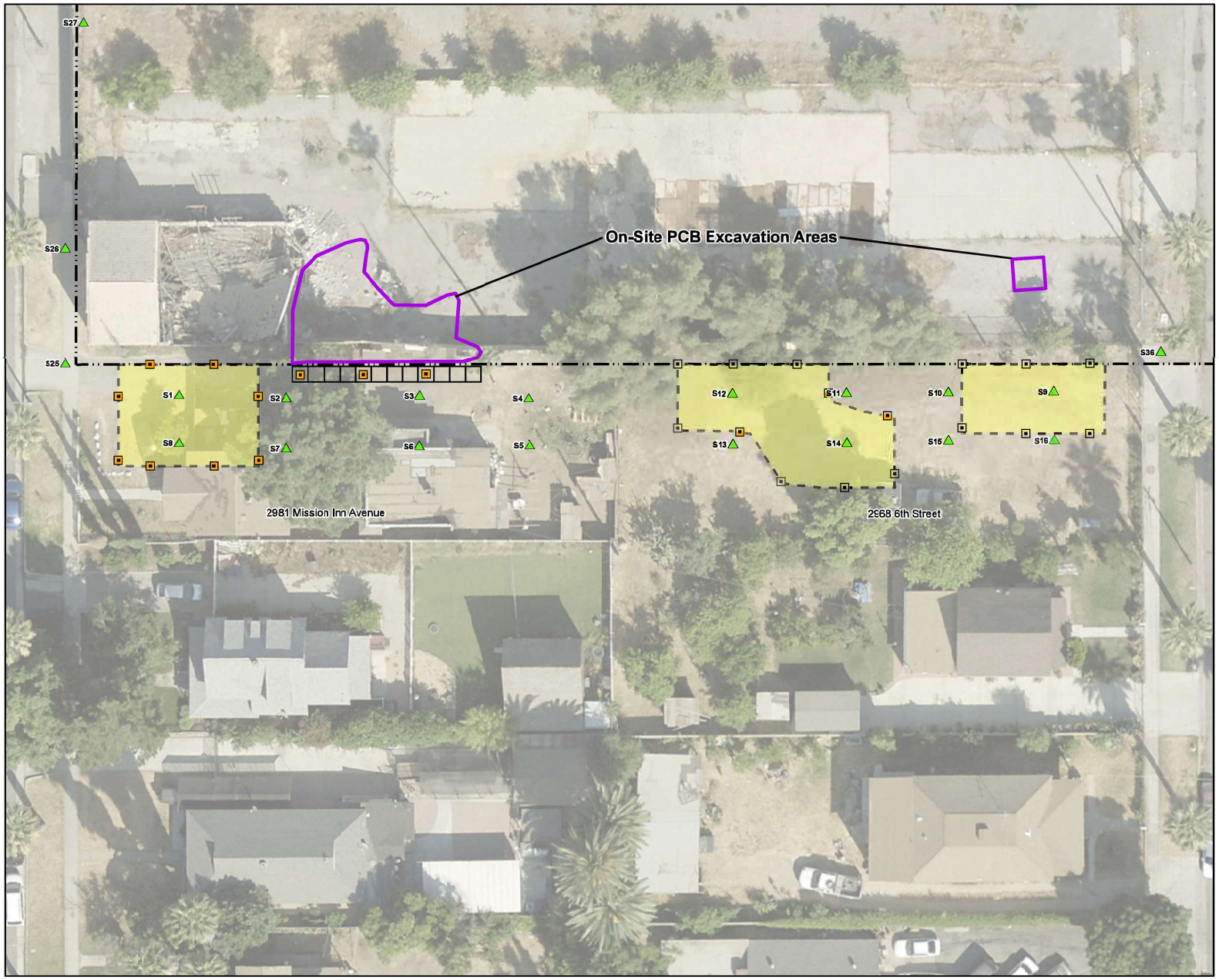
GSI ENVIRONMENTAL

PROPOSED SITE EXCAVATION

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	6-Feb-2023	Chk'd By:	SC
Map ID:	RS6239_PropExcavation	Appv'd By:	SC

FIGURE 5



LEGEND

- Proposed Confirmation Sampling
- Prior Sampling Location (Hillman Consulting, 2017)
- On-Site PCB Excavation to 2.5 ft bgs
- Off-site Excavation (One or More Metals or PAH ≥RSL or Background) at1.0 ft bgs
- PCBs Excavations ≥50 mg/kg Grid is 1.5 Meters x 1.5 Meters
- Site Boundary

Notes

1) Basemap provided by Esri ArcGIS Online, October 2017.
2) Excavation will not be conducted where ground surface is covered with asphaltic concrete.
3) The lateral extents of excavation boundaries will be defined either by existing locations with sampling results below remedial goals or confirmation sampling.

SCALE (Feet)
0 15 30

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

GSI ENVIRONMENTAL

PROPOSED OFF-SITE EXCAVATIONS - SOUTH

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	4-Apr-2023	Chk'd By:	SC
Map ID:	RS6239_PropOSExS	Appv'd By:	SC

FIGURE 6A

LEGEND

- Proposed Confirmation Sampling
- Prior Sampling Location (Hillman Consulting, February 2017)
- Off-site Excavation (One or More Metals ≥RSL or Background) at 1.0 ft bgs
- Site Boundary

Notes

1) Basemap provided by Esri ArcGIS Online, October 2017.
2) Excavation will not be conducted where ground surface is covered with asphaltic concrete.
3) The lateral extents of excavation boundaries will be defined either by existing locations with sampling results below remedial goals or confirmation.

SCALE (Feet)
0 15 30

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

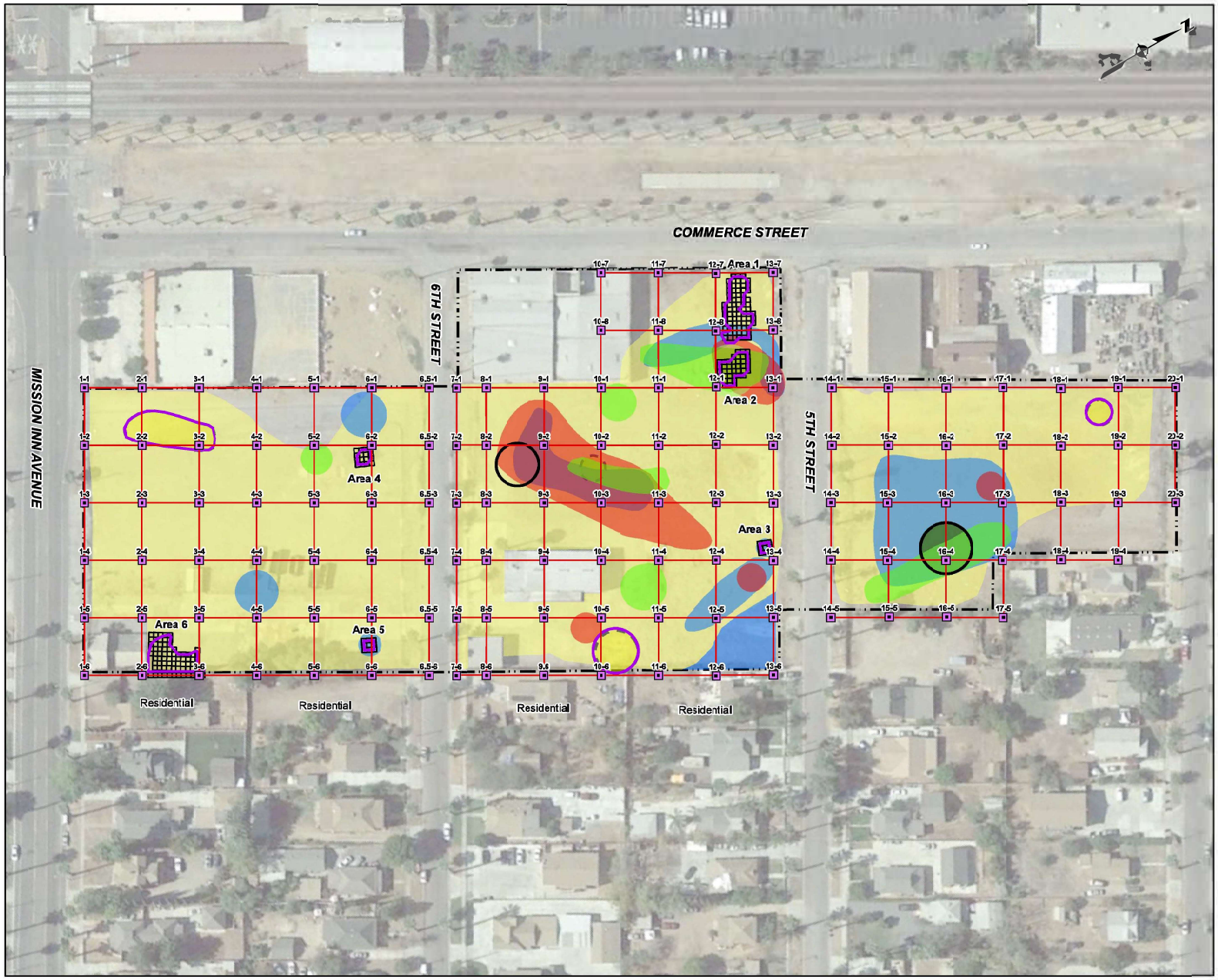
GSI ENVIRONMENTAL

PROPOSED OFF-SITE EXCAVATIONS - NORTH

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	5-Apr-2023	Chk'd By:	SC
Map ID:	RS6239_PropOSExN	Appv'd By:	SC

FIGURE 6B



LEGEND

- Proposed Confirmation Sampling
- 60 Feet x 60 Feet Grid
- Excavation to 2.5 ft bgs
- PCBs Excavations ≥50 mg/kg
  Grid is 1.5 Meters x 1.5 Meters

Excavation (TPH)

- 5.0 ft bgs

Excavation (One or More PAHs ≥RSL or Background)

- 2.5 ft bgs
- 1.0 ft bgs
- 0.25 ft bgs

Targeted Excavation (Lead ≥1000 mg/kg or STLC ≥5mg/kg)

- 2.5 ft bgs
- 1.0 ft bgs

Excavation (PCBs ≥Residental RBSL)

- 2.5 ft bgs
- 1.0 ft bgs

Excavation (One or More Metals ≥RSL or Background)

- 2.5 ft bgs
- 1.0 ft bgs
- Site Boundary

Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) PAH = Polycyclic Aromatic Hydrocarbons; PCB = Polychloride Biphenyl; ft bgs = feet below ground surface; mg/kg = milligrams per kilogram; RSL = residential screening levels; RBSL = risk-based screening levels; TPH = total petroleum hydrocarbons.

SCALE (Feet)
0 50 100

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

GSI ENVIRONMENTAL

PROPOSED CONFIRMATION SAMPLES

Former Riverside Scrap Iron & Metal Site
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	6-Feb-2023	Chk'd By:	SC
Map ID:	RS6239_PropConfirmSamp	Appv'd By:	SC

FIGURE 7

APPENDICES

APPENDIX A.

California Land Reuse and Revitalization Act (CLRRA) Agreement

Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
5796 Corporate Avenue
Cypress, California 90630

Jared Blumenfeld
Secretary for
Environmental Protection

Gavin Newsom
Governor

February 8, 2022

SENT VIA ELECTRONIC MAIL

Mr. Darrin Olson
President, Iron Lofts LLC
1201 Dove Street, Suite 520
Newport Beach, California 92660
dolson@realmre.com

EXECUTED CALIFORNIA LAND REUSE AND REVITALIZATION ACT AGREEMENT FOR RIVERSIDE SCRAP IRON & METAL CORP., 2993 6TH STREET, RIVERSIDE (Docket No. HSA-FY21/22-032, SITE CODE: 401986)

Dear Mr. Olson:

Enclosed for your file is a copy of the fully executed California Land Reuse and Revitalization Act Agreement (Agreement), Docket No. HSA-FY21/22-032, for Riverside Scrap Iron & Metal Corp., located at 2993 6th Street, Riverside.

Should you have any questions regarding the Agreement, please contact Mr. Aslam Shareef, Project Manager, at (714) 484-5472 or at Aslam.Shareef@dtsc.ca.gov, or me at (714) 484-5368 or at Shahir.Haddad@dtsc.ca.gov.

Sincerely,

Shahir Haddad, P.E.
Supervising Engineer
Brownfields Restoration and School Evaluation Branch
Site Mitigation and Restoration Program

mv/as/sh

Enclosure

cc: See next page

cc: (via e-mail)

Mr. Todd Cadwell
Iron Lofts LLC
tcadwell@realmre.com

Mr. Paige Gosney
Gresham Savage Nolan & Tilden, PC
Paige.Gosney@GreshamSavage.com

Mr. Aslam Shareef
Project Manager
DTSC/Brownfields Restoration and School Evaluation Branch
Aslam.Shareef@dtsc.ca.gov

Brownfields Restoration and School Evaluation Branch Reading File - Cypress

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of: Riverside Scrap Iron & Metal Corp. 2993 6th Street Riverside, California 92507 Bona Fide Purchaser: Iron Lofts LLC 1201 Dove Street, Suite 520 Newport Beach, California 92660	Docket No. HSA-FY21/22-032 California Land Reuse and Revitalization Act Agreement Health and Safety Code Sections 25395.91-25395.92

Overview

The California Land Reuse and Revitalization Act of 2004 (CLRRA) was enacted by Assembly Bill No. 389, Montanez, on September 23, 2004, and extended and amended by Senate Bill 143, Cedillo, on October 11, 2009.[1] CLRRA provides for an eligible bona fide purchaser (BFP), innocent landowner (ILO), contiguous property owner (CPO) or prospective purchaser in contract to acquire a site (PP) to qualify for specified immunities from liability for certain response costs or damage claims under applicable State of California (State) statutes. Under CLRRA, those seeking the immunities provided by the Act are required to enter into an agreement with the Department of Toxic Substances Control (DTSC). By entering into an agreement, Iron Lofts LLC (Party), meets the CLRRA requirements to enter into such an agreement. CLRRA is a voluntary option afforded to those who qualify and does not alter existing State law regarding liability for releases or discharges of hazardous substances or hazardous materials not addressed by this Agreement.

DTSC and Party enter into this CLRRA Agreement (Agreement) and agree as follows:

1 Assembly Bill No. 389 added Chapter 6.82 (commencing with Section 25395.60) and Chapter 6.83 (commencing with Section 25395.110) to Division 20 of the Health and Safety Code; Senate Bill No. 143 amended Section 25395.91.

1. Introduction

1.1 Parties. This Agreement is entered into by Party and DTSC, who are collectively the "Parties" to this Agreement.

1.2 Site Description. This Agreement applies to the "Site" which is defined as the real property located at 2993 6th Street in Riverside, Riverside County, California 92507, identified by Riverside County Assessor's Parcel Numbers - Parcel A: 211-072-021-4 and 211-072-022-5; Parcel B: 211-071-005-7; Parcel C: 211-071-024-4; Parcel D: 211-071-023-3; Parcel E: 211-022-026-4 and 211-022-027-5; Parcel F: 211-071-004-6; Parcel G: 211-072-004-9 and 211-072-020-3; and Parcel H: 211-071-001-3 and 211-071-002-4. The Site is approximately 6.9 acres in size and is located east of the downtown area of the City of Riverside. The Site is bordered on the northwest by Commerce Street, on the southwest by Mission Inn Avenue/Seventh Street, and on the northeast by Fourth Street. A diagram of the Site and a location map are attached as Exhibit A and Exhibit B.

1.3 Jurisdiction. CLRRA, as codified in Health and Safety Code Sections 25395.91-25395.92, authorizes DTSC to enter into an Agreement with Party with respect to the Site.

1.4 Purpose. The purpose of this Agreement is to implement CLRRA for the assessment and remediation of the Site, so that Party may qualify for the immunities afforded under CLRRA and DTSC may be reimbursed for the costs incurred by DTSC.

1.5 Agreement Not an Admission. Entry into this Agreement by Party does not constitute an admission of fact or liability or conclusion of law for any purpose or proceeding nor does it limit or waive any defense to responsibility or liability that may be available to Party under any provision of law.

1.6 Agreement Not a Limitation. Nothing in this Agreement limits DTSC's authority to conduct a response action DTSC determines is necessary to protect public health and safety or the environment pursuant to any applicable statute. Except as otherwise expressly provided, nothing in this Agreement limits DTSC's authority to issue an order or take any other action under any provision of law to protect public health and safety or the environment or to pursue any existing legal, equitable or administrative remedies pursuant to State or federal law.

2. Definitions

2.1 Unless otherwise specified, definitions of terms used in this Agreement are those set forth in Health and Safety Code, Division 20, Chapters 6.82 and 6.83.

3. Findings

3.1 Site History and Current Conditions. The Site was used as a scrap yard for over 45 years. Associated piles of scrap metal, containers, scrap bins, a metal compactor and a material bailer have historically occupied the Site. The scrap metal and recycling business ceased operations in 2015 and the Site was cleared of utilities, mixed trash, debris and scrap metal and currently consists mostly of unpaved bare earth and paved surfaces. Site assessment activities were conducted prior to 2016 under the oversight of the Santa Ana Regional Water Quality Control Board (RWQCB). The investigation identified concentrations of polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and metals in soil that required remediation. On April 25, 2016, RWQCB referred the Site to DTSC for further evaluation and cleanup. On July 28, 2016, a Voluntary Cleanup Agreement (VCA) (Docket No. HSA-FY 15/16-152) was executed between DTSC and Riverside Scrap Iron & Metal, Corp., for oversight of Site investigation and cleanup. DTSC approved a Remedial Action Plan (RAP) (GSI Environmental Inc., July 23, 2019) for implementation on January 17, 2020. The remedial action selected in the RAP included excavation and off-site disposal of approximately 30,000 tons of impacted soil. The RAP was not implemented by the past owner. DTSC terminated the VCA on August 31, 2021 due to failure to implement the RAP.

3.2 Site Eligibility. On August 31, 2021, Party submitted to DTSC a complete Request for Agency Oversight Application (application) and an All Appropriate Inquiries (AAI) report that provided sufficient information for DTSC, pursuant to Health and Safety Code Section 25395.92(c), to prepare this Agreement. Party submitted AAI documents to DTSC in order to determine that the Site is an eligible site under Health and Safety Code Section 25395.79.2 and to determine that Party meets the conditions that apply as of the Effective Date of this Agreement to qualify as a BFP pursuant to Health and Safety Code Section 25395.69.

Based on the information submitted in the application and the AAI report, DTSC has determined that the Site meets the definition of a site specified under Health and Safety Code Section 25395.79.2 because it is real property located in an urban infill area and its redevelopment is complicated by the presence of hazardous materials and is not listed or proposed for listing on the National Priorities List site, it is not a State superfund site, and is not solely impacted by a petroleum release from an underground storage tank.

3.3 Eligibility of Iron Lofts LLC. Based on the information submitted in the application and AAI report, DTSC has determined that Party meets the definition of a BFP pursuant to Health and Safety Code Section 25395.69 and that Party made all appropriate inquiries pursuant to Health and Safety Code Section 25395.65 or will make all appropriate inquiries pursuant to Health and Safety Code Section 25395.65 at the time of acquisition and meets the conditions under Health and

Safety Code Section 25395.80 that apply as of the effective date of this Agreement. The AAI documentation provided to date consists of the following document:

Phase I Environmental Site Assessment, Iron Lofts LLC, Riverside, Riverside County (Hillman Consulting LLC, September 2021).

4. Immunities, Withdrawal and Termination

4.1 Immunities. Party will be entitled to the immunities provided for by CLRRA, subject to its limitations and conditions, upon entry into this Agreement. Any successor-in-interest to the Site will also be entitled to the immunities set forth by CLRRA provided: (a) such successor-in-interest executes a written agreement (in the form attached hereto as Exhibit F) to assume any remaining obligations under the Agreement not performed by Party, including, without limitation, long-term operation and maintenance; (b) DTSC finds that such successor-in-interest meets all of the qualifying conditions of Health and Safety Code Section 25395.80 and either Health and Safety Code Sections 25395.69 or 25395.70, as applicable; and (c) DTSC accepts the assumption by such successor-in-interest of the remaining obligations under this Agreement. DTSC's acceptance of the successor-in-interest qualifying under the conditions of Health and Safety Code Section 25395.80 and either Health and Safety Code Section 25395.69 or Section 25395.70, as applicable, shall be evidenced solely by DTSC's execution of the assumption agreement by such successor-in-interest. Such agreement in the executed form shall then be incorporated into the Agreement as a subsequent exhibit.

4.2 Withdrawal and Termination. The circumstances and procedures under which Party or DTSC may withdraw from or terminate this Agreement, and the consequences of withdrawal or termination, are as set forth in CLRRA.

4.3 Opportunity to Cure. Party shall be given notice and an opportunity to cure within a reasonable period of time before DTSC terminates this Agreement for an unapproved material deviation from the Agreement pursuant to Health and Safety Code Sections 25395.81(c)(1) and 25395.93(d).

5. Activities

5.1 Activities. Party and DTSC agree that the following activities are to be conducted under this Agreement in accordance with the schedule contained in Exhibit C.

5.2 Submittal of Existing Data. Party shall make available to DTSC, and shall provide copies of, all known data and information concerning contamination at the Site whether or not such data and information was developed pursuant to this Agreement. Party will also inform DTSC of any other known reports and documents, not in its possession, pertinent to the hazardous materials

management and/or release, characterization and cleanup of the Site, including the name of the document (if known) and the identity and address of the person/entity with possession of the document (if known).

5.3 Site Assessment. Party shall submit a Site Assessment Plan that contains all necessary information required under Health and Safety Code section 25395.94(b) and (c). If DTSC requires a health risk assessment (HRA), Party shall prepare an HRA in accordance with Health and Safety Code Section 25356.1.5(b), (c), and (d).

5.3.1 Site Assessment Plan and Report of Findings. Party shall:

(a) submit a Site Assessment Plan to conduct a site assessment in accordance with the requirements of Health and Safety Code Section 25395.94; and,

(b) upon DTSC's approval, submit a Report of Findings containing all information required under Health and Safety Code Section 25395.94(b) and (c), and Health and Safety Code Section 25395.95

5.3.2 Approval of Site Assessment Plan/Report of Findings. If DTSC finds the Report of Findings is adequate and contains all necessary information required pursuant to Health and Safety Code Section 25395.94(b) and (c), DTSC will approve the plan and notify appropriate persons, including any public drinking water system that relies on impacted groundwater for public drinking water purposes. DTSC will notify City of Riverside Water Utilities Department.

5.4 Response Plan. Party shall submit a Response Plan to DTSC for approval. Once the Response Plan is approved, the Party shall implement the Response Plan. The Response Plan shall contain the information specified in Health and Safety Code Section 25395.96(a) and (b) and shall provide that implementation of the plan will place the Site in condition that allows it to be used for its reasonably anticipated future land use without unreasonable risk to human health and safety and the environment. Public participation shall meet the requirements of Health and Safety Code section 25395.96, including a DTSC public meeting if requested. Upon approval of the Response Plan, DTSC will notify all appropriate persons including City of Riverside, Western Municipal Water District, Santa Ana Regional Water Quality Control Board, South Coast Air Quality Management District, and any local agency involved in environmental decision making.

5.4.1 Agreement to Implement Response Plan. Pursuant to Health and Safety Code section 25395.92(d)(1), Party agrees to take all actions required for a response action pursuant to Health and Safety Code, Division 20, Chapter 6.8 and Water Code Division 7. Required actions may include

actions necessary to prevent an unreasonable risk before approval of the Response Plan.

5.4.2 Schedule for Compliance. The Response Plan shall include a timetable that identifies a schedule for compliance with the response action activities required for the Site.

5.4.3 Determination of Appropriate Care. Within sixty (60) calendar days after DTSC receives the Response Plan submitted under Section 5.4, or sooner, DTSC will make a written determination as to whether proper completion of the Response Plan will constitute appropriate care for the purposes of Health and Safety Code section 25395.67(a).

5.4.4 Certificate of Completion. DTSC will issue a certificate of completion upon determining that all response actions have been satisfactorily completed in accordance with the approved Response Plan and that, based upon the data provided to DTSC at the time of the determination, no further remedial action, except only compliance with operation and maintenance and land use restriction requirements, if any, is necessary. If the Response Plan includes long-term obligations that have not been completed, including operation and maintenance (O&M) requirements or monitoring, DTSC will not issue a certificate of completion unless DTSC determines that all response actions other than the long-term O&M requirements and monitoring in the Response Plan have been completed, Party has submitted an adequate long-term O&M plan and Party has demonstrated initial compliance with the O&M plan.

5.4.5 Notification of Prospective Change in Land Use. After the Response Plan is approved, Party shall notify DTSC of any proposed change in the use or anticipated use of the Site. If the proposed change in use or anticipated use of the Site requires a higher level of protection than use or anticipated use identified in the Response Plan, DTSC may require Party to prepare and implement a new response plan that takes into account the change in use or anticipated use of the Site. Party shall not make any change in use of the Site inconsistent with any recorded land use control without the express approval of DTSC made in accordance with Health and Safety Code section 25395.99(f).

5.5 Land Use Controls. Party will execute and record any land use controls required under the approved Response Plan.

5.6 Operation and Maintenance. If DTSC determines long-term Operation and Maintenance (O&M) is required, as provided in an approved Response Plan, DTSC may, as a condition of issuing a certificate of completion, enter into an O&M agreement with the Party that governs long-term O&M activities and that provides for adequate financial

assurance. Party shall select financial assurance provisions from the options available in Title 22, California Code of Regulations section 66264.145. DTSC may agree to the assignment and termination of Party's O&M obligations, if any, if it is provided satisfactory evidence of financial assurance for the O&M obligations by the assignee and such successor enters into an acceptable O&M Agreement with DTSC. Such agreement shall not be unreasonably withheld.

5.7 CEQA Compliance. Party shall submit to DTSC all documentation necessary for compliance with the California Environmental Quality Act, Public Resources Code sections 21000-21177 (CEQA).

5.8 Final Reports. For all final reports, Party shall submit one hard (paper) copy (if requested by DTSC) and an electronic copy with all applicable attachments, appendices, signatures and certification stamps as a text-readable Portable Document Formatted (pdf).

5.9 Endangerment. Party shall notify DTSC's Project Manager, immediately upon learning of any previously unknown conditions that endangers public health or safety or that poses an unreasonable risk to human health and safety or the environment.

5.9.1 In the event DTSC determines that any activity (whether or not pursued in compliance with this Agreement) may pose an imminent or substantial endangerment to the health and safety of people on the Site or in the surrounding area or to the environment, DTSC may order Party to stop further implementation of this Agreement for such period of time as may be needed to abate the endangerment.

5.10 Further Response Actions. DTSC may require Party to conduct further response actions only under the circumstances set forth in CLRRA.

5.11 Disclosure Provisions. Party will provide all notices and satisfy reporting requirements required by State or federal law with respect to the discovery or release of hazardous substances at the Site.

5.12 Exclusion from Permit Requirements. DTSC may exclude any portion of a response action conducted entirely on a site subject to an approved Response Plan from the hazardous waste facilities permit requirements if the Response Plan specifies that the response action will be conducted in compliance with the standards, requirements, criteria or limitations specified in Health and Safety Code Section 25395.100(b), including any condition imposed by DTSC.

5.13 Access. While Party is the owner or prospective purchaser of the Site, Party shall provide and/or coordinate access to the Site and take all reasonable efforts to obtain access to offsite areas to which access is necessary to implement this

Agreement. Such access shall be provided to DTSC's employees, contractors, and consultants at all reasonable times. Nothing in this paragraph is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of any law.

5.14 Notification of Field Activities. Party shall inform DTSC at least seven (7) calendar days in advance of all field activities pursuant to this Agreement and shall allow DTSC and its authorized representatives to take duplicates of any samples collected pursuant to this Agreement.

6. Oversight, Management and Payment

6.1 Oversight Agreement Managers and Project Managers. Aslam Shareef, is designated by DTSC as its Project Manager for this Agreement. Todd Cadwell is designated by Party as its Project Manager for this Agreement. Each Party will provide at least ten (10) calendar days' advance written notice to the other Party of a change of its designated Project Manager. All notices, documents and communications unless otherwise specified will be sent to the following addresses:

To: Aslam Shareef
Project Manager
Department of Toxic Substances Control
Site Mitigation and Restoration Program
5796 Corporate Avenue
Cypress, California 90630
(714) 484-5472
aslam.shareef@dtsc.ca.gov

To: Todd Cadwell
1201 Dove Street, Suite 520
Newport Beach, California 92660
(949) 975-1122
tcadwell@ealmre.com

6.2 Payment of DTSC's Costs. Party shall follow the procedures for payment of DTSC's oversight costs.

6.2.1 Costs Included. Party shall reimburse DTSC for all DTSC's costs. Subject to the provisions of Section 6.2.6 below, Party will reimburse DTSC costs in accordance with Health and Safety Code Division 20, Chapter 6.66. DTSC's costs are recoverable pursuant to Health and Safety Code Section 25360.

6.2.2 Cost Estimate. An estimate of DTSC oversight costs ("Cost Estimate") is contained in Exhibit D. The cost estimate is the estimated cost of DTSC

oversight of the activities discussed in Section 5, above. The Party acknowledges that the Cost Estimate is not the final cost figure. DTSC will provide an updated Cost Estimate if the estimated oversight cost increases or the scope of work changes. If the DTSC revises the Cost Estimate in Exhibit D, such revision will be incorporated into this Agreement as an update to Exhibit D.

6.2.3 Payment Procedures. In anticipation of the costs to be incurred under this Agreement, including costs of preparing this Agreement, Party will make an advance payment of $69,470. If the advance payment does not cover all costs payable to DTSC, DTSC will invoice Party quarterly. Party shall pay all invoices within thirty (30) calendar days of the mailing date of the invoice. If payment is not received by DTSC within sixty (60) calendar days of the date of the invoice, Party may be deemed to be in material default of this Agreement. Any payment for billing not received by DTSC within sixty (60) calendar days is subject to interest based on applicable federal and State laws and regulations, including but not limited to Health and Safety Code Section 25360.1.

6.2.4 Billing Address. DTSC will provide a Statement of Account to Party at least quarterly. Party's billing address is:

Todd Cadwell
1201 Dove Street, Suite 520
Newport Beach, California 92660
(949) 975-1122
tcadwell@ealmre.com

6.2.5 Payment Address. All payments made by Party pursuant to this Agreement shall be by check made payable to DTSC and bearing on its face the project code for the Site [401986] and the docket number of this Agreement, HSA-FY21/22-032. Payments shall be sent to:

Department of Toxic Substances Control
Accounting/Cashier
1001 I Street, 21st Floor
P.O. Box 806
Sacramento, California 95812-0806

6.2.6 Dispute Resolution. If Party has a dispute regarding the charges or related services appearing in the billing package received from DTSC, Party must notify DTSC of the dispute in writing within 45 calendar days from the date of the billing package. The invoice dispute notice must identify the name of the Site, Site Code, invoice number, invoice date, charges contested, employee name associated with contested charges, and the amount disputed. The invoice dispute notice also must include a detailed statement of the legal and/or factual basis for the dispute and the

remedy sought. For timely and good-faith invoice disputes, DTSC will waive the imposition of interest until resolution of the dispute.

The invoice dispute notice must be addressed to:

Chief, Collections and Resolution Unit
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

A copy of the invoice dispute notice should also be sent to the DTSC Project Manager by using the contact information on the last page of the billing letter included in the billing package.

If Party is disputing only a portion of the costs included in the invoice, Party should pay for those costs that are not being disputed. Filing a dispute will not stay the imposition of the interest charges for undisputed costs.

6.2.7 Effect of Billing Dispute. The existence of a billing dispute shall not excuse, stay, or suspend any other compliance obligation or deadline required pursuant to this Agreement.

7. Additional Provisions

7.1 Exhibits. All Exhibits are incorporated into this Agreement by reference.

7.2 Liens. DTSC shall have a lien on the property constituting the site for its unrecovered costs of any response action carried out at the Site, if the response action increased the fair market value of the Site that existed before the response action was initiated. DTSC and Party may agree to substitute a lien on another property or other assurance of payment for the unrecovered response costs.

7.3 Proponent Liabilities. Except as specified in CLRRA, nothing in this Agreement shall constitute or be considered a satisfaction or release from liability for any condition or claim arising as a result of Party's past, current, or future operations.

7.4 Government Liabilities. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Party or by related parties in carrying out activities pursuant to this Agreement, nor shall the State of California be held as a party to any contract entered into by Party or its agents in carrying out the activities pursuant to this Agreement.

7.5 Third Party Actions. In the event that Party is a party to any suit or claim for damages or contribution to which DTSC is not a party, relating to the Site, Party will notify DTSC in writing within ten (10) calendar days after service of the complaint in the third-party action. However, failure to give such notice within ten

(10) calendar days will not be a material breach of this Agreement, and this requirement confers no rights on any third parties not party to this Agreement.

7.6 California Law. This Agreement shall be governed, performed and interpreted under the laws of the State of California.

7.7 Severability. If any portion of this Agreement is ultimately determined not to be enforceable, that portion will be severed from this Agreement and the severability shall not affect the enforceability of the remaining terms of this Agreement.

7.8 Parties Bound. This Agreement applies to and is binding, jointly and severally, upon Party and its business entity successors and assigns, and upon DTSC and any successor agency of DTSC that may have responsibility for, and jurisdiction over, the subject matter of this Agreement.

7.9 Amendment. This Agreement may be amended in writing by mutual agreement of DTSC and Party. Any agreed-upon amendment shall be in writing, shall be signed by both Parties, shall be effective upon the date the amendment is signed by DTSC and once signed by DTSC, is incorporated in this Agreement. An amendment may include changes to the terms and conditions of this Agreement, including an addition of another party in Exhibit E (provided that the party meets all of the qualifying conditions of Health and Safety Code Section 25395.80 and either Health and Safety Code Section 25395.69 or Health and Safety Code Section 25395.70, as applicable) and any other changes DTSC determines to be necessary. Such amendment shall then be incorporated into the Agreement as a subsequent exhibit.

7.10 Effective Date. The Effective Date of this Agreement is the date when this Agreement is signed by both Parties, and therefore, fully executed.

7.11 Representative Authority. Each undersigned representative of the Parties to this Agreement certifies that she or he is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the Parties to this Agreement.

7.12 Counterparts. This Agreement may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

Date: 2/7/2022

Javier Hinojosa
Branch Chief
Site Mitigation and Restoration Program
Department of Toxic Substances Control

Date: 2/3/22

Darrin Olson
President
Iron Lofts LLC

LIST OF EXHIBITS

Exhibit A: Site Map

Exhibit B: Site Diagram

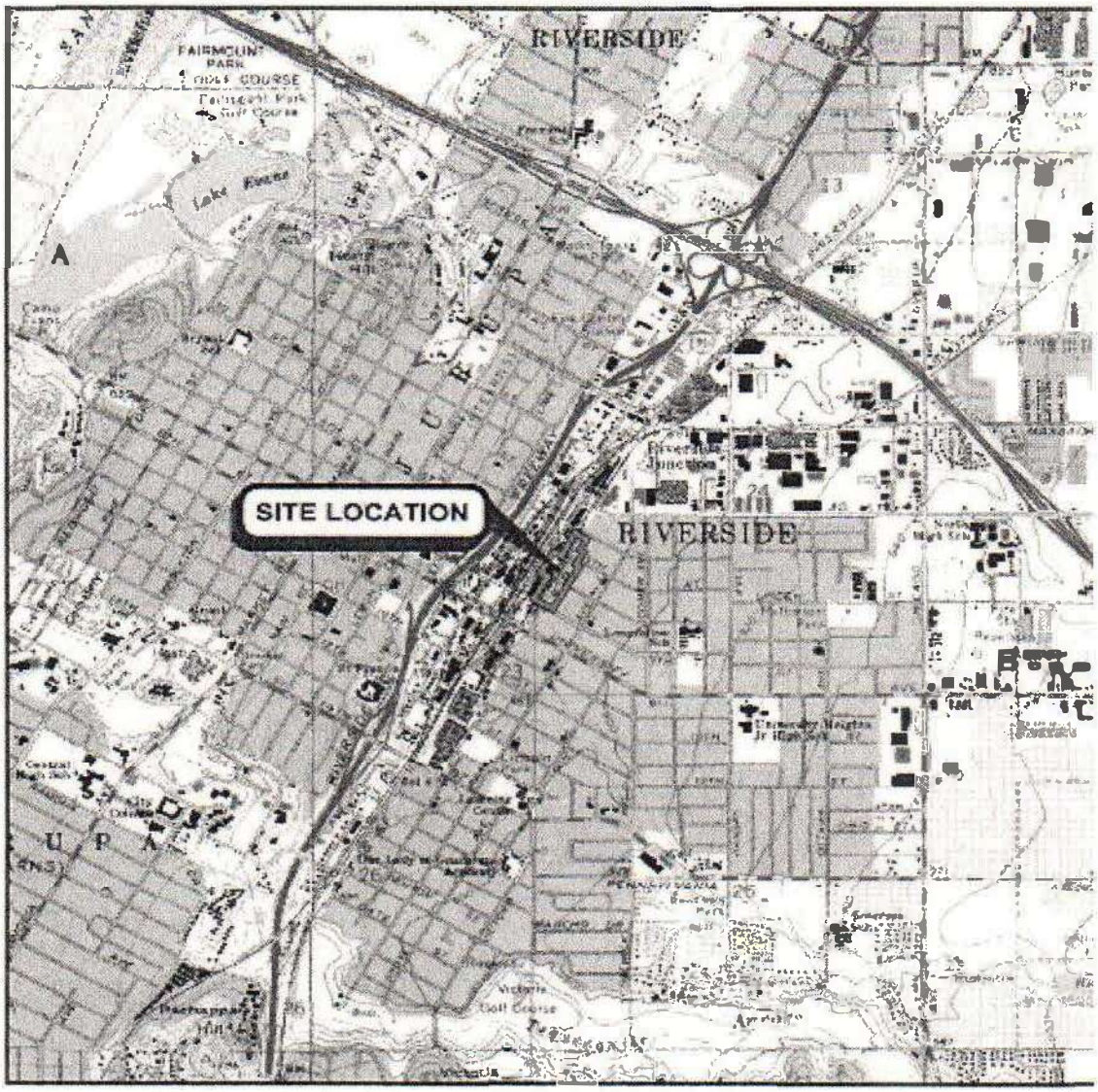
Exhibit C: Schedule

Exhibit D: DTSC Oversight Cost Estimate

Exhibit E: Example Amendment to Add an Additional Party – Sample

Exhibit F: Example Successor Assignment and Assumption Agreement – Sample

EXHIBIT A
Site Map



Site Location Map

EXHIBIT B
Site Diagram

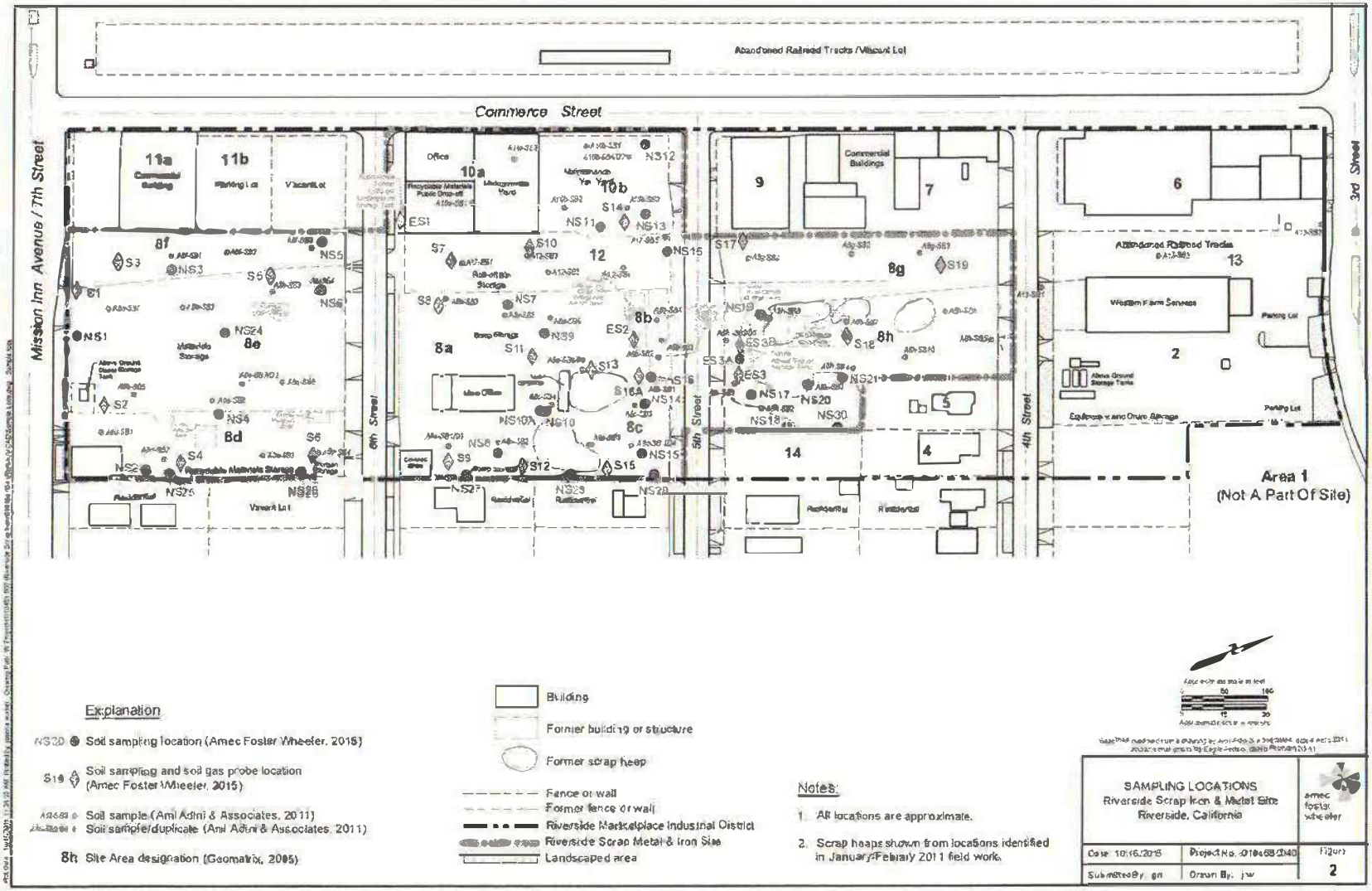


EXHIBIT C
Schedule

If Party is unable to perform any activity or submit any document within the schedule outlined below, Party shall notify DTSC's Project Manager prior to the date the task was to be completed in the schedule below. If DTSC determines that the revised schedule will have a significant effect on the schedule outlined below or upon its review schedule, the schedule shall be updated.

Activity	Schedule
Scoping Meeting	During Agreement negotiation, or shortly after Agreement execution based on DTSC evaluation of project needs
Advance Payment	Within 10 days of Agreement execution
Submit existing data	Within 10 days of Agreement execution, or as requested by DTSC
Submit Notice of Ownership Change and Copy of Transfer Document for Prospective Purchaser, if applicable	At the time of transfer
Submit AAI Update/verification of validity for Prospective Purchaser, if applicable	At the time of transfer
DTSC Site Security Visits	Weekly for six months
Submit Response Plan-	As directed by DTSC
Submit Community Profile	Within 30 days of DTSC's request
Submit CEQA documentation	Concurrent with the Updated Response Plan
Public Review/Comment Period, mailing of information to mailing list and publishing of public notice	Upon DTSC's approval of Response Plan for public review and comment.
DTSC decision on Updated Response Plan	DTSC to approve cleanup plan, if appropriate, after addressing public comments, within ~150 days of receipt of draft[1].
Implement Response Plan	Within 90 days of DTSC approval of cleanup plan, or as directed by DTSC in conjunction with Party[3]
Submit Response Action completion report	Within 90 days from the date of implementation of cleanup plan
DTSC decision on Response Action Completion Report	Within ~100 days of date received by DTSC[1]. May include recommendation for no further action, or no further action with conditions.
DTSC's issuance of a Certificate of Completion or No Further Action	Within ~30 days of approval of Response Plan Completion Report, Operation and Maintenance Plan and Agreement (if required), and the executed land use restriction (if required).
Invoices	DTSC issues quarterly, payment expected within 30 days
Cost estimate and Scope of Work Updates and Amendments	DTSC updates the scope and cost estimate annually, or as needed, based on work needed to complete the Agreement. Amendments are issued on an as-need basis.

[1] Note that DTSC approvals in the target timeframes are contingent upon receiving documents that meet industry standards, comply with DTSC's direction, and that responses to DTSC questions and/or comments are received in a timely manner.
[2] If workplan activities are not initiated within six months of the date of DTSC approval, DTSC may require additional investigation, public participation activities, and/or revision to the document.

[3] If Response Plan activities are not initiated within one year of the date of DTSC approval, DTSC may require additional investigation, public participation activities, or revision to the document.

EXHIBIT D
DTSC Oversight Cost Estimate

COST ESTIMATE WORKSHEET
Type of Agreement: CLRRA
Date: December 2021
Site Name: Riverside Scrap Iron & Metal Corp
Site Code: 401986

DTSC Project Team	VCP Coord.	Project Management	Supervision	Toxicology	Geology	Industrial Hygienist	Public Participation	HQCEQA	Project Assistants	
Classification (personnel)	Sr. [illegible]	HSE	SHSE I	Senior Toxicologist	Engineering Geologist				Associate Program Analyst	Office Technician (Typing)
TASK: (enter # hrs)										
Application		6							1	
CLRRA Agreement	8	6	4							2
Project Management		20								
Site Assessment Plan/Report of Findings		24	2	12	12					1
Site Security Visits		72								
Scoping Meeting		4	2	4	2					
Community Profile		8	2				8			4
CEQA-Initial Study/Environmental Impact Report		20	2					20		2
AB 389 Response Plan		24	4	12	12	4				1
CommunityUpdate		8	2				8			2
Public Notice		4	1				4			2
Response Plan Public meeting		16	4	8	4		20			
Fieldwork		40			16					
Remedial Action Completion Report		24	2	12	12					2
Total No. Hours/Class	8	276	25	48	58	4	40	20	1	16
Hourly Rate/Class	$217	$265	$328	$255	$312	$299	$157	$182	$165	$101
Cost/Class	$1,736	$73,140	$8,200	$12,240	$18,096	$1,196	$6,280	$3,640	$165	$1,616
Subtotal	$126,309									
Contingency (10%)	$12,631									
Grand Total Cost	**$138,940**									
Advance Payment	**$69,470**									

EXHIBIT E

[MONTH, DATE, YEAR] AMENDMENT TO ADD AN ADDITIONAL PARTY

This Amendment is made and entered into, by and between the State of California, Department of Toxic Substances Control ("**DTSC**") and **[Existing BFP, CPO, ILO, or PP]** and **[Name of Additional Party]** (the " Additional Party") (collectively referred to as the "Parties").

The Standard Agreement for participating under California's Land Reuse and Revitalization Act (CLRRA) Program, DTSC Docket No. _____HSA-CLRRA **[DOCKET NUMBER]** (the "Agreement") is amended to replace "**[Name of existing BFP, CPO, IO named in the Agreement]**" with "**[Name of existing BFP, CPO, ILO, PP named in the Agreement]** and **[Name of Additional Party]**".

The **Additional Party** agrees to comply with the amended Agreement.

DTSC has verified that the **Additional Party** meets the requirements and conditions for a **[CHOOSE ONE: Bona fide purchaser pursuant to Health and Safety Code section 25395.69, Contiguous Property Owner pursuant to Health and Safety Code section 25395.70, Innocent landowner pursuant to Health and Safety Code section 25395.75, or Prospective Purchaser pursuant to Health and Safety Code section 25395.91(a)(2) and 25395.69]** and has made all appropriate inquiries pursuant to **Health and Safety Code** section 25395.65 and section 25395.80.

Submittals to the **Additional Party**, pursuant to section 6.1 of the Agreement, shall be addressed as follows:

[Name of Company]
[Street Address]
[City, County, State, Zip Code]
Attention:
Telephone:
Fax:
Email address:

DTSC reviewed the all appropriate inquiries documentation submitted by [Existing BFP, CPO, PP, and ILO] and updated as necessary by **[Additional Party]** and has determined that the documentation meets the requirements for a Site Assessment Plan, pursuant to section 5.2 of this Agreement, and that no changes to the existing Site Assessment Plan are necessary.

Each undersigned representative of the Parties to this Agreement certifies that she or he is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the Parties to this Agreement.

_____ Dated: _____
[Typed Name of Person Authorized to Sign on Behalf of existing BFP, CPO, PP or ILO]
[Title]

_____ Dated: _____
[Typed Name of Person Authorized to Sign on Behalf of Additional Party]
[Title]

_____ Dated: _____
[Name of Branch Chief], Branch Chief
Site Mitigation and Restoration Program
Department of Toxic Substances Control

EXHIBIT F

Assignment and Assumption Agreement

This Assignment and Assumption Agreement (this "Assumption Agreement") is dated as of [_____] [__], (the "Effective Date"), by and among [NAME OF ORIGINAL PARTY/PARTIES TO THE CLRRA AGREEMENT], a [_____]("Assignor(s)"), [NAME OF ASSIGNEE/SUCCESSOR], a [_____]("Assignee"), and, for purposes of consenting to this Assumption Agreement only, the State of California, Department of Toxic Substances Control ("DTSC").

RECITALS

WHEREAS, Assignor is a party to that certain Standard Agreement for Participating Under California's Land Reuse and Revitalization Act Program, by and between Assignor and Department, dated as of [_____] (the "CLRRA Agreement");

WHEREAS, Assignor wishes to assign to Assignee all of its obligations (from and after the Effective Date) pursuant to this Assumption Agreement effective as of the Effective Date, and Assignee wishes to assume all of Assignor's obligations (to the extent arising from and after the Effective Date) with respect to the CLRRA Agreement effective as of the Effective Date; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby expressly acknowledged, the Parties hereto agree as follows:

1. Assumption. Effective as of the Effective Date, Assignee agrees to hereby assume all of the remaining obligations (to the extent arising from and after the Effective Date) of the CLRRA Agreement.

2. DTSC's Determinations. DTSC has determined that the Assignee meets all of the qualifying conditions of Health and Safety Code Section 25395.80 and either Section 25395.69 or 25395.70 of CLRRA, as applicable, and is qualified to perform any remaining obligations under the CLRRA Agreement, including, without limitation, long-term operation and maintenance, and, by execution of this Assumption Agreement, has agreed to assume such obligations.

3. Further Actions. DTSC hereby consents to the Assumption by the Assignee of the Assignor's remaining obligations under the CLRRA Agreement. Assignor and Assignee each covenants and agrees, at its own expense, to execute and deliver, at the request of the other party hereto, such further instruments of transfer and assignment and to take such other action as such other party may reasonably request

to more effectively consummate the assignments and assumptions contemplated by this Agreement.

4. Counterparts. This Assumption Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

5. Binding Effect. This Assumption Agreement shall be binding upon, and shall inure to the benefit of the parties, and each of their respective successors and permitted assigns.

6. Governing Law. This Assumption Agreement shall be governed by, and be construed in accordance with, the laws of the State of California.

IN WITNESS WHEREOF, the parties have executed this Assumption Agreement on the date first set forth above.

_____ Dated: _____

[Assignor:]
[Title]

_____ Dated: _____

[Assignee:]
[Title]

_____ Dated: _____

[Name of Branch Chief], Branch Chief
Site Mitigation and Restoration Program
Department of Toxic Substances Control

APPENDIX B1.

Historical Table Summaries – Metals in Soil

Tables

2011 Results: Ami Adini & Associatees, 2011, Phase II Environmental Site Assessment, Marketplace Brownfields Site Northeast of Commerce Street and Mission Inn Avenue, Riverside, California, August 3.

Table 7
Soil Sampling Analytical Results
Title 22 Metals
Marketplace Brownfields Site, Riverside, California

EPA Method		6010B/7471A (mg/kg)																
Sample Number	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
10 x STLC (mg/l)		150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
Industrial RSLs (mg/kg)		410	1.6	200,000	2,000	1,000	NE	310	41,000	800	160	5,100	20,000	5,100	5,100	NE	5,200	310,000
2 x Upper ECCM (mg/kg)		**3.90**	**22**	**2,800**	**5.4**	**3.4**	**3,158**	**93.8**	**192.8**	**215.8**	**1.8**	**19.2**	**1,018**	**0.86**	**16.6**	**2.2**	**576**	**472**
A8a-SB1	1/27/2011	**17.8**	3.5	130	ND	ND	37	10.2	47.3	**268**	0.061	2.4	ND	ND	ND	ND	175	126
A8a-SB2	1/27/2011	**45.4**	4.2	101	ND	ND	33.8	7.4	**866**	**3,790**	0.519	2.5	4	ND	ND	ND	133	**500**
A8a-SB3	1/27/2011	**46.5**	7.2	196	ND	2	364	11.4	**1,230**	**2,240**	**5.92**	**35.1**	178	ND	ND	ND	411	**5,740**
A8a-SB4	1/27/2011	ND	7	174	ND	ND	22.3	8	28.1	**2,700**	0.171	ND	ND	ND	ND	ND	134	313
A8a-SB5	1/27/2011	**35.2**	4.6	618	ND	**22.5**	369	24.6	**2,240**	**2,130**	**8.81**	**33.2**	147	ND	ND	ND	290	**10,200**
A8a-SB6	1/27/2011	**19.6**	6.1	600	ND	**14.8**	136	22.7	**511**	**1,240**	**7.57**	**53.2**	156	ND	ND	ND	221	**5,040**
A8b-SB1	1/27/2011	**12.3**	6.1	128	ND	3.2	65.9	10.2	**311**	**571**	0.302	3.1	13.1	ND	ND	ND	**177**	**561**
A8b-SB2	1/28/2011	ND	1.5	92.6	ND	ND	48.4	8.3	14.7	14.7	0.172	ND	16.8	ND	ND	ND	124	89
A8b-SB3	1/28/2011	ND	3.2	97.9	ND	ND	36.3	7.5	34.6	104	0.221	ND	59.2	ND	ND	ND	103	174
A8b-SB4	1/28/2011	ND	2.4	39.8	ND	ND	41.3	4.4	30.2	81.9	0.069	ND	18.6	ND	ND	ND	69.9	124
A8c-SB1	1/27/2011	ND	**23.9**	153	ND	ND	37.2	12.7	14.8	9.2	0.056	ND	8.5	ND	ND	ND	236	74.3
A8c-SB2	1/27/2011	**35.5**	2.5	222	ND	**21.5**	253	**261**	**389**	**1,220**	**3.75**	**246**	103	ND	ND	ND	256	**3,970**
A8c-SB3	1/27/2011	**12**	ND	241	ND	**6.7**	514	19.6	**676**	**541**	**3.08**	**37.6**	249	ND	ND	ND	115	**2,970**
A8c-SB4	1/27/2011	ND	2.2	265	ND	ND	20.2	10	19.4	**224**	0.126	ND	ND	ND	ND	ND	168	202
A8d-SB1	1/26/2011	ND	4.3	45.4	ND	ND	19.5	3.5	9.9	7.9	0.068	ND	ND	ND	ND	ND	71	33
A8d-SB2	1/26/2011	ND	4.6	110	ND	ND	16.4	6.2	148	66.9	0.16	ND	ND	ND	ND	ND	154	126
A8d-SB3	1/26/2011	ND	2.9	128	ND	ND	28.3	10.5	97.9	74.2	0.159	2.5	18.1	ND	ND	ND	156	107
A8d-SB4	1/26/2011	ND	2.8	137	ND	ND	17	11.2	15.3	15.9	ND	ND	ND	ND	ND	ND	155	54.3
A8e-SB1	1/25/2011	ND	2.1	369	ND	ND	324	11.9	98.2	**777.0**	0.103	5.3	ND	ND	ND	ND	**655**	199
A8e-SB2	1/25/2011	ND	3.3	252	ND	ND	280	19.3	**302**	138.0	ND	3.2	ND	ND	ND	ND	**586**	166
A8e-SB3	1/25/2011	ND	5.2	240	ND	ND	226	7.9	164	**244**	ND	3.6	ND	ND	**35.6**	ND	**463**	255
A8e-SB4	1/25/2011	ND	3.3	288	ND	ND	133	9	143	**278**	ND	3.4	ND	ND	ND	ND	538	**472**
A8e-SB5	1/26/2011	ND	2.8	153	ND	ND	23.1	12.5	39.7	39.8	0.087	ND	ND	ND	ND	ND	190	266
A8e-SB6	1/26/2011	ND	2.6	216	ND	ND	150.0	11.6	70.9	112	0.263	3.1	ND	ND	ND	ND	304	345
A8e-SB7	1/26/2011	ND	2.7	264	ND	ND	245.0	9.6	**258**	112	ND	4.6	ND	ND	ND	ND	521	216
A8e-SB8	1/26/2011	ND	ND	185	ND	ND	473.0	7.8	**239**	153	ND	4.2	ND	ND	ND	ND	**720**	185
A8f-SB1	1/25/2011	2.8	**166***	110	ND	ND	20	8.7	30.2	92.7	0.225	ND	4	ND	ND	ND	135	113
A8f-SB2	1/25/2011	ND	7.32	269	2.1	ND	36.4	3.4	48.9	61.1	ND	ND	ND	ND	ND	ND	424	132

Table 7
Soil Sampling Analytical Results
Title 22 Metals
Marketplace Brownfields Site, Riverside, California

EPA Method		6010B/7471A (mg/kg)																
Sample Number	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
10 x STLC (mg/l)		150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
Industrial RSLs (mg/kg)		410	1.6	200,000	2,000	1,000	NE	310	41,000	800	160	5,100	20,000	5,100	5,100	NE	5,200	310,000
2 x Upper ECCM (mg/kg)		**3.90**	**22**	**2,800**	**5.4**	**3.4**	**3,158**	**93.8**	**192.8**	**215.8**	**1.8**	**19.2**	**1,018**	**0.86**	**16.6**	**2.2**	**576**	**472**
A8f-SB3	1/25/2011	2.9	5	101	ND	ND	62.6	7	**202.0**	**233**	0.232	7.3	30.1	ND	2.2	ND	124	246
A8g-SB1	1/26/2011	ND	**113***	105	ND	ND	22.1	9.5	20.2	26.5	0.156	ND	ND	ND	ND	ND	130	69.3
A8g-SB2	1/26/2011	ND	**89.2***	125	ND	ND	18.7	11.1	16.6	17.2	0.061	ND	ND	ND	ND	ND	152	58.8
A8g-SB3	1/26/2011	2.7	**112***	67.9	ND	ND	95.4	6.6	115	67.9	0.28	ND	ND	ND	ND	ND	253	119
A8h-SB1	1/28/2011	ND	2.9	111	ND	ND	32.5	9.2	16.9	46.3	0.058	ND	8.7	ND	ND	ND	151	154
A8h-SB10	1/28/2011	ND	4	143	ND	ND	28	12.7	27.9	20.5	0.073	ND	15.6	ND	ND	ND	162	81
A8h-SB2	1/28/2011	3.5	5.6	180	ND	**10.8**	234	13.6	**1,080**	**583**	1.68	**55.5**	283	ND	ND	ND	146	**1,840**
A8h-SB3	1/28/2011	**4.1**	4.3	182	ND	2	95.4	8.4	**206**	**450**	1.25	14	44.9	ND	ND	ND	107	**1,380**
A8h-SB4	1/28/2011	**9**	3.8	175	ND	ND	246	12.6	**497**	**419**	0.839	3.7	163	ND	ND	ND	109	**1,180**
A8h-SB5	1/28/2011	ND	4.3	179	ND	ND	27.1	14.7	22.9	33.8	0.346	ND	19.6	ND	ND	ND	189	224
A8h-SB6	1/28/2011	ND	5.5	131	ND	ND	41.4	7	102	92.9	0.134	5.5	22.3	ND	ND	ND	185	300
A8h-SB7	1/28/2011	**14.7**	5.9	430	ND	ND	826	15.8	**1,470**	**2,320**	**7.35**	**39.8**	898	ND	ND	ND	229	**3,140**
A8h-SB8	1/28/2011	2.6	5	217	ND	ND	636	21.2	**791**	**430**	1.16	**146**	617	ND	ND	ND	159	**1,480**
A8h-SB9	1/28/2011	ND	4	136	ND	ND	24.8	14	21.2	18.6	ND	2.9	13.4	ND	ND	ND	153	93.1
A10a-SB1	1/28/2011	ND	3.8	127	ND	ND	29.9	12.5	29.3	19.6	0.204	ND	14.2	ND	ND	ND	135	74.9
A10a-SB2	1/28/2011	ND	3.2	114	ND	ND	19.4	10.6	23.2	9.6	ND	ND	ND	ND	ND	ND	165	57.5
A10b-SB1	1/26/2011	ND	2.7	159	ND	ND	63.3	11.9	62.7	24.2	0.06	2.2	7.2	ND	ND	ND	213	207
A10b-SB2	1/26/2011	**28**	0.98	109	**19.3**	ND	426	14.4	**2,050**	**666**	1.15	**25.7**	234	ND	ND	ND	117	**1,290**
A10b-SB3	1/26/2011	**40.7**	3.7	404	ND	ND	1,300	34.2	**6,520**	**4,260**	**3.27**	**151**	**1,870**	ND	ND	ND	350	**6,310**
A10b-SB4	1/26/2011	**6.9**	4.1	250	ND	ND	213	18.3	**1,050**	**759**	0.682	14.9	62.3	ND	ND	ND	343	**2,480**
A12 - SB1	1/31/2011	**112**	9.2	291	ND	ND	184	8.3	**1,030**	**3,980**	1.23	12.4	ND	ND	ND	ND	262	**1,590**
A12 - SB2	1/31/2011	3.6	ND	104	ND	ND	557	7.6	89.4	103	0.087	6	ND	ND	ND	ND	**613**	151
A12 - SB3	1/31/2011	3.4	ND	133	ND	ND	371	9.6	**686**	163	0.635	9.4	ND	ND	ND	ND	520	**539**
A12 - SB4	1/31/2011	3.1	2.7	125	ND	ND	331	9.3	**7,150**	**397**	0.105	8.3	ND	ND	ND	ND	**654**	**4,450**
A12 - SB5	1/31/2011	**12.9**	8.2	271	ND	**41.5**	92.8	10.6	**440**	**1,050**	1.01	15.3	34.8	ND	**21.4**	ND	138	**1,210**
A13-SB1	1/31/2011	ND	9.1	101	ND	ND	18.3	6.6	25.3	124	0.13	ND	ND	ND	ND	ND	88.6	144
A13-SB2	1/31/2011	ND	3.3	79.3	ND	ND	12.7	5.8	25.2	146	**6.2**	ND	ND	ND	ND	ND	72.9	**361**
A13-SB3	2/3/2011	ND	**63.5***	373	ND	ND	29.8	18.5	42.7	48.9	0.118	2.1	ND	ND	ND	ND	211	118

Table 7
Soil Sampling Analytical Results
Title 22 Metals
Marketplace Brownfields Site, Riverside, California

EPA Method		6010B/7471A (mg/kg)																
Sample Number	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
10 x STLC (mg/l)		150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
Industrial RSLs (mg/kg)		410	1.6	200,000	2,000	1,000	NE	310	41,000	800	160	5,100	20,000	5,100	5,100	NE	5,200	310,000
2 x Upper ECCM (mg/kg)		**3.90**	**22**	**2,800**	**5.4**	**3.4**	**3,158**	**93.8**	**192.8**	**215.8**	**1.8**	**19.2**	**1,018**	**0.86**	**16.6**	**2.2**	**576**	**472**
D1 (A8e-SB7)	1/26/2011	ND	2.8	283	ND	ND	252.0	10.6	**670**	198	ND	5	ND	ND	ND	ND	**661**	451
D2 (A10b-SB4)	1/26/2011	**10**	5.1	262	ND	ND	310	19.9	**5,740**	**799**	0.42	**47.8**	59.1	ND	ND	ND	334	**1,900**
D3 (A8a-SB1)	1/27/2011	ND	3.5	126	ND	ND	33.5	11.2	18.8	14.1	ND	2.7	5.7	ND	7.9	ND	138	59.8
D4 (A8c-SB1)	1/27/2011	ND	**43.4**	160	ND	ND	22.6	12.8	16	7.2	ND	ND	ND	ND	ND	ND	163	60.6
D5 (A8a-SB4)	1/27/2011	ND	5.2	165	ND	ND	16.6	7.8	33.7	153	0.139	ND	ND	ND	ND	ND	102	175
D6 (A8h-SB9)	1/28/2011	ND	3.1	109	ND	ND	17.2	11.2	15.2	8.9	ND	ND	ND	ND	ND	ND	132	46.8
Practical Quantitation Limit		2	0.5	2	2	2	2	2	2	2	0.05	2	2	0.5	2	2	2	1
Minimum		2.60	0.98	39.80	2.10	2.00	12.70	3.40	9.90	7.20	0.06	2.10	4.00	-	2.20	-	69.90	33.00
Maximum		112.00	166.00	618.00	19.30	41.50	1,300.00	261.00	7,150.00	4,260.00	8.81	246.00	1,870.00	-	35.60	-	720.00	10,200.00
Average		19.49	14.25	191.18	10.70	13.89	171.94	15.58	619.09	564.44	1.24	27.58	168.07	-	16.78	-	247.52	1,045.05
Median		12.00	4.15	156.00	10.70	10.80	55.50	10.60	98.05	142.00	0.23	6.00	32.45	-	14.65	-	166.50	211.50
TTLC (mg/kg)		500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
STLC (mg/l)		15	5.0	100	0.75	1.0	5	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
10 x STLC (mg/l)		150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
TCLP (mg/l)		NE	5	100	NE	1	5	NE	NE	5	0.2	NE	NE	1	5	NE	NE	NE
Residential CHSSL (mg/kg)		30	0.07	5,200	16	1.7	100,000	660	3,000	80	18	380	1,600	380	380	5.0	530	23,000
Industrial CHSSL (mg/kg)		380	0.24	63,000	190	7.5	100,000	3,200	38,000	320	180	4,800	16,000	4,800	4,800	63.0	6,700	100,000
Residential RSLs (mg/kg)		31	0.39	16,000	160	78	NE	23	3,100	400	13	390	1,500	390	390	NE	390	23,000
Industrial RSLs (mg/kg)		410	1.6	200,000	2,000	1,000	NE	310	41,000	800	160	5,100	20,000	5,100	5,100	NE	5,200	310,000
ECCM Mean (mg/kg)		0.5	2.8	468	1.14	0.26	76	12.6	24	44.6	0.2	0.9	36	0.028	0.8	0.56	101	145
ECCM Range (mg/kg)		(0.15-1.95)	(0.6-11.0)	(133-1,400)	(0.25-2.70)	(0.05-1.70)	(23-1,579)	(2.7-46.9)	(9.1–96.4)	(14.3–107.9)	(0.05–0.90)	(0.1–9.6)	(9–509)	(0.14–0.43)	(0.1–8.3)	(0.17–1.10)	(39–288)	(88–236)
Number of Samples Exceeding the Maximum Value of ECCM		25	13	0	1	9	0	1	32	35	14	15	3	0	2	0	17	29
Percentage of Samples Exceeding the Maximum Value of ECCM		40.32%	20.97%	0.00%	1.61%	14.52%	0.00%	1.61%	51.61%	56.45%	22.58%	24.19%	4.84%	0.00%	3.23%	0.00%	27.42%	46.77%

Table 7
Soil Sampling Analytical Results
Title 22 Metals

Marketplace Brownfields Site, Riverside, California

EPA Method		6010B/7471A (mg/kg)																
Sample Number	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
10 x STLC (mg/l)		150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
Industrial RSLs (mg/kg)		410	1.6	200,000	2,000	1,000	NE	310	41,000	800	160	5,100	20,000	5,100	5,100	NE	5,200	310,000
2 x Upper ECCM (mg/kg)		**3.90**	**22**	**2,800**	**5.4**	**3.4**	**3,158**	**93.8**	**192.8**	**215.8**	**1.8**	**19.2**	**1,018**	**0.86**	**16.6**	**2.2**	**576**	**472**
Number of Samples Exceeding the Maximum Value of 2xECCM		17	2	0	1	6	0	1	25	26	8	11	1	0	2	0	6	21
Percentage of Samples Exceeding the Maximum Value of 2xECCM		27.42%	3.23%	0.00%	1.61%	9.68%	0.00%	1.61%	40.32%	41.94%	12.90%	17.74%	1.61%	0.00%	3.23%	0.00%	9.68%	33.87%
Number of Samples Exceeding Industrial RSL		0	51	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
Percentage of Samples Exceeding Industrial RSL		0.00%	82.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Number of Samples Exceeding Residential RSL		6	53	0	0	0	0	3	3	20	0	0	1	0	0	0	12	0
Percentage of Samples Exceeding Residential RSL		9.68%	85.48%	0.00%	0.00%	0.00%	0.00%	4.84%	4.84%	32.26%	0.00%	0.00%	1.61%	0.00%	0.00%	0.00%	19.35%	0.00%

Notes:

ND = Not detected at or above detection limits
NE = Not established
mg/kg = Milligrams per kilogram
TTLC = Total threshold limit concentration, used for California regulated hazardous waste (California Code of Regulations, Title 22, Chapter 11, Article 3). If a substance in a waste is equal to or greater than the TTLC level, it is considered a hazardous toxic waste.
STLC = Soluble threshold limit concentration; if a substance is ten times the STLC value found in the TTLC, the waste extraction test (WET) is indicated. If any substance in the waste extract is equal to or greater than the STLC value, it is considered a hazardous toxic waste.
TCLP = Toxicity characteristic leaching procedure
CHHSL = California Human Health Screening Level for residential land use (Cal/EPA 2010)
RSL = Regional soil screening level for residential air use (USEPA 2009)
ECCM = Element Concentration in California, Mean; data show trace element concentrations in soils of the western US that are considered typical, normal, acceptable, and non-harmful (Bradford, G.R., et al., 1996; Shacklette and Boerngen, 1984)
Note: Soil samples were obtained from 0.5 to 1 foot below ground surface
Bold = Concentrations at or above 2 x ECCM
Gray cell = Concentrations at or above industrial RSLs
Green cell = Concentrations at or above 10 x STLC
Blue cell = Concentrations above industrial RSLs and also above 10 x STLC

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Tables

2015 Results: AMEC Foster Wheeler, 2015, Additional Phase II Environmental Site Assessment Report, Riverside Scrap Iron & Metal Site, Riverside, California, December 9.

TABLE 2

SUMMARY OF METALS IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site, Riverside, California
Riverside, California

Concentrations total metals reported in milligrams per kilogram (mg/kg) and for soluble metals as milligrams per liter (mg/L)

Sample/ Boring ID	Area	Date	Depth (feet bgs)	EPA Methods 6010B/7471A total metal (mg/kg) / [soluble metal using STLC extraction method (mg/L)] / {soluble metal using TCLP extraction method (mg/L)}																
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
California Background (upper quartile)				*0.73*	*4.7*	*625*	*1.53*	*0.44*	*115*	*18.3*	*36.6*	*26.7*	*0.34*	*1.4*	*56*	*0.05*	*0.53*	*0.69*	*134*	*170*
California Background (maximum)				*1.95*	*11*	*1,400*	*2.7*	*1.7*	*1,579*	*46.9*	*96.4*	*107.9*	*0.9*	*9.6*	*509*	*0.43*	*8.3*	*1.1*	*288*	*236*
Industrial RSLs (mg/kg)				410	1.6	200,000	2,000	1,000	NA	310	41,000	800	160	5,100	20,000	5,100	5,100	NA	5,200	310,000
TTLC (mg/kg)				500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
STLC (mg/l)				15	5.0	100	0.75	1.0	5	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
10 x STLC (mg/l)				150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
TCLP (mg/l)				NA	5	100	NA	1	5	NA	NA	5	0.2	NA	NA	1	5	NA	NA	NA
NS1	8e	8/10/2015	0.25	ND<10	**2.0**	**160**	ND<1.0	ND<1.0	**60**	**6.2**	**20**	**680 / [47]**	**0.22**	ND<5.0	**8.3**	ND<0.50	ND<1.0	ND<5.0	**27**	**640**
		8/10/2015	1	—	—	—	—	—	—	—	—	**61**	—	—	—	—	—	—	—	—
NS2	8d	8/18/2015	0.25	ND<10UJ	**5.0**	**52**	ND<1.0	ND<1.0	**61**	**4.8**	**69**	**49**	**0.054**	**13**	**90**	ND<0.50UJ	ND<1.0	ND<5.0	**22**	**66**
		8/18/2015	2.5	ND<10	**2.1**	**130**	ND<1.0	ND<1.0	**14**	**7.6**	**9.6**	ND<3.0	ND<0.020	ND<5.0	**9.6**	ND<0.50	ND<1.0	ND<5.0	**36**	**46**
NS3	8f	8/10/2015	2.5	ND<10	**90**	**110**	ND<1.0	ND<1.0	**16**	**9.6**	**16**	**7.9**	ND<0.020	ND<5.0	**12**	ND<0.50	ND<1.0	ND<5.0	**39**	**92**
		8/10/2015	5	—	**11**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NS7	8a	8/21/2015	2.5	ND<10	**4.7**	**62**	ND<1.0	ND<1.0	**10**	**4**	**53**	**82**	**0.086**	ND<5.0	**8.7**	ND<0.50	ND<1.0	ND<5.0	**18**	**130**
NS8	8a	8/21/2015	2.5	ND<10	**2.8**	**170**	ND<1.0	ND<1.0	**20**	**15**	**16**	**4.7**	ND<0.020	ND<5.0	**14**	ND<0.50	ND<1.0	ND<5.0	**65**	**77**
NS9	8a	8/11/2015	2.5	ND<10	**3.3**	**140**	ND<1.0	ND<1.0	**18**	**10**	**14**	ND<3.0	ND<0.020	ND<5.0	**13**	ND<0.50	ND<1.0	ND<5.0	**48**	**59**
NS10A	8c	8/21/2015	2.5	ND<10	**1.8**	**160**	ND<1.0	ND<1.0	**18**	**11**	**16**	**11J**	ND<0.020	ND<5.0	**12**	ND<0.50	ND<1.0	ND<5.0	**51**	**66**
NS13	10b	8/13/2015	2.5	ND<10	**3.6**	**120**	ND<1.0	ND<1.0	**16**	**9.4**	**17**	**11**	**0.03**	ND<5.0	**14**	ND<0.50	ND<1.0	ND<5.0	**40**	**74**
NS14	8c	8/14/2015	2.5	ND<10	**4.1**	**130**	ND<1.0	ND<1.0	**17**	**10**	**14**	**4.5**	ND<0.020	ND<5.0	**12**	ND<0.50	ND<1.0	ND<5.0	**49**	**59**
NS15	8c	8/14/2015	2.5	ND<10	**2.3**	**120**	ND<1.0	ND<1.0	**14**	**10**	**11**	**4.2**	ND<0.020	ND<5.0	**11**	ND<0.50	ND<1.0	ND<5.0	**48**	**60**
NS16	12	8/13/2015	2.5	ND<10	**3.8**	**130**	ND<1.0	ND<1.0	**18**	**10**	**15**	**4.8**	ND<0.020	ND<5.0	**13**	ND<0.50	ND<1.0	ND<5.0	**47**	**54**
NS24	8e	8/10/2015	0.25	ND<10	**2.5**	**120**	ND<1.0	ND<1.0	**16**	**8.9**	**16**	**13**	**0.024**	ND<5.0	**9.9**	ND<0.50	ND<1.0	ND<5.0	**41**	**66**
		8/10/2014	2.5	ND<10	ND<0.50	**57**	ND<1.0	ND<1.0	**7.3**	**4.4**	**6.1**	ND<3.0	ND<0.020	ND<5.0	**12**	ND<5.0	ND<1.0	ND<5.0	**19**	**25**
S1	8e	8/11/2015	0.25	ND<10	**7.5**	**680**	ND<1.0	ND<1.0	**24**	**8.2**	**37**	**480 / [21] /{ND<0.50}**	**0.20**	ND<5.0	**13**	ND<0.50	**5.9**	ND<5.0	**29**	**230**
		8/11/2015	1	—	—	—	—	—	—	—	—	NA / [ND<0.50]	—	—	—	—	—	—	—	—
		8/11/2015	2.5	ND<10	**4.2**	**130**	ND<1.0	ND<1.0	**18**	**10**	**12**	**18**	**0.021**	ND<5.0	**11**	ND<0.50	ND<1.0	ND<5.0	**44**	**64**
S2	8e	8/12/2015	0.25	ND<10	**5.0**	**110**	ND<1.0	ND<1.0	**26**	**11**	**40**	**20**	ND<.020	ND<5.0	**20**	ND<5.0	ND<1.0	ND<5.0	**50**	**130**
		8/12/2015	2.5	ND<10	**2.8**	**120**	ND<1.0	ND<1.0	**17**	**10**	**17**	**9.1**	ND<.020	ND<5.0	**12**	ND<0.50	ND<1.0	ND<5.0	**45**	**71**
S3	8f	8/11/2015	0.25	ND<10	**120**	**150**	ND<1.0	ND<1.0	**18**	**7.5**	**42**	**97**	**0.070**	ND<5.0	**13**	ND<0.50	ND<1.0	ND<5.0	**34**	**140**
		8/11/2015	2.5	ND<10	**46**	**120**	ND<1.0	ND<1.0	**18**	**10**	**11**	ND<3.0	ND<0.020	ND<5.0	**11**	ND<0.50	ND<1.0	ND<5.0	**47**	**55**
		8/11/2015	5	—	**7.5**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S4	8d	8/18/2015	0.25	ND<10UJ	**2.8**	**50**	ND<1.0	ND<1.0	**5.8**	**3.3**	**9.3**	**3.6**	**0.042**	ND<5.0	**5.6**	ND<0.50UJ	ND<1.0	ND<5.0	**17**	**32**
		8/18/2015	2.5	ND<10UJ	ND<0.50	**82**	ND<1.0	ND<1.0	**11**	**6.4**	**8.3**	ND<3.0	ND<0.020	ND<5.0	**7.3**	ND<0.50UJ	ND<1.0	ND<5.0	**29**	**32**
S5	8d	8/12/2015	0.25	ND<10	**5.8**	**86**	ND<1.0	ND<1.0	**45**	**5.1**	**74**	**190**	**0.078**	ND<5.0	**61**	ND<0.50	ND<1.0	ND<5.0	**41**	**220**
		8/12/2015	1	—	—	—	—	—	—	—	—	**25**	—	—	—	—	—	—	—	—
		8/12/2015	2.5	ND<10	**3.4**	**130**	ND<1.0	ND<1.0	**14**	**9.8**	**12**	ND<3.0	**0.078**	ND<5.0	**9.9**	ND<0.50	ND<1.0	ND<5.0	**42**	**51**
S7	12	8/11/2015	2.5	ND<10	**8.7**	**120**	ND<1.0	ND<1.0	**19**	**11**	**16**	**4.1**	ND<0.020	ND<5.0	**14**	ND<0.50	ND<1.0	ND<5.0	**48**	**57**
S8	8a	8/13/2015	2.5	ND<10	**3.4**	**120**	ND<1.0	ND<1.0	**16**	**8.1**	**12**	**6.9**	ND<0.020	ND<5.0	**12**	ND<0.50	ND<1.0	ND<5.0	**41**	**120**

TABLE 2

SUMMARY OF METALS IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site, Riverside, California
Riverside, California

Concentrations total metals reported in milligrams per kilogram (mg/kg) and for soluble metals as milligrams per liter (mg/L)

Sample/ Boring ID	Area	Date	Depth (feet bgs)	EPA Methods 6010B/7471A total metal (mg/kg) / [soluble metal using STLC extraction method (mg/L)] / {soluble metal using TCLP extraction method (mg/L)}																
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
California Background (upper quartile)				*0.73*	*4.7*	*625*	*1.53*	*0.44*	*115*	*18.3*	*36.6*	*26.7*	*0.34*	*1.4*	*56*	*0.05*	*0.53*	*0.69*	*134*	*170*
California Background (maximum)				*1.95*	*11*	*1,400*	*2.7*	*1.7*	*1,579*	*46.9*	*96.4*	*107.9*	*0.9*	*9.6*	*509*	*0.43*	*8.3*	*1.1*	*288*	*236*
Industrial RSLs (mg/kg)				410	1.6	200,000	2,000	1,000	NA	310	41,000	800	160	5,100	20,000	5,100	5,100	NA	5,200	310,000
TTLC (mg/kg)				500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
STLC (mg/l)				15	5.0	100	0.75	1.0	5	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
10 x STLC (mg/l)				150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
TCLP (mg/l)				NA	5	100	NA	1	5	NA	NA	5	0.2	NA	NA	1	5	NA	NA	NA
S11	8a	8/13/2015	0.25	ND<10	**5.5**	**96**	ND<1.0	**4.2**	**40**	**7.9**	**740**	**300 / [130] / {0.56}**	**0.40**	ND<5.0	**54**	ND<0.50	**6.0**	ND<5.0	**38**	**1200**
		8/13/2015	1	—	—	—	—	—	—	—	—	**9.6 / [0.77]**	—	—	—	—	—	—	—	—
		8/13/2015	2.5	ND<10	**2.8**	**140**	ND<1.0	ND<1.0	**19**	**12**	**14**	**5.0**	ND<0.020	ND<5.0	**12**	ND<0.50	ND<1.0	ND<5.0	**55**	**67**
S12	8a	8/12/2015	0.25	ND<10	**7.1**	**110**	ND<1.0	ND<1.0	**12**	**5.9**	**14**	**170**	ND<.020	ND<5.0	ND<3.0	ND<0.50	ND<1.0	ND<5.0	**36**	**78**
		8/12/2015	2.5	ND<10	**5.1**	**140**	ND<1.0	ND<1.0	**17**	**10**	**46**	**130**	ND<.020	ND<5.0	**17**	ND<0.50	ND<1.0	ND<5.0	**46**	**1000**
		8/12/2015	5	—	—	—	—	—	—	—	—	**21**	—	—	—	—	—	—	—	—
S13	8a	8/20/2015	2.5	ND<10UJ	**1.6**	**130**	ND<1.0	ND<1.0	**18**	**10**	**12**	**3.4**	ND<0.020	ND<5.0	**13**	ND<0.50UJ	ND<1.0	ND<5.0	**45**	**51**
S14	10b	8/13/2015	0.25	**27**	**12**	**300**	ND<1.0	**12**	**800 / [3.5]**	**27**	**2700 / [110]**	**1500 / [180] / {10}**	**3.8**	**73**	**530**	ND<0.50	**3.6**	ND<5.0	**47**	**4300 / [280]**
		8/13/2015	1	**44**	**21**	**400**	ND<1.0	**82**	**150**	**23**	**2300**	**2300**	—	**22**	**230**	ND<0.50	**22**	ND<5.0	**36**	**8300**
		8/13/2015	2.5	ND<10	**4.0**	**170**	ND<1.0	ND<1.0	**21**	**12**	**18**	**8.1**	ND<0.020	ND<5.0	**17**	ND<0.50	ND<1.0	ND<5.0	**52**	**170**
S15	10b	8/12/2015	0.25	ND<10	**2.2**	**130**	ND<1.0	ND<1.0	**600**	**11**	**72**	**86**	**0.17**	**7.6**	**130**	ND<0.50	ND<1.0	ND<5.0	**270**	**460**
		8/12/2015	1	ND<10	**3.2**	**180**	ND<1.0	ND<1.0	**21**	**11**	**20**	**8.4**	**0.028J**	ND<5.0	**15**	ND<0.050	ND<1.0	ND<5.0	**51**	**68**
		8/12/2015	2.5	ND<10	**4.0**	**160**	ND<1.0	ND<1.0	**24**	**12**	**20**	**22**	**0.039**	ND<5.0	**13**	ND<0.050	ND<1.0	ND<5.0	**58**	**390**
S16	8b	8/14/2015	2.5	ND<10	**3.2**	**150**	ND<1.0	ND<1.0	**15**	**11**	**12**	**3.9**	ND<0.020	ND<5.0	**11**	ND<0.50	ND<1.0	ND<5.0	**47**	**59**
S17	8g	8/14/2015	2.5	ND<10	**3.1**	**140**	ND<1.0	ND<1.0	**20**	**12**	**17**	**5.4**	ND<0.020	ND<5.0	**15**	ND<0.50	ND<1.0	ND<5.0	**52**	**64**
S18	8h	8/14/2015	2.5	ND<10	**2.9**	**130**	ND<1.0	ND<1.0	**72**	**10**	**16**	**6.9**	ND<0.020	ND<5.0	**14**	ND<0.50	ND<1.0	ND<5.0	**45**	**61**
S19	8g	8/14/2015	0.25	ND<10	**3.2**	**110**	ND<1.0	ND<1.0	**14**	**8.2**	**14**	**10**	ND<0.020	ND<5.0	**9.8**	ND<0.50	ND<1.0	ND<5.0	**38**	**67**
		8/14/2015	2.5	ND<10	**14**	**110**	ND<1.0	ND<1.0	**14**	**8.9**	**12**	**4.1**	ND<0.020	ND<5.0	**10**	ND<0.50	ND<1.0	ND<5.0	**38**	**48**
ES1	10a	8/19/2015	0.25	ND<10UJ	**3.4**	**41**	ND<1.0	ND<1.0	**8.9**	**4.6**	**17**	**39**	ND<0.020	ND<5.0	**9.7**	ND<0.50UJ	ND<1.0	ND<5.0	**22**	**110**
		8/19/2015	2.5	ND<10UJ	**1.8**	**130**	ND<1.0	ND<1.0	**18**	**9.7**	**14**	**4.3**	**0.024**	ND<5.0	**13**	ND<0.50UJ	ND<1.0	ND<5.0	**43**	**50**
ES2	8b	8/14/2015	0.25	ND<10	**2.8**	**240**	ND<1.0	ND<1.0	**16**	**8.9**	**23**	**95**	**0.031**	ND<5.0	**8.7**	ND<0.50	ND<1.0	ND<5.0	**38**	**150**
		8/14/2015	2.5	ND<10	**2.3**	**130**	ND<1.0	ND<1.0	**17**	**9.5**	**13**	**3.9**	ND<0.020	ND<5.0	**11**	ND<0.50	ND<1.0	ND<5.0	**45**	**52**
A8a-SB1	8a	1/27/2011	1	**17.8**	**3.5**	**130**	ND<2	ND<2	**37**	**10.2**	**47.3**	**268**	**0.061**	**2.4**	ND<2	ND<0.5	ND	ND	**175**	**126**
A8a-SB2	8a	1/27/2011	1	**45.4**	**4.2**	**101**	ND<2	ND<2	**33.8**	**7.4**	**866**	**3,790**	**0.519**	**2.5**	**4**	ND<0.5	ND<2	ND<2	**133**	**500**
A8a-SB3	8a	1/27/2011	1	**46.5**	**7.2**	**196**	ND<2	**2**	**364**	**11.4**	**1,230**	**2,240**	**5.92**	**35.1**	**178**	ND<0.5	ND<2	ND<2	**411**	**5,740**
A8a-SB4	8a	1/27/2011	1	ND<2	**7**	**174**	ND<2	ND<2	**22.3**	**8**	**28.1**	**2,700**	**0.171**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**134**	**313**
A8a-SB5	8a	1/27/2011	1	**35.2**	**4.6**	**618**	ND<2	**22.5**	**369**	**24.6**	**2,240**	**2,130**	**8.81**	**33.2**	**147**	ND<0.5	ND<2	ND<2	**290**	**10,200**
A8a-SB6	8a	1/27/2011	1	**19.6**	**6.1**	**600**	ND<2	**14.8**	**136**	**22.7**	**511**	**1,240**	**7.57**	**53.2**	**156**	ND<0.5	ND<2	ND<2	**221**	**5,040**
A8b-SB1	8b	1/27/2011	1	**12.3**	**6.1**	**128**	ND<2	**3.2**	**65.9**	**10.2**	**311**	**571**	**0.302**	**3.1**	**13.1**	ND<0.5	ND<2	ND<2	**177**	**561**
A8b-SB2	8b	1/28/2011	1	ND<2	**1.5**	**92.6**	ND<2	ND<2	**48.4**	**8.3**	**14.7**	**14.7**	**0.172**	ND<2	**16.8**	ND<0.5	ND<2	ND<2	**124**	**89**
A8b-SB3	8b	1/28/2011	1	ND<2	**3.2**	**97.9**	ND<2	ND<2	**36.3**	**7.5**	**34.6**	**104**	**0.221**	ND<2	**59.2**	ND<0.5	ND<2	ND<2	**103**	**174**

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Riverside, California

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California Background (maximum)				*1.95*	*11*	*1,400*	*2.7*	*1.7*	*1,579*	*46.9*	*96.4*	*107.9*	*0.9*	*9.6*	*509*	*0.43*	*8.3*	*1.1*	*288*	*236*
Industrial RSLs (mg/kg)				410	1.6	200,000	2,000	1,000	NA	310	41,000	800	160	5,100	20,000	5,100	5,100	NA	5,200	310,000
TTLC (mg/kg)				500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
STLC (mg/l)				15	5.0	100	0.75	1.0	5	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
10 x STLC (mg/l)				150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
TCLP (mg/l)				NA	5	100	NA	1	5	NA	NA	5	0.2	NA	NA	1	5	NA	NA	NA
A8b-SB4	8b	1/28/2011	1	ND<2	**2.4**	**39.8**	ND<2	ND<2	**41.3**	**4.4**	**30.2**	**81.9**	**0.069**	ND<2	**18.6**	ND<0.5	ND<2	ND<2	**69.9**	**124**
A8c-SB1	8c	1/27/2011	1	ND<2	**23.9**	**153**	ND<2	ND<2	**37.2**	**12.7**	**14.8**	**9.2**	**0.056**	ND<2	**8.5**	ND<0.5	ND<2	ND<2	**236**	**74.3**
A8c-SB2	8c	1/27/2011	1	**35.5**	**2.5**	**222**	ND<2	**21.5**	**253**	**261**	**389**	**1,220**	**3.75**	**246**	**103**	ND<0.5	ND<2	ND<2	**256**	**3,970**
A8c-SB3	8c	1/27/2011	1	**12**	ND<0.5	**241**	ND<2	**6.7**	**514**	**19.6**	**676**	**541**	**3.08**	**37.6**	**249**	ND<0.5	ND<2	ND<2	**115**	**2,970**
A8c-SB4	8c	1/27/2011	1	ND<2	**2.2**	**265**	ND<2	ND<2	**20.2**	**10**	**19.4**	**224**	**0.126**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**168**	**202**
A8d-SB1	8d	1/26/2011	1	ND<2	**4.3**	**45.4**	ND<2	ND<2	**19.5**	**3.5**	**9.9**	**7.9**	**0.068**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**71**	**33**
A8d-SB2	8d	1/26/2011	1	ND<2	**4.6**	**110**	ND<2	ND<2	**16.4**	**6.2**	**148**	**66.9**	**0.16**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**154**	**126**
A8d-SB3	8d	1/26/2011	1	ND<2	**2.9**	**128**	ND<2	ND<2	**28.3**	**10.5**	**97.9**	**74.2**	**0.159**	**2.5**	**18.1**	ND<0.5	ND<2	ND<2	**156**	**107**
A8d-SB4	8d	1/26/2011	1	ND<2	**2.8**	**137**	ND<2	ND<2	**17**	**11.2**	**15.3**	**15.9**	ND<0.05	ND<2	ND<2	ND<0.5	ND<2	ND<2	**155**	**54.3**
A8e-SB1	8e	1/25/2011	1	ND<2	**2.1**	**369**	ND<2	ND<2	**324**	**11.9**	**98.2**	**777.0**	**0.103**	**5.3**	ND<2	ND<0.5	ND<2	ND<2	**655**	**199**
A8e-SB2	8e	1/25/2011	1	ND<2	**3.3**	**252**	ND<2	ND<2	**280**	**19.3**	**302**	**138.0**	ND<0.05	**3.2**	ND<2	ND<0.5	ND<2	ND<2	**586**	**166**
A8e-SB3	8e	1/25/2011	1	ND<2	**5.2**	**240**	ND<2	ND<2	**226**	**7.9**	**164**	**244**	ND<0.05	**3.6**	ND<2	ND<0.5	**35.6**	ND<2	**463**	**255**
A8e-SB4	8e	1/25/2011	1	ND<2	**3.3**	**288**	ND<2	ND<2	**133**	**9**	**143**	**278**	ND<0.05	**3.4**	ND<2	ND<0.5	ND<2	ND<2	**538**	**472**
A8e-SB5	8e	1/26/2011	1	ND<2	**2.8**	**153**	ND<2	ND<2	**23.1**	**12.5**	**39.7**	**39.8**	**0.087**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**190**	**266**
A8e-SB6	8e	1/26/2011	1	ND<2	**2.6**	**216**	ND<2	ND<2	**150.0**	**11.6**	**70.9**	**112**	**0.263**	**3.1**	ND<2	ND<0.5	ND<2	ND<2	**304**	**345**
A8e-SB7	8e	1/26/2011	1	ND<2	**2.7**	**264**	ND<2	ND<2	**245.0**	**9.6**	**258**	**112**	ND<0.05	**4.6**	ND<2	ND<0.5	ND<2	ND<2	**521**	**216**
A8e-SB8	8e	1/26/2011	1	ND<2	ND<0.5	**185**	ND<2	ND<2	**473.0**	**7.8**	**239**	**153**	ND<0.05	**4.2**	ND<2	ND<0.5	ND<2	ND<2	**720**	**185**
A8f-SB1	8f	1/25/2011	1	**2.8**	**166***	**110**	ND<2	ND<2	**20**	**8.7**	**30.2**	**92.7**	**0.225**	ND<2	**4**	ND<0.5	ND<2	ND<2	**135**	**113**
A8f-SB2	8f	1/25/2011	1	ND<2	**7.32**	**269**	**2.1**	ND<2	**36.4**	**3.4**	**48.9**	**61.1**	ND<0.05	ND<2	ND<2	ND<0.5	ND<2	ND<2	**424**	**132**
A8f-SB3	8f	1/25/2011	1	**2.9**	**5**	**101**	ND<2	ND<2	**62.6**	**7**	**202.0**	**233**	**0.232**	**7.3**	**30.1**	ND<0.5	**2.2**	ND<2	**124**	**246**
A8g-SB1	8g	1/26/2011	1	ND<2	**113***	**105**	ND<2	ND<2	**22.1**	**9.5**	**20.2**	**26.5**	**0.156**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**130**	**69.3**
A8g-SB2	8g	1/26/2011	1	ND<2	**89.2***	**125**	ND<2	ND<2	**18.7**	**11.1**	**16.6**	**17.2**	**0.061**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**152**	**58.8**
A8g-SB3	8g	1/26/2011	1	**2.7**	**112***	**67.9**	ND<2	ND<2	**95.4**	**6.6**	**115**	**67.9**	**0.28**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**253**	**119**
A8h-SB1	8h	1/28/2011	1	ND<2	**2.9**	**111**	ND<2	ND<2	**32.5**	**9.2**	**16.9**	**46.3**	**0.058**	ND<2	**8.7**	ND<0.5	ND<2	ND<2	**151**	**154**
A8h-SB10	8h	1/28/2011	1	ND<2	**4**	**143**	ND<2	ND<2	**28**	**12.7**	**27.9**	**20.5**	**0.073**	ND<2	**15.6**	ND<0.5	ND<2	ND<2	**162**	**81**
A8h-SB2	8h	1/28/2011	1	**3.5**	**5.6**	**180**	ND<2	**10.8**	**234**	**13.6**	**1,080**	**583**	**1.68**	**55.5**	**283**	ND<0.5	ND<2	ND<2	**146**	**1,840**
A8h-SB3	8h	1/28/2011	1	**4.1**	**4.3**	**182**	ND<2	**2**	**95.4**	**8.4**	**206**	**450**	**1.25**	**14**	**44.9**	ND<0.5	ND<2	ND<2	**107**	**1,380**
A8h-SB4	8h	1/28/2011	1	**9**	**3.8**	**175**	ND<2	ND<2	**246**	**12.6**	**497**	**419**	**0.839**	**3.7**	**163**	ND<0.5	ND<2	ND<2	**109**	**1,180**
A8h-SB5	8h	1/28/2011	1	ND<2	**4.3**	**179**	ND<2	ND<2	**27.1**	**14.7**	**22.9**	**33.8**	**0.346**	ND<2	**19.6**	ND<0.5	ND<2	ND<2	**189**	**224**
A8h-SB6	8h	1/28/2011	1	ND<2	**5.5**	**131**	ND<2	ND<2	**41.4**	**7**	**102**	**92.9**	**0.134**	**5.5**	**22.3**	ND<0.5	ND<2	ND<2	**185**	**300**
A8h-SB7	8h	1/28/2011	1	**14.7**	**5.9**	**430**	ND<2	ND<2	**826**	**15.8**	**1,470**	**2,320**	**7.35**	**39.8**	**898**	ND<0.5	ND<2	ND<2	**229**	**3,140**

TABLE 2

SUMMARY OF METALS IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site, Riverside, California
Riverside, California

Concentrations total metals reported in milligrams per kilogram (mg/kg) and for soluble metals as milligrams per liter (mg/L)

Sample/ Boring ID	Area	Date	Depth (feet bgs)	EPA Methods 6010B/7471A total metal (mg/kg) / [soluble metal using STLC extraction method (mg/L)] / {soluble metal using TCLP extraction method (mg/L)}																
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Califomia Background (upper quartile)				*0.73*	*4.7*	*625*	*1.53*	*0.44*	*115*	*18.3*	*36.6*	*26.7*	*0.34*	*1.4*	*56*	*0.05*	*0.53*	*0.69*	*134*	*170*
California Background (maximum)				*1.95*	*11*	*1,400*	*2.7*	*1.7*	*1,579*	*46.9*	*96.4*	*107.9*	*0.9*	*9.6*	*509*	*0.43*	*8.3*	*1.1*	*288*	*236*
Industrial RSLs (mg/kg)				410	1.6	200,000	2,000	1,000	NA	310	41,000	800	160	5,100	20,000	5,100	5,100	NA	5,200	310,000
TTLC (mg/kg)				500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
STLC (mg/l)				15	5.0	100	0.75	1.0	5	80	25	5.0	0.2	350	20	1.0	5	7.0	24	250
10 x STLC (mg/l)				150	50	1,000	7.5	10	50	800	250	50	2	3,500	200	10	50	70	240	2,500
TCLP (mg/l)				NA	5	100	NA	1	5	NA	NA	5	0.2	NA	NA	1	5	NA	NA	NA
A8h-SB8	8h	1/28/2011	1	**2.6**	**5**	**217**	ND<2	ND<2	**636**	**21.2**	**791**	**430**	**1.16**	**146**	**617**	ND<0.5	ND<2	ND<2	**159**	**1,480**
A8h-SB9	8h	1/28/2011	1	ND<2	**4**	**136**	ND<2	ND<2	**24.8**	**14**	**21.2**	**18.6**	ND<0.05	**2.9**	**13.4**	ND<0.5	ND<2	ND<2	**153**	**93.1**
A10a-SB1	10	1/28/2011	1	ND<2	**3.8**	**127**	ND<2	ND<2	**29.9**	**12.5**	**29.3**	**19.6**	**0.204**	ND<2	**14.2**	ND<0.5	ND<2	ND<2	**135**	**74.9**
A10a-SB2	10	1/28/2011	1	ND<2	**3.2**	**114**	ND<2	ND<2	**19.4**	**10.6**	**23.2**	**9.6**	ND<0.05	ND<2	ND<2	ND<0.5	ND<2	ND<2	**165**	**57.5**
A10b-SB1	10	1/26/2011	1	ND<2	**2.7**	**159**	ND<2	ND<2	**63.3**	**11.9**	**62.7**	**24.2**	**0.06**	**2.2**	**7.2**	ND<0.5	ND<2	ND<2	**213**	**207**
A10b-SB2	10	1/26/2011	1	**28**	**0.98**	**109**	**19.3**	ND<2	**426**	**14.4**	**2,050**	**666**	**1.15**	**25.7**	**234**	ND<0.5	ND<2	ND<2	**117**	**1,290**
A10b-SB3	10	1/26/2011	1	**40.7**	**3.7**	**404**	ND<2	ND<2	**1,300**	**34.2**	**6,520**	**4,260**	**3.27**	**151**	**1,870**	ND<0.5	ND<2	ND<2	**350**	**6,310**
A10b-SB4	10	1/26/2011	1	**6.9**	**4.1**	**250**	ND<2	ND<2	**213**	**18.3**	**1,050**	**759**	**0.682**	**14.9**	**62.3**	ND<0.5	ND<2	ND<2	**343**	**2,480**
A12-SB1	12	1/31/2011	1	**112**	**9.2**	**291**	ND<2	ND<2	**184**	**8.3**	**1,030**	**3,980**	**1.23**	**12.4**	ND<2	ND<0.5	ND<2	ND<2	**262**	**1,590**
A12-SB2	12	1/31/2011	1	**3.6**	ND<0.5	**104**	ND<2	ND<2	**557**	**7.6**	**89.4**	**103**	**0.087**	**6**	ND<2	ND<0.5	ND<2	ND<2	**613**	**151**
A12-SB3	12	1/31/2011	1	**3.4**	ND<0.5	**133**	ND<2	ND<2	**371**	**9.6**	**686**	**163**	**0.635**	**9.4**	ND<2	ND<0.5	ND<2	ND<2	**520**	**539**
A12-SB4	12	1/31/2011	1	**3.1**	**2.7**	**125**	ND<2	ND<2	**331**	**9.3**	**7,150**	**397**	**0.105**	**8.3**	ND<2	ND<0.5	ND<2	ND<2	**654**	**4,450**
A12-SB5	12	1/31/2011	1	**12.9**	**8.2**	**271**	ND<2	**41.5**	**92.8**	**10.6**	**440**	**1,050**	**1.01**	**15.3**	**34.8**	ND<0.5	**21.4**	ND<2	**138**	**1,210**
A13-SB1	13	1/31/2011	1	ND<2	**9.1**	**101**	ND<2	ND<2	**18.3**	**6.6**	**25.3**	**124**	**0.13**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**88.6**	**144**
A13-SB2	13	1/31/2011	1	ND<2	**3.3**	**79.3**	ND<2	ND<2	**12.7**	**5.8**	**25.2**	**146**	**6.2**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**72.9**	**361**
A13-SB3	13	2/3/2011	1	ND<2	**63.5***	**373**	ND<2	ND<2	**29.8**	**18.5**	**42.7**	**48.9**	**0.118**	**2.1**	ND<2	ND<0.5	ND<2	ND<2	**211**	**118**
A8e-SB7 (D1)	8e	1/26/2011	1	ND<2	**2.8**	**283**	ND<2	ND<2	**252.0**	**10.6**	**670**	**198**	ND<0.05	**5**	ND<2	ND<0.5	ND<2	ND<2	**661**	**451**
A10b-SB4 (D2)	10b	1/26/2011	1	**10**	**5.1**	**262**	ND<2	ND<2	**310**	**19.9**	**5,740**	**799**	**0.42**	**47.8**	**59.1**	ND<0.5	ND<2	ND<2	**334**	**1,900**
A8a-SB1 (D3)	8a	1/27/2011	1	ND<2	**3.5**	**126**	ND<2	ND<2	**33.5**	**11.2**	**18.8**	**14.1**	ND<0.05	**2.7**	**5.7**	ND<0.5	**7.9**	ND<2	**138**	**59.8**
A8c-SB1 (D4)	8c	1/27/2011	1	ND<2	**43.4**	**160**	ND<2	ND<2	**22.6**	**12.8**	**16**	**7.2**	ND<0.05	ND<2	ND<2	ND<0.5	ND<2	ND<2	**163**	**60.6**
A8a-SB4 (D5)	8a	1/27/2011	1	ND<2	**5.2**	**165**	ND<2	ND<2	**16.6**	**7.8**	**33.7**	**153**	**0.139**	ND<2	ND<2	ND<0.5	ND<2	ND<2	**102**	**175**
A8h-SB9 (D6)	8h	1/28/2011	1	ND<2	**3.1**	**109**	ND<2	ND<2	**17.2**	**11.2**	**15.2**	**8.9**	ND<0.05	ND<2	ND<2	ND<0.5	ND<2	ND<2	**132**	**46.8**

Notes and Data Qualifiers
California Background concentrations from Kearney Foundation Study (Bradford et al., 1996)
USEPA Region IX Regional Screening Levels (RSLs), June 2015, screening levels for industrial soil.
Soil samples collected in 2011 at 0.5 to 1 foot bgs by Ami Adini & Associates (2011) shown for completeness
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample due to the quality of the data generated because certain quality control criteria were not met. See data quality review memo for details
UJ = The analyte was not detected above the laboratory reporting limit but the reporting limit is approximate due either to the quality of the data generated because certain quality control criteria were not me See data quality review memo for details.

Abbreviations
~~bgs = Below~~ ground surface
mg/kg = Milligrams per kilogram
mg/L = Milligrams per liter
NA = Not available
ND = Not detected at the reporting limit shown
RSL = Regional soil screening level
STLC = Soluble threshold limit concentration (California Code of Regulations, Title 22, Chapter 11, Article 3
TCLP = Toxicity characteristic leaching procedure
TTLC = Total threshold limit concentration (California Code of Regulations, Title 22, Chapter 11, Article 3)
USEPA = United States Environmental Protection Agency
--- = Sample not analyzed for analyte

Tables

2017 Results: Hillmann Consulting, 2017, Off-Site Preliminary Environmental Assessment, Riverside Scrap Iron & Metal, Riverside, California, February 27.

2017 Results: Hillmann, 2017, Draft Remedial Action Plan, Riverside Scrap Iron & Metal, Riverside, California, May 8.

TABLE 1
Summary of Soil Sampling Results (mg/Kg)

Sample ID	Arsenic	Lead	PAH Above Screening Levels	Aroclor 1260	Aroclor 1016	Other PCBs
2981 Mission Inn Residence						
S1-0.25	ND<1.0	183	None	ND<0.05	ND<0.05	ND<0.05
S1-1	1.12	7.48	None	ND<0.05	ND<0.05	ND<0.05
S2-0.25	1.69	28.2	None	ND<0.05	ND<0.05	ND<0.05
S2-1	1.66	9.03	None	ND<0.05	ND<0.05	ND<0.05
S3-0.25	3.10	68.6	None	ND<0.05	ND<0.05	ND<0.05
S3-1	2.69	9.68	None	ND<0.05	ND<0.05	ND<0.05
S4-0.25	1.69	57.8	None	ND<0.05	ND<0.05	ND<0.05
S4-1	3.18	48.1	None	ND<0.05	ND<0.05	ND<0.05
S5-0.25	1.58	38.2	None	ND<0.05	ND<0.05	ND<0.05
S5-1	2.68	29.7	None	ND<0.05	ND<0.05	ND<0.05
S6-0.25	1.20	26.9	None	ND<0.05	ND<0.05	ND<0.05
S6-1	1.64	4.43	None	ND<0.05	ND<0.05	ND<0.05
S7-0.25	ND<1.0	11.1	None	ND<0.05	ND<0.05	ND<0.05
S7-1	1.88	5.06	None	ND<0.05	ND<0.05	ND<0.05
S8-0.25	1.16	95.5	None	ND<0.05	ND<0.05	ND<0.05
S8-1	1.83	14.4	None	ND<0.05	ND<0.05	ND<0.05
2968 6th Street Vacant Lot						
S9-0.25	1.75	153	None	ND<0.05	ND<0.05	ND<0.05
S9-1	2.96	7.76	None	ND<0.05	ND<0.05	ND<0.05
S10-0.25	3.21	45.2	None	ND<0.05	ND<0.05	ND<0.05
S10-1	3.63	9.83	None	ND<0.05	ND<0.05	ND<0.05
S11-0.25	3.32	52.3	None	ND<0.05	ND<0.05	ND<0.05
S11-1	3.54	8.40	None	ND<0.05	ND<0.05	ND<0.05
S12-0.25	3.05	86.1	None	ND<0.05	ND<0.05	ND<0.05
S12-1	3.21	5.94	None	ND<0.05	ND<0.05	ND<0.05
S13-0.25	3.08	54.0	None	ND<0.05	ND<0.05	ND<0.05
S13-1	3.43	3.96	None	ND<0.05	ND<0.05	ND<0.05
S14-0.25	3.49	78.4	Four	0.05	ND<0.05	ND<0.05
S14-1	3.51	25.2	None	ND<0.05	ND<0.05	ND<0.05
S15-0.25	3.19	37.4	None	0.10	ND<0.05	ND<0.05
S15-1	3.43	4.07	None	ND<0.05	ND<0.05	ND<0.05
S16-0.25	2.82	79.0	None	0.07	ND<0.05	ND<0.05
S16-1	2.78	2.93	None	ND<0.05	ND<0.05	ND<0.05
Residential RSL	***12****	***80****	*--*	***0.24***	***4.1***	*--*

*Notes: PAH - poly-nuclear aromatic hydrocarbons summarized in Table 1A. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC to determine Health Risk in residential and commercial settings. *DTSC Background Concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California. ** - Values modified by DTSC HHRA Note 3. Please refer to lab report for complete results.*

TABLE 1-Contd.
Summary of Soil Sampling Results (mg/Kg)

Sample ID	Arsenic	Lead	PAH Above Screening Levels	Aroclor 1260	Aroclor 1016	Other PCBs
2981 6th Street Residence						
S17-0.25	3.80	48.2	None	ND<0.05	ND<0.05	ND<0.05
S17-1	3.44	3.15	None	ND<0.05	ND<0.05	ND<0.05
S18-0.25	3.18	79.3	None	ND<0.05	ND<0.05	ND<0.05
S18-1	3.76	10.8	None	ND<0.05	ND<0.05	ND<0.05
S19-0.25	6.71	121	Benzo(a)pyrene	0.05	ND<0.05	ND<0.05
S19-1	4.20	193	None	ND<0.05	ND<0.05	ND<0.05
S19-2.5	--	6.54	--	--	--	--
S20-0.25	3.83	976	None	0.25	0.14	ND<0.05
S20-1	4.49	10.4	None	ND<0.05	ND<0.05	ND<0.05
S21-0.25	3.53	5.93	None	ND<0.05	ND<0.05	ND<0.05
S21-1	4.50	7.52	None	ND<0.05	ND<0.05	ND<0.05
S22-0.25	4.12	89.9	Benzo(a)pyrene	ND<0.05	ND<0.05	ND<0.05
S22-1	3.64	15.8	None	ND<0.05	ND<0.05	ND<0.05
S23-0.25	3.40	105	Benzo(a)pyrene	ND<0.05	ND<0.05	ND<0.05
S23-1	3.97	18.0	None	ND<0.05	ND<0.05	ND<0.05
S24-0.25	1.90	36.0	Benzo(a)pyrene	ND<0.05	ND<0.05	ND<0.05
S24-1	4.18	3.71	None	ND<0.05	ND<0.05	ND<0.05
Riverside Scrap Mission Inn Entry						
S25-0.25	3.41	17.4	None	ND<0.05	ND<0.05	ND<0.05
S25-1	3.31	2.85	None	ND<0.05	ND<0.05	ND<0.05
S26-0.25	3.10	65.3	None	ND<0.05	ND<0.05	ND<0.05
S26-1	3.70	5.18	None	ND<0.05	ND<0.05	ND<0.05
S27-0.25	2.95	62.0	None	0.076	ND<0.05	ND<0.05
S27-1	4.22	2.74	None	ND<0.05	ND<0.05	ND<0.05
S28-0.25	3.84	44.7	None	0.097	ND<0.05	ND<0.05
S28-1	4.60	6.19	None	ND<0.05	ND<0.05	ND<0.05
Residential RSL	***12****	***80****	--	***0.24***	***4.1***	--

*Notes: PAH - poly-nuclear aromatic hydrocarbons summarized in Table 1A. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC to determine Health Risk in residential and commercial settings. *DTSC Background Concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California. ** - Values modified by DTSC HHRA Note 3. Please refer to lab report for complete results.*

TABLE 1-Contd.
Summary of Soil Sampling Results (mg/Kg)

Sample ID	Arsenic	Lead	PAH Above Screening Levels	Aroclor 1260	Aroclor 1016	Other PCBs
Riverside Scrap 5th Street Entry						
S29-0.25	1.91	91.4	None	0.74	ND<0.05	ND<0.05
S29-1	3.20	5.41	None	0.12	ND<0.05	ND<0.05
S30-0.25	4.10	170	Seven Compounds	0.22	0.39	ND<0.05
S30-1	Refusal	No	Sample	--	--	--
S31-0.25	1.78	149	Three Compounds	0.40	0.31	ND<0.05
S31-1	4.12	4.42	None	ND<0.05	ND<0.05	ND<0.05
S32-0.25	3.23	4.16	None	ND<0.05	ND<0.05	ND<0.05
S32-1	4.02	2.49	None	ND<0.05	ND<0.05	ND<0.05
S33-0.25	4.20	6.75	None	ND<0.05	ND<0.05	ND<0.05
S33-1	3.28	2.31	None	ND<0.05	ND<0.05	ND<0.05
Riverside Scrap 6th Street Entry						
S34-0.25	2.83	1,040	None	1.05	ND<0.05	ND<0.05
S34-1	3.64	14.5	None	0.067	ND<0.05	ND<0.05
S35-0.25	3.69	643	None	0.94	ND<0.05	ND<0.05
S35-1	1.25	68.9	None	ND<0.05	ND<0.05	ND<0.05
S36-0.25	3.42	60.3	None	0.061	ND<0.05	ND<0.05
S36-1	3.07	63.5	None	ND<0.05	ND<0.05	ND<0.05
S37-0.25	3.48	542	Benzo(a)pyrene	0.60	ND<0.05	ND<0.05
S37-1	3.54	4.56	None	ND<0.05	ND<0.05	ND<0.05
S38-0.25	3.52	616	Benzo(a)pyrene	0.37	0.059	ND<0.05
S38-1	3.52	14.0	None	ND<0.05	ND<0.05	ND<0.05
S39-0.25	3.23	278	None	0.13	ND<0.05	ND<0.05
S39-1	3.31	11.3	None	ND<0.05	ND<0.05	ND<0.05
S40-0.25	4.60	235	Three Compounds	0.40	ND<0.05	ND<0.05
S40-1	3.66	28.2	Benzo(a)pyrene	ND<0.05	ND<0.05	ND<0.05
Residential RSL	***12****	***80****	*--*	***0.24***	***4.1***	*--*

*Notes: PAH - poly-nuclear aromatic hydrocarbons summarized in Table 1A. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC to determine Health Risk in residential and commercial settings. *DTSC Background Concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California. ** - Values modified by DTSC HHRA Note 3. Please refer to lab report for complete results.*

APPENDIX B2.

Historical Table Summaries – PAHs in Soil

Tables

2011 Results: Ami Adini & Associatees, 2011, Phase II Environmental Site Assessment, Marketplace Brownfields Site Northeast of Commerce Street and Mission Inn Avenue, Riverside, California, August 3.

Table 6
Soil Sampling Analytical Results
Polycyclic Aromatic Hydrocarbons (PAHs)
Marketplace Brownfields Site, Riverside, California

EPA Method			8270 SIM (mg/kg)															
Soil Boring Location	Sample Date	Lab ID	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenthrene	Anthracene	Pyrene	Fluoranthene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)-pyrene	Benzo(g,h,i)-perylene	Dibenz(a,h)-anthracene
Industrial RSL (mg/kg)			18	NE	33,000	22,000	NE	165,000	16,500	22,000	2.11	211	2.11	21.1	0.211	2.11	NE	0.211
A8a-SB1	1/27/2011	S101135-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8a-SB2	1/27/2011	S101135-2	0.04J	ND	ND	ND	0.03J	ND	0.39	0.24	0.31	0.41	0.28	0.22	0.35	0.49	0.6	0.1
A8a-SB3	1/27/2011	S101135-3	0.03J	ND	ND	ND	0.16	ND	0.78	0.53	0.3	0.43	0.17	0.12	0.1	0.16	0.3	0.04J
A8a-SB4	1/27/2011	S101135-4	ND	ND	ND	ND	0.13	0.15	0.2	0.19	0.09	0.12	0.04	0.04	0.05	0.05	0.05	ND
A8a-SB5	1/27/2011	S101135-5	0.29	0.05	0.11	0.12	1.12	0.19	>5 h	1.41	0.45	0.77	0.35	0.27	**0.32**	1.02	1.23	**0.24**
A8a-SB6	1/27/2011	S101135-6	0.26	0.11	0.34	0.14	1.88	0.63	>5 h	2.38	1.1	1.77	0.5	0.61	**0.53**	1.04	0.77	**0.22**
A8b-SB1	1/27/2011	S101135-11	ND	ND	ND	ND	ND	ND	0.06	ND	0.04J	0.04J	ND	ND	ND	0.03J	0.11	ND
A8b-SB2	1/28/2011	S101135-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8b-SB3	1/28/2011	S101135-13	ND	ND	ND	ND	0.04J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8b-SB4	1/28/2011	S101135-14	ND	ND	ND	ND	ND	ND	0.04J	ND	0.05J	ND	ND	ND	ND	ND	0.11	ND
A8c-SB1	1/27/2011	S101135-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8c-SB2	1/27/2011	S101135-8	0.37	ND	0.03J	0.03J	0.28	0.07	0.57	0.41	0.31	0.38	0.05	0.04J	0.07	0.19	0.3	0.05
A8c-SB3	1/27/2011	S101135-9	0.03	ND	ND	ND	0.2	0.05	0.66	0.39	0.14	0.17	0.07	0.06	0.05	0.23	0.31	0.07
A8c-SB4	1/27/2011	S101135-10	3.33	0.03	0.51	1.48	5.76	1.33	>5 h	3.6	1.17	1.21	0.42	0.51	**0.67**	0.42	0.57	0.18
A8d-SB1	1/26/2011	S101114-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.09	ND	ND	ND
A8d-SB2	1/26/2011	S101114-13	ND	ND	ND	ND	0.09	ND	0.12	0.17	0.07	0.15	0.05	0.04J	0.1	ND	0.07	ND
A8d-SB3	1/26/2011	S101114-14	0.04J	ND	ND	ND	0.08	ND	0.06	0.09	0.04J	0.04J	ND	0.03J	ND	ND	ND	ND
A8d-SB4	1/26/2011	S101114-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8e-SB1	1/25/2011	S101114-1	ND	ND	ND	ND	ND	0.04J	ND	0.06	0.05	0.06	0.09	0.06	0.08	0.05	0.08	ND
A8e-SB2	1/25/2011	S101114-2	ND	ND	ND	ND	0.04J	ND	ND	0.05	0.04J	0.06	0.07	0.04J	0.05	ND	0.06	ND
A8e-SB3	1/25/2011	S101114-3	1.6	0.90	>5h	>5h	>5h	>5h	>5h	>5h	**>5h**	>5h	**3.22**	2.94	**3.23**	1.92	1.54	1.07
A8e-SB4	1/25/2011	S101114-4	ND	ND	ND	ND	0.05	ND	0.03J	0.08	0.05	0.07	0.05	0.04J	0.06	ND	0.04J	ND
A8e-SB5	1/26/2011	S101114-5	ND	ND	ND	ND	0.04J	ND	ND	0.05	0.04J	0.04J	0.04J	0.03J	0.04J	ND	ND	ND
A8e-SB6	1/26/2011	S101114-6	ND	ND	ND	ND	0.04J	ND	ND	0.07	0.04J	0.09	0.06	0.07	0.04J	ND	0.06	ND
A8e-SB7	1/26/2011	S101114-7	ND	ND	ND	ND	ND	ND	ND	0.05	0.04J	0.06	0.06	0.05	0.06	ND	ND	ND
A8e-SB8	1/26/2011	S101114-8	ND	ND	ND	ND	ND	ND	ND	0.04	0.04	0.06	0.06	0.03	0.05	ND	ND	ND
A8f-SB1	1/25/2011	S101114-9	0.03J	0.06	ND	ND	0.07	0.03	0.07	0.12	0.1	0.12	0.11	0.04J	0.19	0.08	0.19	ND
A8f-SB2	1/25/2011	S101114-10	0.04J	0.08	ND	ND	0.33	0.24	0.42	0.89	0.35	0.55	0.36	0.37	0.19	0.18	0.26	ND
A8f-SB3	1/25/2011	S101114-11	ND	0.04J	ND	ND	0.04J	0.1	0.14	0.21	0.21	0.34	0.17	0.15	0.15	0.05	0.13	ND
A8g-SB1	1/26/2011	S101114-16	ND	ND	ND	ND	ND	ND	ND	0.04J	0.04J	0.04J	0.08	ND	0.03J	ND	ND	ND
A8g-SB2	1/26/2011	S101114-17	ND	ND	ND	ND	0.06	ND	0.05	0.16	0.08	0.12	0.05	0.05	0.05	ND	ND	ND
A8g-SB3	1/26/2011	S101114-18	ND	ND	ND	ND	0.06	0.04J	0.08	0.17	0.08	0.22	0.09	0.09	0.13	ND	0.06	ND
A8h-SB1	1/28/2011	S101135-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8h-SB10	1/28/2011	S101135-24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8h-SB2	1/28/2011	S101135-16	0.04J	0.04J	0.08	0.08	0.74	0.25	1.3	1	0.43	0.65	0.3	0.25	**0.4**	0.56	0.76	0.08
A8h-SB3	1/28/2011	S101135-17	0.05	ND	0.13	0.12	1.02	0.36	1.56	1.41	0.41	0.28	0.35	0.29	**0.34**	0.52	0.67	0.11
A8h-SB4	1/28/2011	S101135-18	0.05	ND	0.04J	0.03J	0.44	0.14	0.6	0.59	0.33	0.45	0.3	0.22	**0.39**	0.44	0.23	0.12
A8h-SB5	1/28/2011	S101135-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 6
Soil Sampling Analytical Results
Polycyclic Aromatic Hydrocarbons (PAHs)
Marketplace Brownfields Site, Riverside, California

EPA Method			8270 SIM (mg/kg)															
Soil Boring Location	Sample Date	Lab ID	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenthrene	Anthracene	Pyrene	Fluoranthene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)-pyrene	Benzo(g,h,i)-perylene	Dibenz(a,h)-anthracene
Industrial RSL (mg/kg)			18	NE	33,000	22,000	NE	165,000	16,500	22,000	2.11	211	2.11	21.1	0.211	2.11	NE	0.211
A8h-SB6	1/28/2011	S101135-20	ND	ND	ND	ND	0.08	ND	0.12	0.11	ND	0.03J	ND	ND	ND	0.04J	0.08	ND
A8h-SB7	1/28/2011	S101135-21	0.07	0.03J	ND	ND	0.43	0.06	0.59	0.29	0.28	0.61	0.15	0.12	0.16	0.41	0.61	0.19
A8h-SB8	1/28/2011	S101135-22	0.04J	ND	ND	ND	0.27	0.07	0.76	0.65	0.34	0.37	0.24	0.22	0.17	0.16	0.23	0.04J
A8h-SB9	1/28/2011	S101135-23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A10a-SB1	1/28/2011	S101135-25	ND	ND	ND	ND	0.28	ND	0.55	0.34	0.11	0.19	0.2	0.16	0.14	0.19	0.43	ND
A10a-SB2	1/28/2011	S101135-26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A10b-SB1	1/26/2011	S101114-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03J	ND	ND	ND	ND	ND	ND
A10b-SB2	1/26/2011	S101114-20	ND	ND	ND	ND	0.47	0.17	0.98	1.43	0.9	1.11	0.44	0.41	**0.35**	0.23	0.37	0.07
A10b-SB3	1/26/2011	S101114-21	0.06	0.03J	0.03J	0.03J	0.29	0.03J	0.41	0.6	0.3	0.38	0.2	0.12	**0.31**	0.35	0.65	0.13
A10b-SB4	1/26/2011	S101114-22	ND	ND	ND	ND	0.14	0.04J	0.12	0.29	0.16	0.2	0.07	0.09	0.07	0.1	0.19	0.07
A12 - SB1	1/31/2011	S101140-1	ND	ND	ND	ND	0.12	ND	0.25	0.24	0.04	0.07	0.05	ND	0.05	ND	ND	ND
A12 - SB2	1/31/2011	S101140-2	0.03J	0.03J	0.1	0.06	0.96	0.29	2.36	2.4	1.42	1.66	1.03	0.89	**1.19**	1.24	1.26	**0.27**
A12 - SB3	1/31/2011	S101140-3	ND	ND	0.04J	0.03J	0.56	0.09	0.86	0.99	0.49	0.64	0.63	0.4	**0.69**	0.63	0.58	ND
A12 - SB4	1/31/2011	S101140-4	ND	ND	ND	ND	0.08	ND	0.2	0.2	0.08	0.16	0.18	0.14	0.14	0.06	0.11	ND
A12 - SB5	1/31/2011	S101140-5	ND	ND	ND	ND	0.09	ND	0.57	0.26	0.1	0.18	0.13	0.1	0.06	0.05	0.12	ND
A13-SB1	1/31/2011	S101140-6	ND	ND	ND	ND	0.11	0.03J	0.26	0.26	0.06	0.18	0.2	0.15	0.08	0.04	0.08	ND
A13-SB2	1/31/2011	S101140-7	ND	ND	ND	ND	0.07	ND	0.33	0.34	0.09	0.24	0.26	0.2	0.12	0.07	0.12	ND
A13-SB3	2/3/2011	S102017-1	ND	ND	ND	ND	0.06	ND	0.12	0.24	0.05	0.09	0.07	0.06	0.03J	ND	ND	ND
D1 (A8e-SB7)	1/26/2011	S101114-23	ND	ND	ND	ND	0.03J	ND	ND	0.09	0.07	0.08	0.05	0.04J	0.03J	ND	ND	ND
D2 (A10b-SB4)	1/26/2011	S101114-24	ND	ND	ND	ND	0.16	0.04J	0.07	0.2	0.08	0.12	0.07	0.04J	0.1	0.12	0.22	0.05
D3 (A8a-SB1)	1/27/2011	S101135-27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D4 (A8c-SB1)	1/27/2011	S101135-28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D5 (A8a-SB4)	1/27/2011	S101135-29	ND	ND	ND	ND	0.06	0.03	0.12	0.05	0.03J	0.07	ND	ND	ND	0.04J	ND	0.08
D6 (A8h-SB9)	1/28/2011	S101135-30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Method Detection Limit			0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Practical Detection Limit			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Minimum			0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.04	0.04
Maximum			3.33	0.90	>5 h	>5 h	>5 h	>5 h	>5 h	>5 h	>5 h	>5 h	3.22	2.94	3.23	1.92	1.54	1.07
Average			0.28	0.13	0.58	0.65	0.53	0.37	0.90	0.63	0.35	0.43	0.27	0.24	0.27	0.34	0.36	0.16
Median			0.04	0.04	0.10	0.08	0.14	0.08	0.36	0.24	0.10	0.18	0.14	0.12	0.10	0.18	0.23	0.09
TTLC (mg/kg)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
STLC (mg/l)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
10 x STLC (mg/l)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
TCLP (mg/l)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Residential CHHSL (mg/kg)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.038	NE	NE	NE
Industrial CHHSL (mg/kg)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.13	NE	NE	NE
Residential RSL (mg/kg)			3.57	NE	3,440	2,290	NE	17,200	1,720	2,290	0.148	14.8	0.148	1.48	0.0148	0.148	NE	0.0148
Industrial RSL (mg/kg)			18	NE	33,000	22,000	NE	165,000	16,500	22,000	2.11	211	2.11	21.1	0.211	2.11	NE	0.211

Table 6
Soil Sampling Analytical Results
Polycyclic Aromatic Hydrocarbons (PAHs)
Marketplace Brownfields Site, Riverside, California

EPA Method			8270 SIM (mg/kg)															
Soil Boring Location	Sample Date	Lab ID	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenthrene	Anthracene	Pyrene	Fluoranthene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)-pyrene	Benzo(g,h,i)-perylene	Dibenz(a,h)-anthracene
Industrial RSL (mg/kg)			18	NE	33,000	22,000	NE	165,000	16,500	22,C00	2.11	211	2.11	21.1	0.211	2.11	NE	0.211

Notes:
SIM = Selected Ion Monitoring
ND = Not detected at any concentration
J = Estimated value, compound observed below method detection limit
mg/kg = Milligrams per kilogram
h = The concentration is over selected ion monitoring (SIM) upper limit.
TTLC = Total threshold limit concentration, used for California regulated hazardous waste (California Code of Regulations, Title 22, Chapter 11, Article 3). If a substance in a waste is equal to or greater than the TTLC level, it is considered a hazardous toxic waste.
STLC = Soluble threshold limit concentration; if a substance is ten times the STLC value found in the TTLC, the waste extraction test (WET) is indicated. If any substance in the waste extract is equal to or greater than the STLC value, it is considered a hazardous toxic waste.
TCLP = Toxicity characteristic leaching procedure
CHHSL = California Human Health Screening Level for residential land use in shallow soil gas (Cal/EPA 2010)
RSL = Regional soil screening level for residential air use (USEPA 2009)
NE= Not established
NA = Not applicable
Bold = Concentrations at or above industrial RSLs
PAH = Polycyclic Aromatic Hydrocarbons
Note: Soil samples were obtained from 0.5 to 1 foot below ground surface.

GSI ENVIRONMENTAL

Tables

2015 Results: AMEC Foster Wheeler, 2015, Additional Phase II Environmental Site Assessment Report, Riverside Scrap Iron & Metal Site, Riverside, California, December 9.

TABLE 3

SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site, Riverside, California
Riverside, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample/ Boring ID	Area	Sample Date	Depth (feet bgs)	EPA Method 8270C SIM (EPA Method 8270C for semi-volatile organic compounds if higher value for analyses of PAHs in the same sample)															
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenthrene	Pyrene
		Industrial RSL		45,000	NA	230,000	2.90	0.290	2.90	NA	29.0	290	0.290	30,000	30,000	2.90	17	NA	230,000
NS1	8e	8/10/2015	0.25	ND<0.050	ND<0.050	ND<0.050	**0.061**	ND<0.050	**0.051**	**0.058**	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.20	ND<0.050	ND<0.050	ND<0.050
NS2	8d	8/18/2015	0.25	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5
		8/18/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
NS7	8a	8/21/2015	2.5	ND<0.050	ND<0.050	ND<0.050	**0.20**	**0.11**	**0.29**	**0.11**	**0.13**	**0.19**	**0.091**	**0.25**	ND<0.50	ND<0.20	ND<0.50	ND<0.50	**0.15**
NS9	8a	8/11/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
NS10A	8c	8/21/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
NS11	10b	8/11/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
NS13	10b	8/13/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	**0.012**
NS14	8c	8/14/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
NS16	12	8/13/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
NS17	8h	8/21/2015	2.5	**0.01**	ND<0.01	**0.022**	**0.064**	**0.031**	**0.070**	**0.024**	**0.042**	**0.030**	**0.015**	**0.089**	ND<0.01	ND<0.040	ND<0.01	**0.052**	**0.057**
NS18	8h	8/21/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
NS20	8h	8/21/2015	2.5	ND<0.01	ND<0.01	**1.8**	**6.9**	**3.1 (5)**	**4.1**	**2.3**	**2.4**	**3.5 (5.7)**	**1.6**	**9.8 (10)**	ND<1.0	ND<4.0	ND<1.0	**4.5 (9.2)**	**6.7 (8.6)**
NS21	8h	8/21/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
NS24	8e	8/10/2015	0.25	ND<0.010	ND<0.01	ND<0.01	**0.097**	**0.085**	**0.098**	**0.075**	**0.041**	**0.045**	**0.019**	**0.056**	ND<0.01	**0.10**	ND<0.01	**0.021**	**0.052**
		8/10/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
S1	8e	8/11/2015	0.25	ND<0.01	ND<0.01	ND<0.01	**0.018**	**0.012**	**0.022**	**0.015**	ND<0.01	**0.014**	ND<0.01	**0.025**	ND<0.01	ND<0.040	ND<0.01	**0.013**	**0.028**
		8/11/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	**0.014**	ND<0.01
S2	8e	8/12/2015	0.25	ND<0.01	ND<0.01	ND<0.01	**0.024**	**0.02**	**0.02**	**0.022**	**0.017**	**0.014**	ND<0.010	**0.025**	ND<0.010	ND<0.040	ND<0.010	ND<0.010	**0.032**
		8/12/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
S3	8f	8/11/2015	0.25	ND<0.01	ND<0.01	**0.018**	**0.05**	**0.024**	**0.76**	**0.045**	**0.033**	**0.034**	**0.015**	**0.039**	ND<0.01	**0.051**	ND<0.01	**0.019**	**0.042**
		8/11/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
S4	8d	8/18/2015	0.25	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5
		8/18/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
S5	8d	8/12/2015	0.25	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.20	ND<0.050	ND<0.050	**0.050**
		8/12/2015	2.5	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.40	ND<0.010	ND<0.010	ND<0.010
S10	12	8/11/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01

TABLE 3

SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site, Riverside, California
Riverside, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample/ Boring ID	Area	Sample Date	Depth (feet bgs)	EPA Method 8270C SIM (EPA Method 8270C for semi-volatile organic compounds if higher value for analyses of PAHs in the same sample)															
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenthrene	Pyrene
Industrial RSL				45,000	NA	230,000	2.90	0.290	2.90	NA	29.0	290	0.290	30,000	30,000	2.90	17	NA	230,000
S11	8a	8/13/2015	0.25	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<0.5	ND<0.5	ND<0.5
		8/13/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
S12	8a	8/12/2015	0.25	ND<0.010	ND<0.010	ND<0.010	**0.014**	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	**0.015**	ND<0.010	ND<0.040	ND<0.010	ND<0.010	**0.014**
		8/12/2015	2.5	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.040	ND<0.010	ND<0.010	ND<0.010
S14	10b	8/13/2015	0.25	ND<0.01	ND<0.01	**0.11**	**0.96**	**0.64**	**0.79**	**0.59**	**0.37**	**0.51**	**0.17**	**0.93 (1.1)**	ND<0.01	**0.72**	ND<0.01	**0.44**	**0.75 (1.4)**
		8/13/2015	1	**0.56**	ND<0.50	**8.8**	**14**	**6.9**	**9.2**	**2.5**	**4.0**	**8.1**	ND<0.50	**34**	**0.70**	**2.7**	ND<0.50	**17**	**33**
		8/13/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
S15	10b	8/12/2015	0.25	ND<0.010	ND<0.010	ND<0.010	**0.086**	**0.055**	**0.10**	**0.066**	**0.024**	**0.036**	**0.018**	**0.068**	ND<0.010	**0.079**	**0.013**	**0.032**	**0.046**
		8/12/2015	2.5	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.040	ND<0.010	ND<0.010	ND<0.010
S16	8b	8/14/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
S18	8h	8/14/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
S19	8g	8/14/2015	0.25	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<0.50	ND<0.50	ND<0.50
		8/14/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
ES1	10a	8/19/2015	0.25	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<0.50	ND<0.50	ND<0.50
		8/19/2015	2.5	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.040	ND<0.010	ND<0.010	ND<0.010
ES2	8b	8/14/2015	0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
		8/14/2015	2.5	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.040	ND<0.01	ND<0.01	ND<0.01
A8a-SB1	8a	1/27/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8a-SB2	8a	1/27/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.31**	**0.35**	**0.28**	**0.6**	**0.22**	**0.41**	**0.1**	**0.24**	ND<0.05	**0.49**	**0.04J**	**0.03J**	**0.39**
A8a-SB3	8a	1/27/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.3**	**0.1**	**0.17**	**0.3**	**0.12**	**0.43**	**0.04J**	**0.53**	ND<0.05	**0.16**	**0.03J**	**0.16**	**0.78**
A8a-5B4	8a	1/27/2011	1	ND<0.05	ND<0.05	**0.15**	**0.09**	**0.05**	**0.04**	**0.05**	**0.04**	**0.12**	ND<0.05	**0.19**	ND<0.05	**0.05**	ND<0.05	**0.13**	**0.2**
A8a-SB5	8a	1/27/2011	1	**0.11**	**0.05**	**0.19**	**0.45**	**0.32**	**0.35**	**1.23**	**0.27**	**0.77**	**0.24**	**1.41**	**0.12**	**1.02**	**0.29**	**1.12**	**>5 h**
A8a-SB6	8a	1/27/2011	1	**0.34**	**0.11**	**0.63**	**1.1**	**0.53**	**0.5**	**0.77**	**0.61**	**1.77**	**0.22**	**2.38**	**0.14**	**1.04**	**0.26**	**1.88**	**>5 h**
A8b-SB1	8b	1/27/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.04J**	ND<0.05	ND<0.05	**0.11**	ND<0.05	**0.04J**	ND<0.05	ND<0.05	ND<0.05	**0.03J**	ND<0.05	ND<0.05	**0.06**
A8b-SB2	8b	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8b-SB3	8b	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	**0.04J**	ND<0.05

TABLE 3

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Riverside Scrap Iron & Metal Site, Riverside, California
Riverside, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample/ Boring ID	Area	Sample Date	Depth (feet bgs)	EPA Method 8270C SIM (EPA Method 8270C for semi-volatile organic compounds if higher value for analyses of PAHs in the same sample)															
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenthrene	Pyrene
		Industrial RSL		45,000	NA	230,000	2.90	0.290	2.90	NA	29.0	290	0.290	30,000	30,000	2.90	17	NA	230,000
A8b-SB4	8b	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.05J**	ND<0.05	ND<0.05	**0.11**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	**0.04J**
A8c-SB1	8c	1/27/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8c-SB2	8c	1/27/2011	1	**0.03J**	ND<0.05	**0.07**	**0.31**	**0.07**	**0.05**	**0.3**	**0.04J**	**0.38**	**0.05**	**0.41**	**0.03J**	**0.19**	**0.37**	**0.28**	**0.57**
A8c-SB3	8c	1/27/2011	1	ND<0.05	ND<0.05	**0.05**	**0.14**	**0.05**	**0.07**	**0.31**	**0.06**	**0.17**	**0.07**	**0.39**	ND<0.05	**0.23**	**0.03**	**0.2**	**0.66**
A8c-SB4	8c	1/27/2011	1	**0.51**	**0.03**	**1.33**	**1.17**	**0.67**	**0.42**	**0.57**	**0.51**	**1.21**	**0.18**	**3.6**	**1.48**	**0.42**	**3.33**	**5.76**	**>5 h**
A8d-SB1	8d	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	**0.09**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8d-SB2	8d	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.07**	**0.1**	**0.05**	**0.07**	**0.04J**	**0.15**	ND<0.05	**0.17**	ND<0.05	ND<0.05	ND<0.05	**0.09**	**0.12**
A8d-SB3	8d	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.04J**	ND<0.05	ND<0.05	ND<0.05	**0.03J**	**0.04J**	ND<0.05	**0.09**	ND<0.05	ND<0.05	**0.04J**	**0.08**	**0.06**
A8d-SB4	8d	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8e-SB1	8e	1/25/2011	1	ND<0.05	ND<0.05	**0.04J**	**0.05**	**0.08**	**0.09**	**0.08**	**0.06**	**0.06**	ND<0.05	**0.06**	ND<0.05	**0.05**	ND<0.05	ND<0.05	ND<0.05
A8e-S82	8e	1/25/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.04J**	**0.05**	**0.07**	**0.06**	**0.04J**	**0.06**	ND<0.05	**0.05**	ND<0.05	ND<0.05	ND<0.05	**0.04J**	ND<0.05
A8e-SB3	8e	1/25/2011	1	**>5h**	**0.90**	**>5h**	**>5h**	**3.23**	**3.22**	**1.54**	**2.94**	**>5h**	**1.07**	**>5h**	**>5h**	**1.92**	**1.6**	**>5h**	**>5h**
A8e-SB4	8e	1/25/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.05**	**0.06**	**0.05**	**0.04J**	**0.04J**	**0.07**	ND<0.05	**0.08**	ND<0.05	ND<0.05	ND<0.05	**0.05**	**0.03J**
A8e-SB5	8e	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.04J**	**0.04J**	**0.04J**	ND<0.05	**0.03J**	**0.04J**	ND<0.05	**0.05**	ND<0.05	ND<0.05	ND<0.05	**0.04J**	ND<0.05
A8e-SB6	8e	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.04J**	**0.04J**	**0.06**	**0.06**	**0.07**	**0.09**	ND<0.05	**0.07**	ND<0.05	ND<0.05	ND<0.05	**0.04J**	ND<0.05
A8e-SB7	8e	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.04J**	**0.06**	**0.06**	ND<0.05	**0.05**	**0.06**	ND<0.05	**0.05**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8e-SB8	8e	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.04**	**0.05**	**0.06**	ND<0.05	**0.03**	**0.06**	ND<0.05	**0.04**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8f-SB1	8f	1/25/2011	1	ND<0.05	**0.06**	**0.03**	**0.1**	**0.19**	**0.11**	**0.19**	**0.04J**	**0.12**	ND<0.05	**0.12**	ND<0.05	**0.08**	**0.03J**	**0.07**	**0.07**
A8f-SB2	8f	1/25/2011	1	ND<0.05	**0.08**	**0.24**	**0.35**	**0.19**	**0.36**	**0.26**	**0.37**	**0.55**	ND<0.05	**0.89**	ND<0.05	**0.18**	**0.04J**	**0.33**	**0.42**
A8f-SB3	8f	1/25/2011	1	ND<0.05	**0.04J**	**0.1**	**0.21**	**0.15**	**0.17**	**0.13**	**0.15**	**0.34**	ND<0.05	**0.21**	ND<0.05	**0.05**	ND<0.05	**0.04J**	**0.14**
A8g-SB1	8g	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.04J**	**0.03J**	**0.08**	ND<0.05	ND<0.05	**0.04J**	ND<0.05	**0.04J**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8g-SB2	8g	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	**0.08**	**0.05**	**0.05**	ND<0.05	**0.05**	**0.12**	ND<0.05	**0.16**	ND<0.05	ND<0.05	ND<0.05	**0.06**	**0.05**
A8g-SB3	8g	1/26/2011	1	ND<0.05	ND<0.05	**0.04J**	**0.08**	**0.13**	**0.09**	**0.06**	**0.09**	**0.22**	ND<0.05	**0.17**	ND<0.05	ND<0.05	ND<0.05	**0.06**	**0.08**
A8h-SB1	8h	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05

TABLE 3

SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site, Riverside, California
Riverside, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample/ Boring ID	Area	Sample Date	Depth (feet bgs)	EPA Method 8270C SIM (EPA Method 8270C for semi-volatile organic compounds if higher value for analyses of PAHs in the same sample)															
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenthrene	Pyrene
		Industrial RSL		45,000	NA	230,000	2.90	0.290	2.90	NA	29.0	290	0.290	30,000	30,000	2.90	17	NA	230,000
A8h-SB10	8h	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8h-SB2	8h	1/28/2011	1	0.08	0.04J	0.25	0.43	0.4	0.3	0.76	0.25	0.65	0.08	1	0.08	0.56	0.04J	0.74	1.3
A8h-SB3	8h	1/28/2011	1	0.13	ND<0.05	0.36	0.41	0.34	0.35	0.67	0.29	0.28	0.11	1.41	0.12	0.52	0.05	1.02	1.56
A8h-SB4	8h	1/28/2011	1	0.04J	ND<0.05	0.14	0.33	0.39	0.3	0.23	0.22	0.45	0.12	0.59	0.03J	0.44	0.05	0.44	0.6
A8h-SB5	8h	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8h-SB6	8h	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.08	ND<0.05	0.03J	ND<0.05	0.11	ND<0.05	0.04J	ND<0.05	0.08	0.12
A8h-SB7	8h	1/28/2011	1	ND<0.05	0.03J	0.06	0.28	0.16	0.15	0.61	0.12	0.61	0.19	0.29	ND<0.05	0.41	0.07	0.43	0.59
A8h-SB8	8h	1/28/2011	1	ND<0.05	ND<0.05	0.07	0.34	0.17	0.24	0.23	0.22	0.37	0.04J	0.65	ND<0.05	0.16	0.04J	0.27	0.76
A8h-SB9	8h	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A10a-SB1	10	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	0.11	0.14	0.2	0.43	0.16	0.19	ND<0.05	0.34	ND<0.05	0.19	ND<0.05	0.28	0.55
A10a-SB2	10	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A10b-SB1	10	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.03J	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A10b-SB2	10	1/26/2011	1	ND<0.05	ND<0.05	0.17	0.9	0.35	0.44	0.37	0.41	1.11	0.07	1.43	ND<0.05	0.23	ND<0.05	0.47	0.98
A10b-SB3	10	1/26/2011	1	0.03J	0.03J	0.03J	0.3	0.31	0.2	0.65	0.12	0.38	0.13	0.6	0.03J	0.35	0.06	0.29	0.41
A10b-SB4	10	1/26/2011	1	ND<0.05	ND<0.05	0.04J	0.16	0.07	0.07	0.19	0.09	0.2	0.07	0.29	ND<0.05	0.1	ND<0.05	0.14	0.12
A12-SB1	12	1/31/2011	1	ND<0.05	ND<0.05	ND<0.05	0.04	0.05	0.05	ND<0.05	ND<0.05	0.07	ND<0.05	0.24	ND<0.05	ND<0.05	ND<0.05	0.12	0.25
A12-SB2	12	1/31/2011	1	0.1	0.03J	0.29	1.42	1.19	1.03	1.26	0.89	1.66	0.27	2.4	0.06	1.24	0.03J	0.96	2.36
A12-SB3	12	1/31/2011	1	0.04J	ND<0.05	0.09	0.49	0.69	0.63	0.58	0.4	0.64	ND<0.05	0.99	0.03J	0.63	ND<0.05	0.56	0.86
A12-SB4	12	1/31/2011	1	ND<0.05	ND<0.05	ND<0.05	0.08	0.14	0.18	0.11	0.14	0.16	ND<0.05	0.2	ND<0.05	0.06	ND<0.05	0.08	0.2
A12-SB5	12	1/31/2011	1	ND<0.05	ND<0.05	ND<0.05	0.1	0.06	0.13	0.12	0.1	0.18	ND<0.05	0.26	ND<0.05	0.05	ND<0.05	0.09	0.57
A13-SB1	13	1/31/2011	1	ND<0.05	ND<0.05	0.03J	0.06	0.08	0.2	0.08	0.15	0.18	ND<0.05	0.26	ND<0.05	0.04	ND<0.05	0.11	0.26
A13-SB2	13	1/31/2011	1	ND<0.05	ND<0.05	ND<0.05	0.09	0.12	0.26	0.12	0.2	0.24	ND<0.05	0.34	ND<0.05	0.07	ND<0.05	0.07	0.33
A13-SB3	13	2/3/2011	1	ND<0.05	ND<0.05	ND<0.05	0.05	0.03J	0.07	ND<0.05	0.06	0.09	ND<0.05	0.24	ND<0.05	ND<0.05	ND<0.05	0.06	0.12
A8e-SB7 (D1)	8e	1/26/2011	1	ND<0.05	ND<0.05	ND<0.05	0.07	0.03J	0.05	ND<0.05	0.04J	0.08	ND<0.05	0.09	ND<0.05	ND<0.05	ND<0.05	0.03J	ND<0.05
A10b-SB4 (D2)	10	1/26/2011	1	ND<0.05	ND<0.05	0.04J	0.08	0.1	0.07	0.22	0.04J	0.12	0.05	0.2	ND<0.05	0.12	ND<0.05	0.16	0.07
A8a-SB1 (D3)	8a	1/27/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8c-SB1 (D4)	8c	1/27/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
A8a-SB4 (D5)	8a	1/27/2011	1	ND<0.05	ND<0.05	0.03	0.03J	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.07	0.08	0.05	ND<0.05	0.04J	ND<0.05	0.06	0.12
A8h-SB9 (D6)	8h	1/28/2011	1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05

Notes and Data Qualifiers:
USEPA Region IX Regional Screening Levels (RSLs), June 2015, screening levels for industrial soil.
Soil samples collected in 2011 at 0.5 to 1 foot bgs by Ami Adini & Associates (2011) shown for completeness.
J = Estimated value, concentration above method detection limit but below practical quantitation limit
h = The concentration is over selected ion monitoring (SIM) upper limit

Abbreviations
bgs = Below ground surface
mg/kg = Milligrams per kilogram
NA = Not available
ND = Not detected at the laboratory reporting limit shown
RSL = Regional soil screening level

Tables

2017 Results: Hillmann Consulting, 2017, Off-Site Preliminary Environmental Assessment, Riverside Scrap Iron & Metal, Riverside, California, February 27.

2017 Results: Hillmann, 2017, Draft Remedial Action Plan, Riverside Scrap Iron & Metal, Riverside, California, May 8.

TABLE 1A
Summary of PAH Soil Sampling Results (mg/Kg)

Sample ID	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
2981 Mission Inn Residence																	
S1-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S1-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S2-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S2-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S3-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S3-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S4-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S4-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S5-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S5-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S6-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S6-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S7-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S7-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S8-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S8-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
Residential RSL	***3,600***	***--***	***18,000***	***0.16***	***0.016***	***0.16***	***--***	***1.6***	***16***	***0.016***	***2,400***	***2,400***	***0.16***	***240***	***3.8***	***--***	***1,800***
Commercial RSL	***45,000***	***--***	***230,000***	***2.9***	***0.29***	***2.9***	***--***	***29***	***290***	***0.29***	***30,000***	***30,000***	***2.9***	***3,000***	***17***	***--***	***23,000***

Notes: PAH - poly-nuclear aromatic hydrocarbons. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC to determine Health Risk in residential and commercial settings. . - Values modified by DTSC HHRA Note 3. DTSC Background Concentration is based on statistical study of sites throughout southern California. This concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California. Please refer to lab report for complete results.*

TABLE 1A
Summary of PAH Soil Sampling Results (mg/Kg)

Sample ID	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
2968 6th Street Vacant Lot																	
S9-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S9-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S10-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S10-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S11-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S11-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S12-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S12-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S13-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S13-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S14-0.25	0.12	ND<0.01	0.34	0.78	0.46	0.78	0.28	0.90	0.64	0.02	1.9	0.08	ND<0.01	ND<0.01	0.16	1.8	1.3
S14-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S15-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S15-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S16-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S16-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
Residential RSL	***3,600***	***--***	***18,000***	***0.16***	***0.016***	***0.16***	***--***	***1.6***	***16***	***0.016***	***2,400***	***2,400***	***0.16***	***240***	***3.8***	***--***	***1,800***
Commercial RSL	***45,000***	***--***	***230,000***	***2.9***	***0.29***	***2.9***	***--***	***29***	***290***	***0.29***	***30,000***	***30,000***	***2.9***	***3,000***	***17***	***--***	***23,000***

Notes: PAH - poly-nuclear aromatic hydrocarbons. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC to determine Health Risk in residential and commercial settings. . - Values modified by DTSC HHRA Note 3. DTSC Background Concentration is based on statistical study of sites throughout southern California. This concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California. Please refer to lab report for complete results.*

TABLE 1A
Summary of PAH Soil Sampling Results (mg/Kg)

Sample ID	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
2981 6th Street Residence																	
S17-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S17-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S18-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S18-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S19-0.25	ND<0.01	0.02	ND<0.01	0.08	0.10	0.16	0.06	0.20	0.10	ND<0.01	0.36	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.22	0.32
S19-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S20-0.25	ND<0.01	ND<0.01	ND<0.01	0.01	ND<0.01	0.01	ND<0.01	0.01	0.01	ND<0.01	0.02	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.02	0.02
S20-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S21-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S21-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S22-0.25	ND<0.01	ND<0.01	ND<0.01	0.08	0.06	0.08	ND<0.01	0.12	0.04	ND<0.01	0.22	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.16	0.16
S22-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S23-0.25	ND<0.01	ND<0.01	ND<0.01	0.02	0.02	0.04	ND<0.01	0.04	0.02	ND<0.01	0.06	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.06	0.06
S23-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S24-0.25	ND<0.01	ND<0.01	ND<0.01	0.12	0.10	0.12	0.06	0.16	0.08	ND<0.01	0.20	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.04	0.22
S24-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
Residential RSL	***3,600***	***--***	***18,000***	***0.16***	***0.016***	***0.16***	***--***	***1.6***	***16***	***0.016***	***2,400***	***2,400***	***0.16***	***240***	***3.8***	***--***	***1,800***
Commercial RSL	***45,000***	***--***	***230,000***	***2.9***	***0.29***	***2.9***	***--***	***29***	***290***	***0.29***	***30,000***	***30,000***	***2.9***	***3,000***	***17***	***--***	***23,000***

Notes: PAH - poly-nuclear aromatic hydrocarbons. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC to determine Health Risk in residential and commercial settings. . - Values modified by DTSC HHRA Note 3. DTSC Background Concentration is based on statistical study of sites throughout southern California. This concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California. Please refer to lab report for complete results.*

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Sample ID	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
Riverside Scrap Mission Inn Entry																	
S25-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S25-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S26-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S26-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S27-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S27-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S28-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S28-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
Residential RSL	***3,600***	***--***	***18,000***	***0.16***	***0.016***	***0.16***	***--***	***1.6***	***16***	***0.016***	***2,400***	***2,400***	***0.16***	***240***	***3.8***	***--***	***1,800***
Commercial RSL	***45,000***	***--***	***230,000***	***2.9***	***0.29***	***2.9***	***--***	***29***	***290***	***0.29***	***30,000***	***30,000***	***2.9***	***3,000***	***17***	***--***	***23,000***

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Riverside Scrap 5th Street Entry																	
S29-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S29-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S30-0.25	52	1.1	47	19	3.8	10	0.95	2.2	15	0.4	146	63	0.4	17.1	21.2	260	73
S30-1	Refusal	No	Sample	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S31-0.25	0.08	ND<0.01	0.08	0.24	0.12	0.24	0.12	0.18	0.28	ND<0.01	0.50	0.08	ND<0.01	ND<0.01	0.02	0.60	0.48
S31-1	Not	Sampled															
S32-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S32-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S33-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S33-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
Residential RSL	***3,600***	***--***	***18,000***	***0.16***	***0.016***	***0.16***	***--***	***1.6***	***16***	***0.016***	***2,400***	***2,400***	***0.16***	***240***	***3.8***	***--***	***1,800***
Commercial RSL	***45,000***	***--***	***230,000***	***2.9***	***0.29***	***2.9***	***--***	***29***	***290***	***0.29***	***30,000***	***30,000***	***2.9***	***3,000***	***17***	***--***	***23,000***

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Riverside Scrap 6th Street Entry																	
S34-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S34-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S35-0.25	ND<0.01	ND<0.01	ND<0.01	0.05	ND<0.01	ND<0.01	ND<0.01	ND<0.01	0.05	ND<0.01	0.10	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.15	0.10
S35-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S36-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	0.04	ND<0.01	ND<0.01	ND<0.01	ND<0.01	0.06	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.06	0.04
S36-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S37-0.25	ND<0.01	ND<0.01	ND<0.01	0.12	0.04	0.08	0.02	0.08	0.02	ND<0.01	0.08	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.06	0.08
S37-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S38-0.25	ND<0.01	ND<0.01	ND<0.01	0.04	0.04	0.08	ND<0.01	0.06	ND<0.01	ND<0.01	0.08	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.04	0.08
S38-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S39-0.25	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	0.05	ND<0.01	ND<0.01	ND<0.01	ND<0.01	0.025	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.05	0.025
S39-1	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.015	ND<0.01	ND<0.01
S40-0.25	ND<0.01	ND<0.01	ND<0.01	0.55	0.35	0.65	0.40	0.75	0.50	ND<0.01	0.75	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.50	0.80
S40-1	ND<0.01	ND<0.01	ND<0.01	0.12	0.04	0.06	0.065	0.08	0.10	ND<0.01	0.18	ND<0.01	ND<0.01	ND<0.01	ND<0.015	0.12	0.14
Residential RSL	***3,600***	***--***	***18,000***	***0.16***	***0.016***	***0.16***	***--***	***1.6***	***16***	***0.016***	***2,400***	***2,400***	***0.16***	***240***	***3.8***	***--***	***1,800***
Commercial RSL	***45,000***	***--***	***230,000***	***2.9***	***0.29***	***2.9***	***--***	***29***	***290***	***0.29***	***30,000***	***30,000***	***2.9***	***3,000***	***17***	***--***	***23,000***

Notes: PAH - poly-nuclear aromatic hydrocarbons. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC to determine Health Risk in residential and commercial settings. . - Values modified by DTSC HHRA Note 3. DTSC Background Concentration is based on statistical study of sites throughout southern California. This concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California. Please refer to lab report for complete results.*

APPENDIX B3.

Historical Table Summaries – PCBs in Soil

Tables

2011 Results: Ami Adini & Associatees, 2011, Phase II Environmental Site Assessment, Marketplace Brownfields Site Northeast of Commerce Street and Mission Inn Avenue, Riverside, California, August 3.

Table 4
Soil Sampling Analytical Results
Total Petroleum Hydrocarbons (TPH) and Polychlorinated Biphenyls (PCBs)
Marketplace Brownsfields Site
Riverside, California

EPA Method				8015M (mg/kg)			8082 (µg/kg)						
Soil Boring Location	Sample Date	Area	Lab ID	TPH-g	TPH-d	TPH-o	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Industrial RSL (ug/kg)				NE	NE	NE	21,000	540	540	740	740	740	740
A8a-SB1	1/27/2011	8a	S101135-1	ND	ND	ND	ND	ND	ND	ND	ND	199	ND
A8a-SB2	1/27/2011	8a	S101135-2	ND	47.4	133	ND	ND	ND	ND	ND	**790**	ND
A8a-SB3	1/27/2011	8a	S101135-3	ND	124	297	ND	ND	ND	ND	**2,960**	**2,660**	ND
A8a-SB4	1/27/2011	8a	S101135-4	ND	26.9	230	ND	ND	ND	ND	ND	ND	ND
A8a-SB5	1/27/2011	8a	S101135-5	ND	181	480	ND	ND	ND	ND	**8,150**	**4,620**	ND
A8a-SB6	1/27/2011	8a	S101135-6	ND	276	589	ND	ND	ND	ND	**26,800**	**5,950**	ND
A8b-SB1	1/27/2011	8b	S101135-11	ND	259	466	ND	ND	ND	ND	**369,000**	**125,000**	ND
A8b-SB2	1/28/2011	8b	S101135-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8b-SB3	1/28/2011	8b	S101135-13	ND	412	1,100	ND	ND	ND	ND	180	274	ND
A8b-SB4	1/28/2011	8b	S101135-14	ND	438	1,410	ND	ND	ND	ND	ND	**903**	ND
A8c-SB1	1/27/2011	8c	S101135-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8c-SB2	1/27/2011	8c	S101135-8	ND	91.3	284	ND	ND	ND	ND	**10,400**	**1,450**	ND
A8c-SB3	1/27/2011	8c	S101135-9	ND	129	297	ND	ND	ND	ND	**24,300**	**2,670**	ND
A8c-SB4	1/27/2011	8c	S101135-10	ND	117	282	ND	ND	ND	ND	ND	ND	ND
A8d-SB1	1/26/2011	8d	S101114-12	ND	5.5	148	ND	ND	ND	ND	ND	ND	ND
A8d-SB2	1/26/2011	8d	S101114-13	ND	31.3	242	ND	ND	ND	ND	ND	**5,840**	ND
A8d-SB3	1/26/2011	8d	S101114-14	ND	24.1	166	ND	ND	ND	ND	ND	**903**	ND
A8d-SB4	1/26/2011	8d	S101114-15	ND	ND	ND	ND	ND	ND	ND	ND	372	ND
A8e-SB1	1/25/2011	8e	S101114-1	ND	ND	ND	ND	ND	ND	ND	ND	219	ND
A8e-SB2	1/25/2011	8e	S101114-2	ND	ND	ND	ND	ND	ND	ND	ND	109	ND
A8e-SB3	1/25/2011	8e	S101114-3	11.9	588	183	ND	ND	ND	ND	ND	ND	ND
A8e-SB4	1/25/2011	8e	S101114-4	ND	2.7J	ND	ND	ND	ND	ND	ND	ND	**62,800**
A8e-SB5	1/26/2011	8e	S101114-5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8e-SB6	1/26/2011	8e	S101114-6	ND	ND	ND	ND	ND	ND	ND	ND	**1,430**	ND
A8e-SB7	1/26/2011	8e	S101114-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8e-SB8	1/26/2011	8e	S101114-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8f-SB1	1/25/2011	8f	S101114-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8f-SB2	1/25/2011	8f	S101114-10	ND	ND	ND	ND	ND	ND	ND	ND	161	ND
A8f-SB3	1/25/2011	8f	S101114-11	1.3	ND	ND	ND	ND	ND	ND	ND	**3,070**	ND
A8g-SB1	1/26/2011	8g	S101114-16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8g-SB2	1/26/2011	8g	S101114-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 4
Soil Sampling Analytical Results
Total Petroleum Hydrocarbons (TPH) and Polychlorinated Biphenyls (PCBs)
Marketplace Brownsfields Site
Riverside, California

EPA Method				8015M (mg/kg)			8082 (µg/kg)						
Soil Boring Location	Sample Date	Area	Lab ID	TPH-g	TPH-d	TPH-o	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Industrial RSL (ug/kg)				NE	NE	NE	21,000	540	540	740	740	740	740
A8g-SB3	1/26/2011	8g	S101114-18	ND	3.2J	ND	ND	ND	ND	ND	ND	ND	ND
A8h-SB1	1/28/2011	8h	S101135-15	ND	59.4	44	ND	ND	ND	ND	ND	ND	ND
A8h-SB10	1/28/2011	8h	S101135-24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A8h-SB2	1/28/2011	8h	S101135-16	ND	61.4	144	ND	ND	ND	ND	ND	**1,300**	ND
A8h-SB3	1/28/2011	8h	S101135-17	ND	119	370	ND	ND	ND	ND	**1,180**	699	ND
A8h-SB4	1/28/2011	8h	S101135-18	ND	61.2	170	ND	ND	ND	ND	**1,570**	552	ND
A8h-SB5	1/28/2011	8h	S101135-19	ND	ND	22.9J	ND	ND	ND	ND	ND	ND	ND
A8h-SB6	1/28/2011	8h	S101135-20	ND	166	217	ND	ND	ND	ND	84	ND	ND
A8h-SB7	1/28/2011	8h	S101135-21	ND	998	1,310	ND	ND	ND	ND	**1,730**	**1,810**	ND
A8h-SB8	1/28/2011	8h	S101135-22	ND	173	340	ND	ND	ND	ND	**1,490**	536	ND
A8h-SB9	1/28/2011	8h	S101135-23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A10a-SB1	1/28/2011	10a	S101135-25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A10a-SB2	1/28/2011	10a	S101135-26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A10b-SB1	1/26/2011	10b	S101114-19	ND	ND	85.8	ND	ND	ND	ND	ND	112	ND
A10b-SB2	1/26/2011	10b	S101114-20	ND	15.9	73.4	ND	ND	ND	ND	**2,190**	**1,290**	ND
A10b-SB3	1/26/2011	10b	S101114-21	ND	173	440	ND	ND	ND	ND	ND	**7,120**	ND
A10b-SB4	1/26/2011	10b	S101114-22	ND	627	643	ND	ND	ND	ND	ND	ND	**73,800**
A12 - SB1	1/31/2011	12	S101140-1	ND	7.7	ND	ND	ND	ND	ND	ND	ND	**23,000**
A12 - SB2	1/31/2011	12	S101140-2	ND	2.0J	ND	ND	ND	ND	ND	ND	ND	ND
A12 - SB3	1/31/2011	12	S101140-3	ND	3.5J	ND	ND	ND	ND	ND	123	ND	ND
A12 - SB4	1/31/2011	12	S101140-4	ND	3.7J	ND	ND	ND	ND	ND	205	120	ND
A12 - SB5	1/31/2011	12	S101140-5	ND	17.9	96.4	ND	ND	ND	ND	ND	ND	**6,200**
A13-SB1	1/31/2011	13	S101140-6	ND	ND	ND	ND	ND	ND	ND	ND	425	ND
A13-SB2	1/31/2011	13	S101140-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A13-SB3	2/3/2011	13	S102017-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D1 (A8e-SB7)	1/26/2011	8e	S101114-23	ND	ND	ND	ND	ND	ND	ND	ND	ND	165
D2 (A10b-SB4)	1/26/2011	10b	S101114-24	ND	1,430	1,140	ND	ND	ND	ND	ND	ND	**69,500**
D3 (A8a-SB1)	1/27/2011	8a	S101135-27	ND	3.9J	ND	ND	ND	ND	ND	ND	ND	ND
D4 (A8c-SB1)	1/27/2011	8c	S101135-28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D5 (A8a-SB4)	1/27/2011	8a	S101135-29	ND	232	620	ND	ND	ND	ND	224	236	ND
D6 (A8h-SB9)	1/28/2011	8h	S101135-30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 4
Soil Sampling Analytical Results
Total Petroleum Hydrocarbons (TPH) and Polychlorinated Biphenyls (PCBs)
Marketplace Brownsfields Site
Riverside, California

EPA Method				8015M (mg/kg)			8082 (µg/kg)						
Soil Boring Location	Sample Date	Area	Lab ID	TPH-g	TPH-d	TPH-o	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Industrial RSL (ug/kg)				NE	NE	NE	21,000	540	540	740	740	740	740
Method Detection Limit				0.2	2	20	50	100	50	50	50	50	50
Practical Detection Limit				0.5	5	40	-	-	-	-	-	-	-
Minimum				1.3	2	22.9	0	0	0	0	84	109	165
Maximum				11.9	1,430	1,410	0	0	0	0	369,000	125,000	73,800
Average				6.6	197	401	NA	NA	NA	NA	28,162	5,890	39,244
Median				6.6	91.3	283	NA	NA	NA	NA	1,650	903	42,900
TTLC (mg/mg)				NE	NE	NE	50	50	50	50	50	50	50
STLC (mg/l)				NE	NE	NE	5	5	5	5	5	5	5
10 x STLC (mg/l)				NE	NE	NE	50	50	50	50	50	50	50
TCLP (mg/l)				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Residential CHHSL (mg/kg)				NE	NE	NE	0.089	0.089	0.089	0.089	0.089	0.089	0.089
Residential CHHSL (ug/kg)				NE	NE	NE	0.000089	0.000089	0.000089	0.000089	0.000089	0.000089	0.000089
Industrial CHHSL (mg/kg)				NE	NE	NE	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Industrial CHHSL (ug/kg)				NE	NE	NE	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Residential RSL (mg/kg)				NE	NE	NE	3.9	0.14	0.14	0.22	0.22	0.22	0.22
Residential RSL (ug/kg)				NE	NE	NE	3,900	140	140	220	220	220	220
Industrial RSL (mg/kg)				NE	NE	NE	21	0.54	0.54	0.74	0.74	0.74	0.74
Industrial RSL (ug/kg)				NE	NE	NE	21,000	540	540	740	740	740	740

Notes:

TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
TPHo = Total petroleum hydrocarbons as oil
ND = Not detected at any concentration
J = Estimated value, compound observed below method detection limit
- = Not reported
TTLC = Total threshold limit concentration, used for California regulated hazardous waste (California Code of Regulations, Title 22, Chapter 11, Article 3). If a substance in a waste is equal to or greater than the TTLC level, it is considered a hazardous toxic waste.
STLC = Soluble threshold limit concentration; if a substance is ten times the STLC value found in the TTLC, the waste extraction test (WET) is indicated. If any substance in the waste extract is equal to or greater than the STLC value, it is considered a hazardous toxic waste.
TCLP = Toxicity characteristic leaching procedure
CHHSL = California Human Health Screening Level for residential land use (Cal/EPA 2009)
RSL = Regional soil screening level for residential and industrial use (USEPA 2010)
NE= Not established
NA = Not applicable
Bold = Concentrations at or above industrial RSLs
Note: Soil samples were obtained from 0.5 to 1 foot below ground surface

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Tables

2015 Results: AMEC Foster Wheeler, 2015, Additional Phase II Environmental Site Assessment Report, Riverside Scrap Iron & Metal Site, Riverside, California, December 9.

TABLE 1

SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site
Riverside, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample/ Boring ID	Area	Sample Date	depth (feet bgs)	EPA Method 8082 (µg/kg)						
				PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
		Industrial RSL (ug/kg)		27,000	720	720	970	940	970	990
		Residential RSL (ug/kg)		6,600	170	170	230	230	240	240
NS1	8e	8/10/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	**94**	**57**
NS2	8d	8/18/2015	0.25	ND<20	ND<20	ND<20	**8,600**	ND<20	**28,000**	**2300J**
		8/18/2015	1	ND<20UJ	ND<20UJ	ND<20UJ	**62,000J**	ND<20UJ	**290,000J**	**34,000J**
		8/18/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	**23**	ND<20
NS3	8f	8/10/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	**47**	**43**
NS4	8e	8/10/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	**130**	**33**
NS5	8f	8/10/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS6	8e	8/10/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS7	8a	8/21/2015	2.5	ND<20	ND<20	ND<20	**55**	ND<20	**110**	**58**
NS8	8a	8/21/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**2,200J**	ND<20UJ	**350J**	**110J**
		8/21/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS9	8a	8/11/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS10A	8c	8/21/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**110J**	ND<20UJ	**200J**	**100J**
NS11	10b	8/11/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	**39**	**27**
NS12	10b	8/13/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS13	10b	8/13/2015	2.5	ND<20	ND<20	ND<20	**71**	ND<20	**76**	**32**
NS14	8c	8/14/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS15	8c	8/14/2015	0.25	ND<20	ND<20	ND<20	**1,500**	ND<20	**1,600**	**290**
		8/14/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS16	12	8/13/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS17	8h	8/21/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS18	8h	8/21/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**250J**	ND<20UJ	**420J**	**150J**
		8/21/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20

TABLE 1

SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site
Riverside, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample/ Boring ID	Area	Sample Date	depth (feet bgs)	EPA Method 8082 (µg/kg)						
				PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
		Industrial RSL (ug/kg)		27,000	720	720	970	940	970	990
		Residential RSL (ug/kg)		6,600	170	170	230	230	240	240
NS19	8h	8/21/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS20	8h	8/21/2015	2.5	ND<20UJ	ND<20UJ	ND<20UJ	**3,200J**	ND<20UJ	**1,500J**	**1,100J**
		8/21/2015	5	ND<20UJ	ND<20UJ	ND<20UJ	**1,100J**	ND<20UJ	**480J**	**290J**
NS21	8h	8/21/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS24	8e	8/10/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	**24**	**21**
		8/10/2015	2.5	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ
NS25	8d	8/18/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	**1,300J**	**140J**
		8/18/2015	1	ND<20	ND<20	ND<20	ND<20	ND<20	**42**	ND<20
NS26	8d	8/12/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**320J**	ND<20UJ	**12,000J**	**1,600J**
		8/12/2015	1	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS27	8d	8/12/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	**120**	**97**
NS28	8d	8/12/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**2,000J**	ND<20UJ	**860J**	**180J**
		8/12/2015	1	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
NS29	8d	8/12/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**58J**	ND<20UJ	**110J**	**89J**
NS30	8d	8/21/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	**44J**	**45J**
S1	8e	8/11/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
		8/11/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S2	8e	8/12/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	**51**	ND<20
		8/12/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S3	8f	8/11/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	**76**	**47**
		8/11/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S4	8d	8/18/2015	0.25	ND<20	ND<20	ND<20	**140**	ND<20	**940**	**71**
		8/18/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20

TABLE 1

SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site
Riverside, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample/ Boring ID	Area	Sample Date	depth (feet bgs)	EPA Method 8082 (µg/kg)						
				PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
		Industrial RSL (ug/kg)		27,000	720	720	970	940	970	990
		Residential RSL (ug/kg)		6,600	170	170	230	230	240	240
S5	8d	8/12/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	**170**	**93**
		8/12/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S6	8d	8/12/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**19,000J**	ND<20UJ	**51,000J**	**6,100J**
S7	12	8/11/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S8	8a	8/13/2015	2.5	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200
S9	8a	8/12/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**120J**	ND<20UJ	**280J**	**130J**
S10	12	8/11/2017	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**1,400J**	ND<20UJ	**4,300J**	**3,500J**
		8/11/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S11	8a	8/13/2015	0.25	ND<200	ND<200	ND<200	**1,600**	ND<200	**1,400**	**430**
		8/13/2015	1	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200
		8/13/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S12	8a	8/12/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S13	8a	8/14/2015	0.25	ND<20	ND<20	ND<20	**4,200**	ND<20	**1,600**	**300**
S14	10b	8/13/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**2,900J**	ND<20UJ	**15,000J**	**9,300J**
		8/13/2015	1	ND<200	ND<200	ND<200	**48,000J**	ND<200	**50,000J**	**18,000J**
		8/13/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	**38**	ND<20
S15	10b	8/12/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	**230J**	ND<20UJ	**95J**	**23J**
		8/12/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S16	8b	8/14/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S17	8g	8/14/2015	0.25	ND<20	ND<20	ND<20	**26**	ND<20	**60**	**30**
S18	8h	8/14/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
S19	8g	8/14/2015	0.25	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
		8/14/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
ES1	10a	8/19/2015	0.25	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200
		8/19/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
ES2	8b	8/14/2015	0.25	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	ND<20UJ	**22J**
		8/14/2015	2.5	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20

TABLE 1

SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site
Riverside, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample/ Boring ID	Area	Sample Date	depth (feet bgs)	EPA Method 8082 (µg/kg)						
				PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
		Industrial RSL (ug/kg)		27,000	720	720	970	940	970	990
		Residential RSL (ug/kg)		6,600	170	170	230	230	240	240
ES3	8h	8/14/2015	0.25	ND<20	ND<20	ND<20	**200**	ND<20	**410**	**170**
A8a-SB1	8a	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**199**	ND<50
A8a-SB2	8a	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**790**	ND<50
A8a-SB3	8a	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	**2,960**	**2,660**	ND<50
A8a-SB4	8a	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8a-SB5	8a	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	**8,150**	**4,620**	ND<50
A8a-SB6	8a	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	**26,800**	**5,950**	ND<50
A8b-SB1	8b	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	**369,000**	**125,000**	ND<50
A8b-SB2	8b	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8b-SB3	8b	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	**180**	**274**	ND<50
A8b-SB4	8b	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**903**	ND<50
A8c-SB1	8c	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8c-SB2	8c	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	**10,400**	**1,450**	ND<50
A8c-SB3	8c	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	**24,300**	**2,670**	ND<50
A8c-SB4	8c	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8d-SB1	8d	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8d-SB2	8d	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**5,840**	ND<50
A8d-SB3	8d	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**903**	ND<50
A8d-SB4	8d	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**372**	ND<50
A8e-SB1	8e	1/25/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**219**	ND<50
A8e-SB2	8e	1/25/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**109**	ND<50
A8e-SB3	8e	1/25/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8e-SB4	8e	1/25/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	**62,800**
A8e-SB5	8e	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8e-SB6	8e	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**1,430**	ND<50
A8e-SB7	8e	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50

TABLE 1

SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site
Riverside, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample/ Boring ID	Area	Sample Date	depth (feet bgs)	EPA Method 8082 (µg/kg)						
				PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
		Industrial RSL (ug/kg)		27,000	720	720	970	940	970	990
		Residential RSL (ug/kg)		6,600	170	170	230	230	240	240
A8e-SB8	8e	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8f-SB1	8f	1/25/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8f-SB2	8f	1/25/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**161**	ND<50
A8f-SB3	8f	1/25/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**3,070**	ND<50
A8g-SB1	8g	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8g-SB2	8g	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8g-SB3	8g	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8h-SB1	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8h-SB10	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8h-SB2	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**1,300**	ND<50
A8h-SB3	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	**1,180**	**699**	ND<50
A8h-SB4	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	**1,570**	**552**	ND<50
A8h-SB5	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8h-SB6	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	**84**	ND<50	ND<50
A8h-SB7	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	**1,730**	**1,810**	ND<50
A8h-SB8	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	**1,490**	**536**	ND<50
A8h-SB9	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A10a-SB1	10a	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A10a-SB2	10a	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A10b-SB1	10b	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**112**	ND<50
A10b-SB2	10b	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	**2,190**	**1,290**	ND<50
A10b-SB3	10b	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**7,120**	ND<50
A10b-SB4	10b	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	**73,800**
A12-SB1	12	1/31/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	**23,000**
A12-SB2	12	1/31/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A12-SB3	12	1/31/2011	1	ND<50	ND<100	ND<50	ND<50	**123**	ND<50	ND<50
A12-SB4	12	1/31/2011	1	ND<50	ND<100	ND<50	ND<50	**205**	**120**	ND<50

TABLE 1

SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBS) IN SHALLOW SOIL
Riverside Scrap Iron & Metal Site
Riverside, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample/ Boring ID	Area	Sample Date	depth (feet bgs)	EPA Method 8082 (µg/kg)						
				PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
			Industrial RSL (ug/kg)	27,000	720	720	970	940	970	990
			Residential RSL (ug/kg)	6,600	170	170	230	230	240	240
A12-SB5	12	1/31/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	**6,200**
A13-SB1	13	1/31/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	**425**	ND<50
A13-SB2	13	1/31/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A13-SB3	13	2/3/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8e-SB7 (D1)	8e	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	**165**
A10b-SB4 (D2)	10b	1/26/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	**69,500**
A8a-SB1 (D3)	8a	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8c-SB1 (D4)	8c	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50
A8a-SB4 (D5)	8a	1/27/2011	1	ND<50	ND<100	ND<50	ND<50	**224**	**236**	ND<50
A8h-SB9 (D6)	8h	1/28/2011	1	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50

Notes and Data Qualifiers

USEPA Region IX Regional Screening Levels (RSLs), June 2015, screening levels for industrial soil and residential soil.

Soil samples collected in 2011 at 0.5 to 1 foot bgs by Ami Adini & Associates (2011) shown for completeness.

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample due either to the quality of the data generated because certain quality control criteria were not met or the sample was analyzed outside the holding time. See data quality review memo for details.

UJ = The analyte was not detected above the laboratory reporting limit but the reporting limit is approximate due either to the quality of the data generated because certain quality control criteria were not met or the sample was analyzed outside the holding time for extraction. See data quality review memo for details.

Abbreviations

bgs = Below ground surface
ND = Not detected at the reporting limit shown
PCBs = Polychlorinated biphenyls
RSL = Regional soil screening level
USEPA = United States Environmental Protection Agency
µg/kg = Micrograms per kilogram

Tables

2017 Results: Hillmann Consulting, 2017, Off-Site Preliminary Environmental Assessment, Riverside Scrap Iron & Metal, Riverside, California, February 27.

2017 Results: Hillmann, 2017, Draft Remedial Action Plan, Riverside Scrap Iron & Metal, Riverside, California, May 8.

TABLE 2
Summary of PCB Soil Sampling Results (EPA)

Boring ID	Area	Date	Depth (ft)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Total PCB
S1-0.25	2981	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S1-1	Mssn Inn		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S2-0.25	2981	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S2-1	Mssn Inn		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S3-0.25	2981	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S3-1	Mssn Inn		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S4-0.25	2981	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S4-1	Mssn Inn		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S5-0.25	2981	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S5-1	Mssn Inn		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S6-0.25	2981	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S6-1	Mssn Inn		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S7-0.25	2981	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S7-1	Mssn Inn		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S8-0.25	2981	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S8-1	Mssn Inn		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S9-0.25	2968 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S9-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S10-0.25	2968 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S10-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S11-0.25	2968 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S11-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S12-0.25	2968 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S12-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S13-0.25	2968 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S13-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S14-0.25	2968 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.05	0.05
S14-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S15-0.25	2968 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.10	0.10
S15-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S16-0.25	2968 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.07	0.07
S16-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S17-0.25	2981 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S17-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S18-0.25	2981 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S18-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S19-0.25	2981 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.05	0.05
S19-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S20-0.25	2981 6th	Feb 2017	0.25	0.14	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.25	0.39
S20-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05

TABLE 2
Summary of PCB Soil Sampling Results (EPA)

Boring ID	Area	Date	Depth (ft)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Total PCB
S21-0.25	2981 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S21-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S22-0.25	2981 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S22-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S23-0.25	2981 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S23-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S24-0.25	2981 6th	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S24-1	St		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S25-0.25	Mssn Inn	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S25-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S26-0.25	Mssn Inn	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S26-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S27-0.25	Mssn Inn	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.076	0.076
S27-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S28-0.25	Mssn Inn	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.097	0.097
S28-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S29-0.25	5th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.74	0.74
S29-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.12	0.12
S30-0.25	5th St	Feb 2017	0.25	0.39	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.22	0.61
No Sample	Entry		--	--	--	--	--	--	--	--	--
S31-0.25	5th St	Feb 2017	0.25	0.31	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.40	0.71
S31-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S32-0.25	5th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S32-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S33-0.25	5th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S33-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S34-0.25	6th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	1.05	1.05
S34-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.067	0.067
S35-0.25	6th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.94	0.94
S35-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S36-0.25	6th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.061	0.061
S36-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S37-0.25	6th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.60	0.60
S37-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S38-0.25	6th St	Feb 2017	0.25	0.059	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.37	0.429
S38-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S39-0.25	6th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.13	0.13
S39-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
S40-0.25	6th St	Feb 2017	0.25	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.40	0.40
S40-1	Entry		1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05
NS1	8e	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.094	0.057	0.151

TABLE 2
Summary of PCB Soil Sampling Results (EPA)

Boring ID	Area	Date	Depth (ft)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Total PCB
NS2	8d	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	8.6	ND<0.02	28	2.3	38.9
			1	ND<0.02	ND<0.02	ND<0.02	62	ND<0.02	290	34	386
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.023	ND<0.02	0.023
NS3	8f	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.047	0.043	0.09
NS4	8e	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.130	0.033	0.163
NS5	8f	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS6	8e	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS7	8a	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	0.055	ND<0.02	0.11	0.058	0.223
NS8	8a	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	2.2	ND<0.02	0.35	0.11	2.66
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS9	8a	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS10A	8a	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	0.11	ND<0.02	0.200	0.100	0.41
NS11	10b	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.039	0.027	0.066
NS12	10b	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS13	10b	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	0.071	ND<0.02	0.076	0.032	0.179
NS14	8c	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS15	8c	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	1.5	ND<0.02	1.6	0.29	3.39
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS16	12	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS17	8h	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS18	8h	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	0.25	ND<0.02	0.42	0.15	0.82
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS19	8h	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS20	8h	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	3.2	ND<0.02	10.5	1.1	14.8
			5	ND<0.02	ND<0.02	ND<0.02	1.1	ND<0.02	0.48	0.29	1.87
NS21	8h	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS24	8e	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.024	0.021	0.045
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS25	8d	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	1.3	0.14	1.44
			1	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.042	ND<0.02	0.042
NS26	8d	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	0.32	ND<0.02	12	1.6	13.92
			1	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS27	8a	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.12	0.097	0.217
NS28	8c	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	2.0	ND<0.02	0.86	0.18	3.04
			1	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
NS29	8c	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	0.058	ND<0.02	0.11	0.089	0.257

TABLE 2
Summary of PCB Soil Sampling Results (EPA)

Boring ID	Area	Date	Depth (ft)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Total PCB
NS30	8h	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.044	0.045	0.089
S1	8e	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S2	8e	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.051	ND<0.02	0.051
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S3	8f	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.076	0.047	0.123
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S4	8d	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	0.14	ND<0.02	0.94	0.071	1.151
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S5	8e	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.17	0.093	0.263
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S6	8d	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	19	ND<0.02	51	6.1	76.1
S7	12	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S8	8a	Aug 2015	2.5	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND
S9	8a	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	0.12	ND<0.02	0.28	0.13	0.53
S10	12	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	1.4	ND<0.02	4.3	3.5	9.2
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S11	8a	Aug 2015	0.25	ND<0.2	ND<0.2	ND<0.2	1.6	ND<0.2	1.4	0.43	3.43
			1	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.2	ND<0.02	ND
S12	8a	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S13	8a	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	4.2	ND<0.02	1.6	0.3	6.1
S14	10b	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	2.9	ND<0.02	15	9.3	27.2
			1	ND<0.2	ND<0.2	ND<0.2	48	ND<0.2	50	18	116
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.2	ND<0.02	0.038	ND<0.02	0.038
S15	8c	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	0.23	ND<0.02	0.095	0.023	0.348
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S16	8b	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S17	8g	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	0.026	ND<0.02	0.06	0.030	0.116
S18	8h	Aug 2015	2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
S19	8g	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
ES1	10a	Aug 2015	0.25	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
ES2	8b	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.022	0.022
			2.5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND
ES3	8h	Aug 2015	0.25	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.410	0.170	0.58

TABLE 2
Summary of PCB Soil Sampling Results (EPA)

Boring ID	Area	Date	Depth (ft)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Total PCB
A8a-SB1	8a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.199	ND<0.05	0.199
A8a-SB2	8a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.790	ND<0.05	0.79
A8a-SB3	8a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	2.96	2.66	ND<0.05	5.62
A8a-SB4	8a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8a-SB5	8a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	8.15	4.62	ND<0.05	12.77
A8a-SB6	8a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	26.8	5.95	ND<0.05	32.75
A8b-SB1	8b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	369	125	ND<0.05	494
A8b-SB2	8b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8b-SB3	8b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	0.18	0.274	ND<0.05	0.454
A8b-SB4	8b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.903	ND<0.05	0.903
A8c-SB1	8c	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8c-SB2	8c	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	10.4	1.45	ND<0.05	11.85
A8c-SB3	8c	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	24.3	2.67	ND<0.05	26.97
A8c-SB4	8c	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8d-SB1	8d	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8d-SB2	8d	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	5.84	ND<0.05	5.84
A8d-SB3	8d	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.903	ND<0.05	0.903
A8d-SB4	8d	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.372	ND<0.05	0.372
A8e-SB1	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.219	ND<0.05	0.219
A8e-SB2	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.109	ND<0.05	0.109
A8e-SB3	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8e-SB4	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	62.8	62.8
A8e-SB5	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8e-SB6	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	1.43	ND<0.05	1.43
A8e-SB7	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8e-SB8	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8f-SB1	8f	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8f-SB2	8f	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.161	ND<0.05	0.161
A8f-SB3	8f	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	3.070	ND<0.05	3.07
A8g-SB1	8g	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8g-SB2	8g	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND

TABLE 2
Summary of PCB Soil Sampling Results (EPA)

Boring ID	Area	Date	Depth (ft)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Total PCB
A8g-SB3	8g	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8h-SB1	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8h-SB10	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8h-SB2	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	1.3	ND<0.05	1.3
A8h-SB3	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	1.18	0.699	ND<0.05	1.879
A8h-SB4	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	1.57	0.552	ND<0.05	2.122
A8h-SB5	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8h-SB6	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	0.084	ND<0.05	ND<0.05	0.084
A8h-SB7	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	1.73	1.810	ND<0.05	3.54
A8h-SB8	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	1.49	0.536	ND<0.05	2.026
A8h-SB9	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A10a-SB1	10a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A10a-SB2	10a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A10b-SB1	10b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.112	ND<0.05	0.112
A10b-SB2	10b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	2.190	1.29	ND<0.05	3.48
A10b-SB3	10b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	7.12	ND<0.05	7.12
A10b-SB4	10b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	73.8	73.8
A12-SB1	12	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	23	23
A12-SB2	12	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A12-SB3	12	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	0.123	ND<0.05	ND<0.05	0.123
A12-SB4	12	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	0.205	0.120	ND<0.05	0.325
A12-SB5	12	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	6.2	6.2
A13-SB1	13	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	0.425	ND<0.05	0.425
A13-SB2	13	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A13-SB3	13	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
Duplicate Samples											
A8e-SB7 (D1)	8e	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.165	0.165
A10b-SB4 (D2)	10b	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	69.5	69.5
A8a-SB1 (D3)	8a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8c-SB1 (D4)	8c	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
A8a-SB4 (D5)	8a	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	0.224	0.236	ND<0.05	0.46

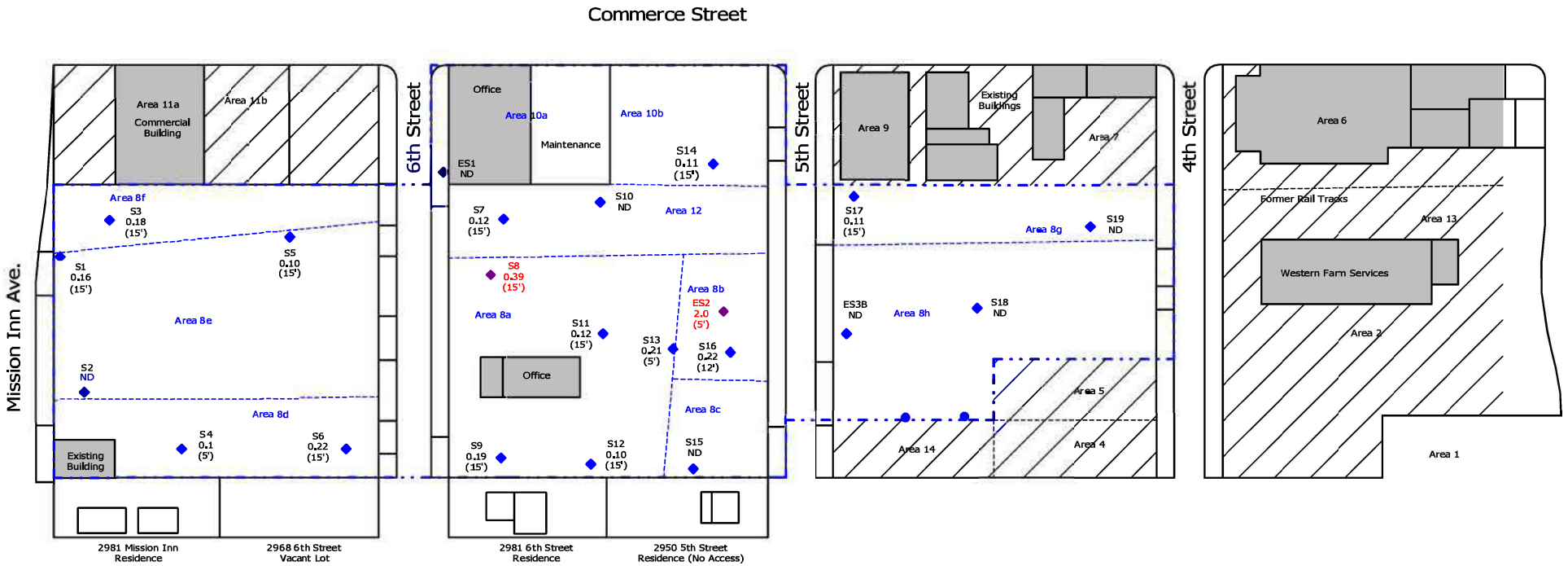
TABLE 2
Summary of PCB Soil Sampling Results (EPA)

Boring ID	Area	Date	Depth (ft)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Total PCB
A8h-SB9 (D6)	8h	Jan 2011	1	ND<0.05	ND<0.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND

Notes: USEPA requires a table that shows all PCB sampling results in mg/kg, and with a total PCB column. The Aroclors presented were the only ones detected in the testing. Samples with greater than 50 mg/Kg highlighted in RED.

APPENDIX C.

Historical Distribution of PCE in Soil Gas



LEGEND

◆ Soil Gas Sampling Locations (Amec 2015)

FIGURE 9A
DISTRIBUTION OF PCE IN SOIL GAS
RIVERSIDE SCRAP IRON & METAL
Riverside, California

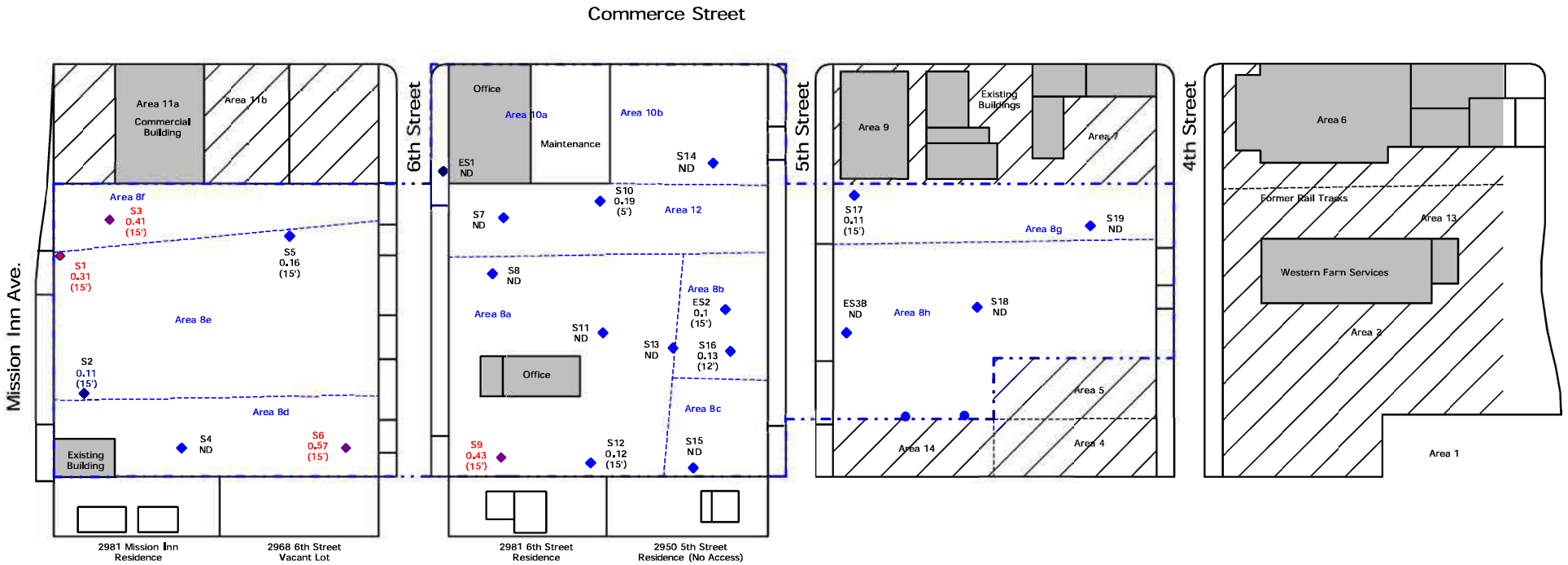
Maximum PCE Concentrations Shown in ug/L.
Concentrations >0.24 ug/L Shown in RED.

HILLMANN CONSULTING

N

APPROXIMATE SCALE IN FEET

0 100 200



LEGEND

◆ Soil Gas Sampling Locations (Amec 2015)

FIGURE 9B
DISTRIBUTION OF TCE IN SOIL GAS
RIVERSIDE SCRAP IRON & METAL
Riverside, California

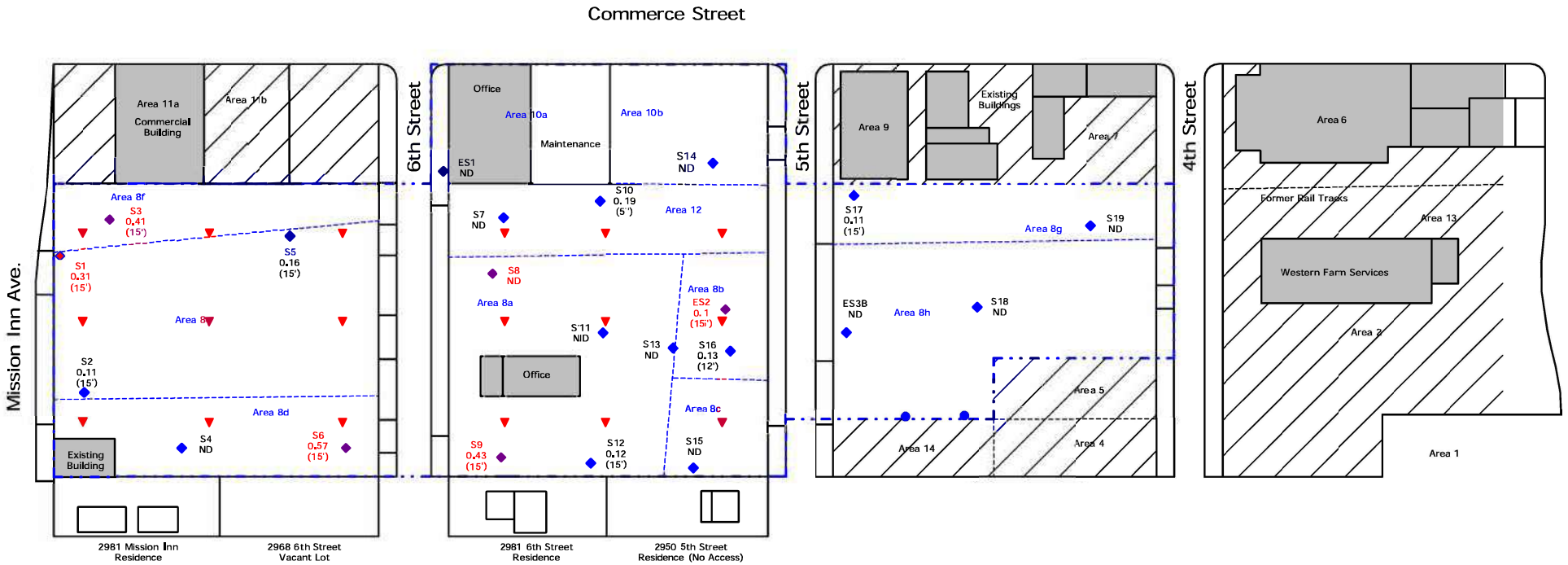
Maximum TCE Concentrations Shown in ug/L.
Concentrations >0.24 ug/L Shown in RED.

HILLMANN CONSULTING

N

APPROXIMATE SCALE IN FEET

0 100 200



LEGEND

- Soil Gas Sampling Locations (Amec 2015)
- Proposed Soil GasProbes (After Excavation Program)

FIGURE 9C
PROPOSED SOIL GAS PROBES
RIVERSIDE SCRAP IRON & METAL
Riverside, California

Probes with Maximum TCE or PCE Concentrations >0.24 ug/L Shown in RED.

HILLMANN CONSULTING

APPROXIMATE SCALE IN FEET

0 100 200

TABLE 7

SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) AND GASOLINE RANGE ORGANICS (GRO) IN SOIL GAS
Riverside Scrap Iron & Metal Site
Riverside, California

Results reported in micrograms per liter (µg/L)

Soil Gas Probe Designation	Depth (feet bgs)	Purge Volume (µg/L)	Date	Chloro-methane	Freon 12	Freon 11	TCE	PCE	IPA	Gasoline Range Organics
Industrial RSLs or *DTSC-modified Screeing Level*				390	440	3,100	3	*2.1*	880	NA
Ambient Air	---	---	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
	---	---	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S1	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S1	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.31**	**0.16**	ND<1.0	ND<10
S2	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S2	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.11**	ND<0.10	ND<1.0	ND<10
S3	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S3	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.37**	**0.17**	ND<1.0	ND<10
S3	15 Dup	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.41**	**0.18**	ND<1.0	ND<10
S4	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	**0.10**	ND<1.0	ND<10
S4	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S5	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S5	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.16**	**0.10**	ND<1.0	ND<10
S6	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.14**	**0.14**	ND<1.0	ND<10
S6	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.57**	**0.22**	ND<1.0	ND<10
S7	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S7	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	**0.12**	ND<1.0	ND<10
S8	5	3	10/1/2015	ND<0.10	ND<0.10	**0.12**	ND<0.10	ND<0.10	ND<1.0	ND<200
S8	15	3	10/1/2015	ND<0.10	ND<0.10	**0.18**	ND<0.10	**0.39**	ND<1.0	ND<10
S9	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S9	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.43**	**0.19**	ND<1.0	ND<10
S10	5	3	10/2/2015	ND<0.10	ND<0.10	**0.21**	**0.19**	ND<0.10	ND<1.0	ND<10
S10	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S11	5	3	10/1/2015	ND<0.10	ND<0.10	**1.9**	ND<0.10	ND<0.10	ND<1.0	ND<10
S11	15	3	10/1/2015	ND<0.10	ND<0.10	**2.6**	ND<0.10	**0.12**	ND<1.0	ND<10
S11	15 Dup	3	10/1/2015	ND<0.10	ND<0.10	**2.6**	ND<0.10	**0.12**	ND<1.0	ND<10
S12	5	3	10/1/2015	ND<0.10	ND<0.10	**1.1**	ND<0.10	ND<0.10	ND<1.0	ND<10
S12	15	3	10/1/2015	ND<0.10	ND<0.10	**1.5**	**0.12**	**0.10**	ND<1.0	ND<10
S13 (see notes)	5	3	10/1/2015	**0.49**	**0.28**	**15**	ND<0.10	**0.21**	ND<1.0	ND<10
S13 (See notes)	15	3	10/1/2015	ND<0.10	**0.34**	**12**	ND<0.10	**0.18**	ND<1.0	ND<10
S14	5	3	10/2/2015	ND<0.10	ND<0.10	**0.16**	ND<0.10	ND<0.10	ND<1.0	ND<10
S14	15	3	10/2/2015	ND<0.10	ND<0.10	**0.11**	ND<0.10	**0.11**	ND<1.0	ND<10
S15	5	3	10/1/2015	ND<0.10	ND<0.10	**1.4**	ND<0.10	ND<0.10	ND<1.0	ND<10
S15	15	3	10/1/2015	ND<0.10	ND<0.10	**1.0**	ND<0.10	ND<0.10	ND<1.0	ND<10
S16A	5	3	10/2/2015	ND<0.10	ND<0.10	**3.5**	ND<0.10	**0.12**	ND<1.0	ND<10
S16A	12	3	10/2/2015	ND<0.10	ND<0.10	**3.0**	**0.13**	**0.22**	ND<1.0	ND<10
S17	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S17	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	**0.11**	**0.11**	ND<1.0	ND<10

TABLE 7

SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) AND GASOLINE RANGE ORGANICS (GRO) IN SOIL GAS
Riverside Scrap Iron & Metal Site
Riverside, California

Results reported in micrograms per liter (µg/L)

Soil Gas Probe Designation	Depth (feet bgs)	Purge Volume (µg/L)	Date	Chloro-methane	Freon 12	Freon 11	TCE	PCE	IPA	Gasoline Range Organics
S18	5	3	10/2/2015	ND<0.10UJ	ND<0.10UJ	**0.62J**	ND<0.10UJ	ND<0.10UJ	**3.3J**	ND<10
S18	15	3	10/2/2015	ND<0.10	ND<0.10	**0.50**	ND<0.10	ND<0.10	ND<1.0	ND<10
S18	15 Dup	3	10/2/2015	ND<0.10	ND<0.10	**0.46**	ND<0.10	ND<0.10	ND<1.0	ND<10
S19	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S19	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES1	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES1	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES2	5	3	10/2/2015	ND<0.10	ND<0.10	**0.78**	ND<0.10	**2.0**	ND<1.0	ND<10
ES2	15	3	10/2/2015	ND<0.10	ND<0.10	**0.69**	**0.10**	**1.1**	ND<1.0	ND<10
ES3B	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES3B	5 Dup	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES3B	11.25	3	10/2/2015	ND<0.10	ND<0.10	**0.19**	ND<0.10	ND<0.10	ND<1.0	ND<10

Notes and Data Qualifiers

Volatile Organic Compounds (VOCs) and Gasoline Range Organics (GRO) were analyzed using United States Environmental Protection Agency (EPA) Method 8260M. All remaining VOCs were not detected. For a complete list of EPA 8260M analytes, see laboratory reports.

The Regional Screening Levels (RSLs) are from the EPA Region 9, revised June 2015, http://www.epa.gov/region9/superfund/prg/. RSLs were adjusted for a default (DTSC, 2011) attenuation factor for existing commercial buildings by multiplying the air RSLs by 1000 (representing a soil vapor-to-indoor air attenuation factor of 0.001. Therefore, the soil vapor screening levels presented are protective of existing buildings. The DTSC-modified screening level (DTSC, 2015) was used for PCE (italicized) because it was more conservative than the USEPA RSL.

S13 at 5 bgs and S13 at 15 feet bgs -Freon 11 concentrations from soil vapor samples exceeded the laboratory instrument calibration range. The samples were re-run at a higher dilution rate to quantify Freon 11 concentrations.

J - The analyte was positively identified. However, the leak detection compound IPA was detected in the sample at a concentration greater than 10 times the reporting limit of target analytes and therefore, the detected value is estimated.

UJ - The analyte was reported as not detected at the laboratory reporting limit. However, the leak detection compound IPA was detected in the sample at concentration greater than 10 times the reporting limit of the target analytes and therefore, the reporting limit is estimated.

Abbreviations

bgs = Below ground surface
ND = Not detected at the reporting limit shown
DUP = Duplicate sample
DTSC = Department of Toxic Substances Control
Freon 11 = Trichlorofluoromethane
Freon 12 = Dichlorodifluoromethane
IPA = Isopropanol
NA = Not available
PCE = Tetrachloroethene
RSL = Regional Screening Level
TCE = Trichloroethene
µg/L = Micrograms per liter

References

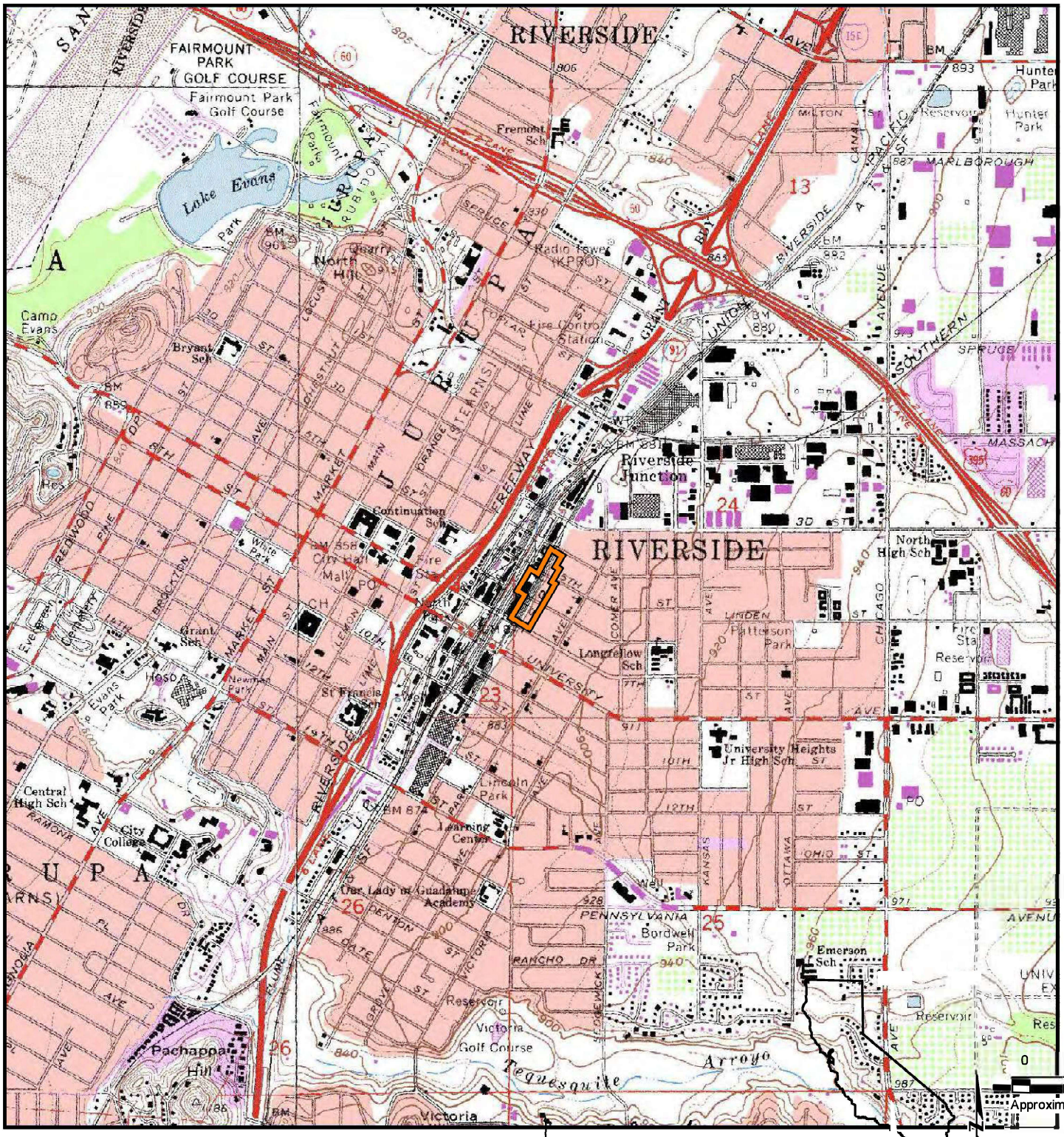
DTSC, 2015, Human Health Risk Assessment (HHRA) Note #3, DTSC-modified Screening Levels (DTSC-SLs), Human and Ecological Risk Office (HERO), October.

DTSC, 2011, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, October.

APPENDIX D.

Data from 2015 AMEC Investigation

APPENDIX A
AMEC Data



REFERENCE:

USGS 7.5 Minute Quadrangle Maps RIVERSIDE EAS , RIVERSIDE WEST, SAN BERNARDINO SOUTH, & FONTANA, C lifornia, 1967.

Photorevised 1980.

SITE LOCATION MAP

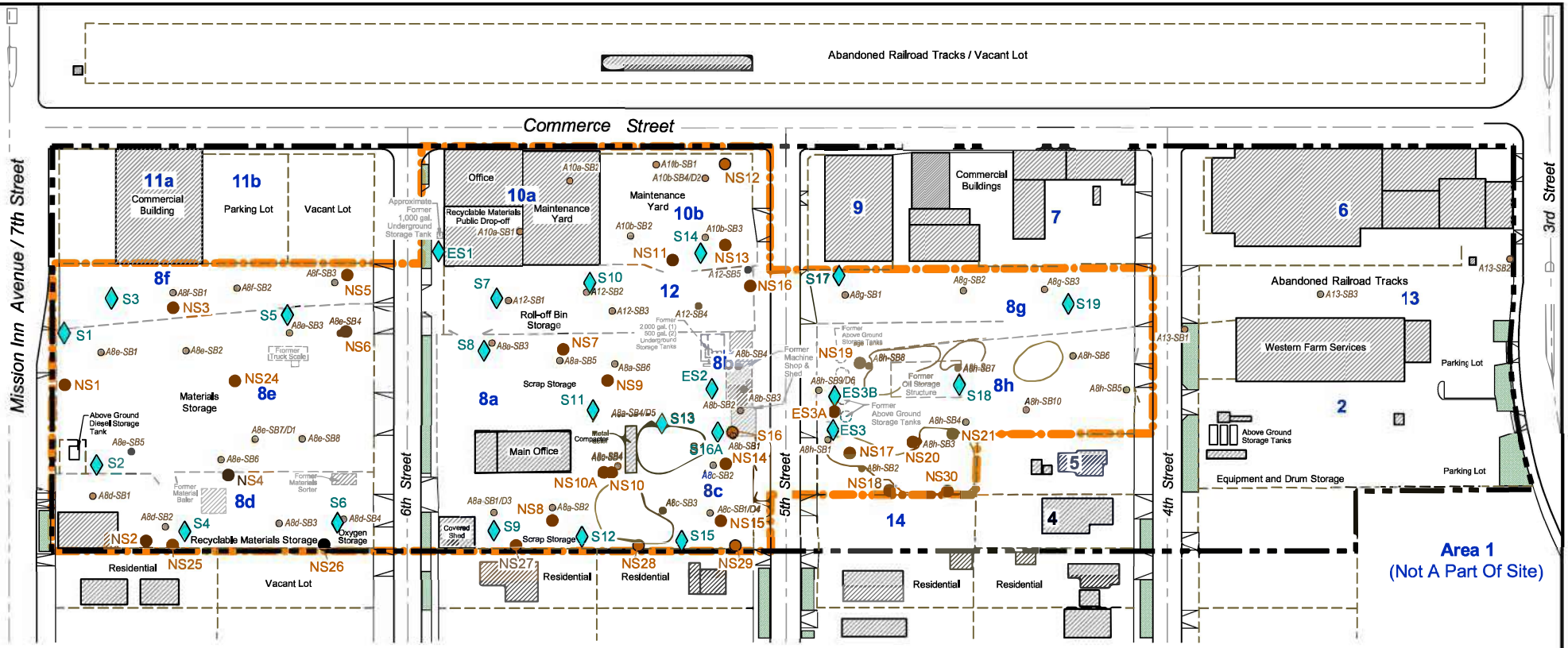
Riverside Scrap Iron & Metal Site

Riverside, California

Project No. 01-0468.0020 Date: 4/13/2015

grr Drawn By: Submitted By:

1



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ◊ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ○ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ○ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)

- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Notes:

1. All locations are approximate.
2. Scrap heaps shown from locations identified in January/Febrary 2011 field work.

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

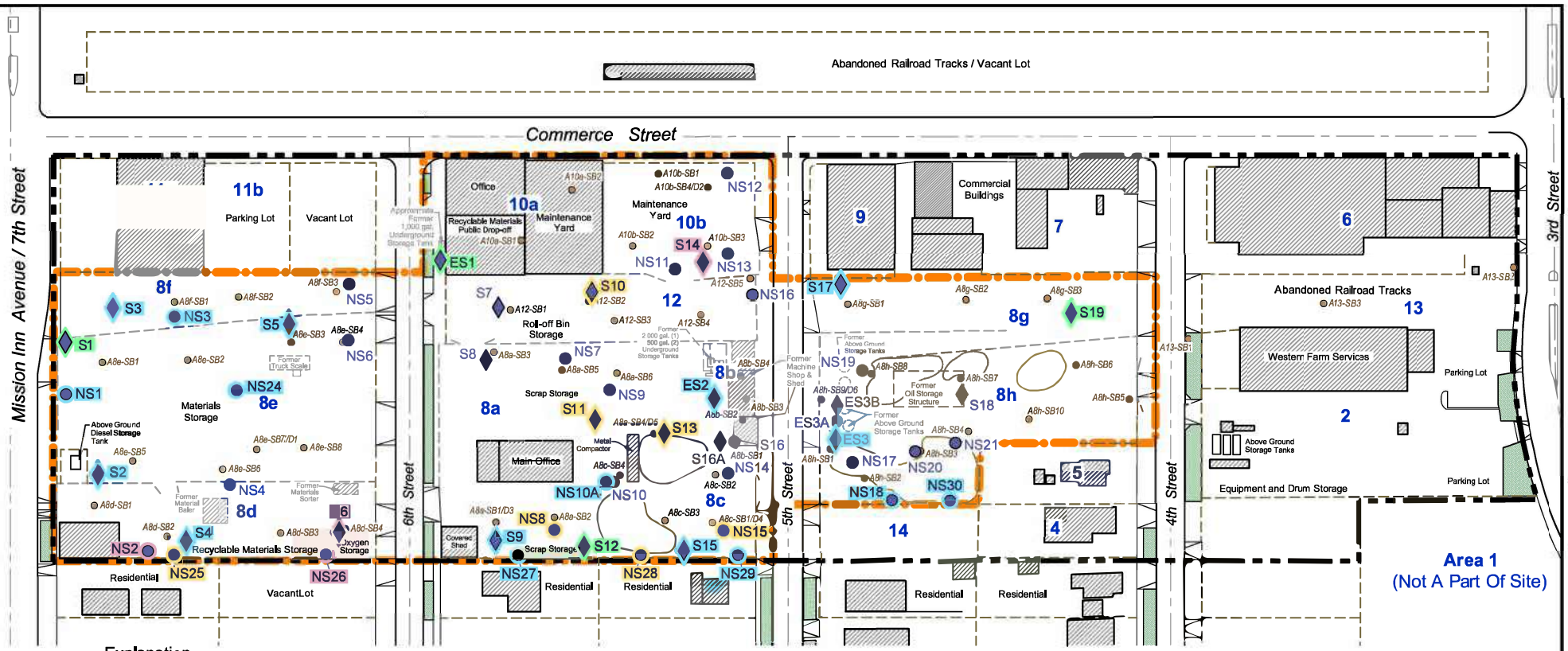
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

SAMPLING LOCATIONS
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/16/2015	Project No. 010468.0040	Figure 2
Submitted By: grr	Drawn By: jrw	

Plot Date: 10/16/2015 11:39:50 AM Plotted by: joanna.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468.004 (RSI&M)\ACAD\Sample Locs.dwg Sample locs



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ○ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ○ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Polychlorinated Biphenyl (PCB) Concentrations

- All Aroclors Not Detected
- All Aroclors < Regional Screening Level (RSL)
- One or more Aroclors > RSL
- One or more Aroclors >10x RSL

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Locations that were not sampled or analyzed have no color hi-lighting.
4. The posted concentration category for a sample/sample duplicate pair is the higher of the two categories if they differ.
5. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

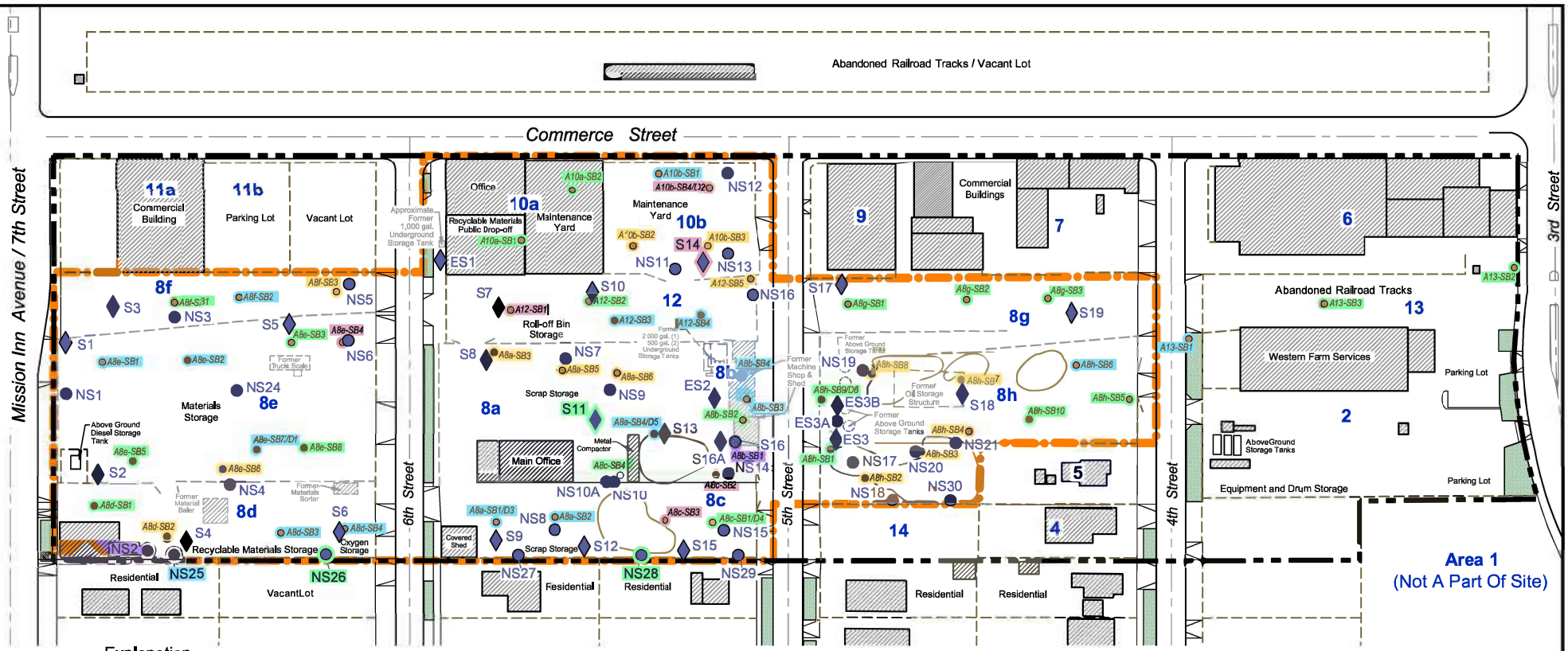
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

PCB CONCENTRATIONS IN SOIL 0.25 FOOT
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure 3a
Submitted By: grr	Drawn By: jrw	

Plot Date: 10/27/2015 8:55:47 AM, Plotted by: joanna.worker - Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468.004 (RSIM)\ACAD\Results-2015.dwg - PCBs_025



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ○ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ◎ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Polychlorinated Biphenyl (PCB) Concentrations

- All Aroclors Not Detected
- All Aroclors < Regional Screening Level (RSL)
- One or more Aroclors > RSL
- One or more Aroclors >10x RSL
- One or more Aroclors >100x RSL

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Locations that were not sampled or analyzed have no color hi-lighting.
4. The posted concentration category for a sample/sample duplicate pair is the higher of the two categories if they differ.
5. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

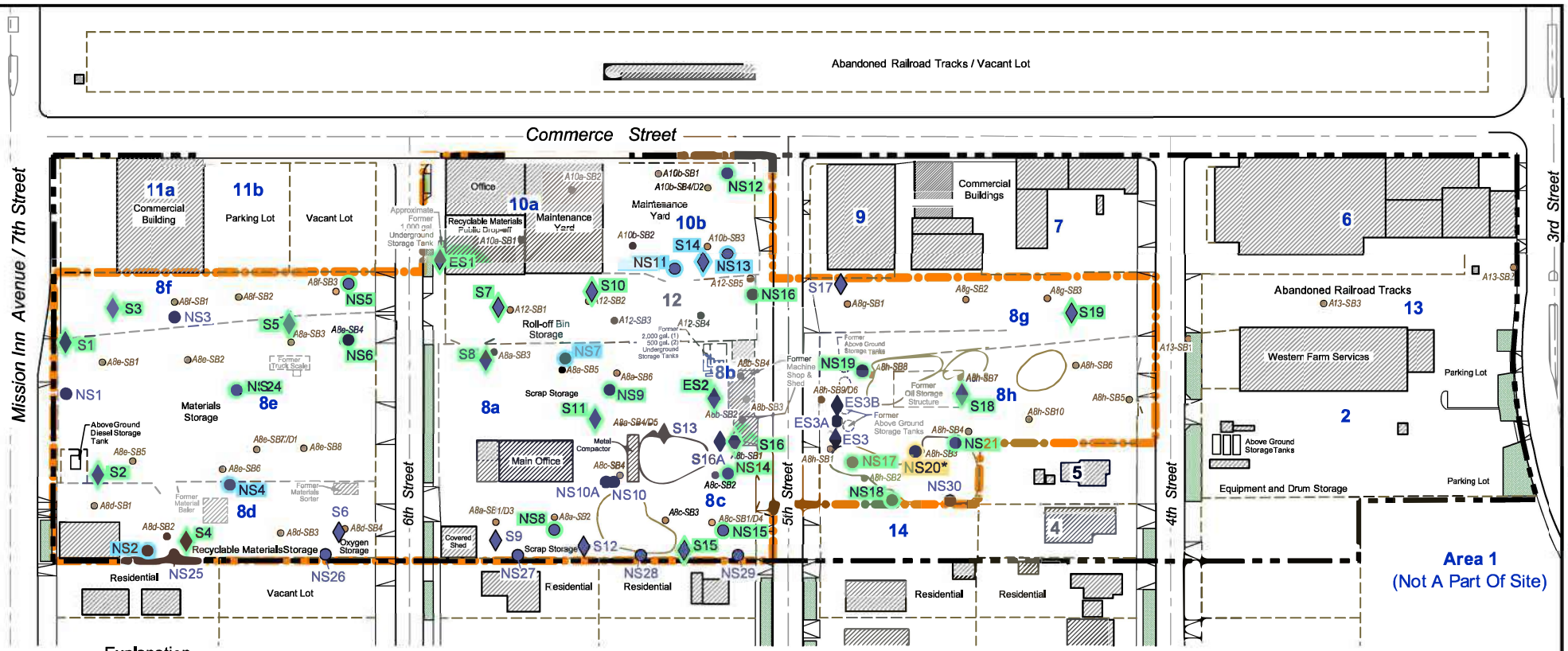
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

PCB CONCENTRATIONS IN SOIL 0.5 - 1 FOOT
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure 3b
Submitted By: grr	Drawn By: jrw	

Plot Date: 10/27/2015 9:01:48 AM Plotted by: joanna.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468_004 (RSIM)\ACAD\Results\8-2015.dwg PCBs_0.5-1



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ⊙ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ⊙ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Polychlorinated Biphenyl (PCB) Concentrations

- All Aroclors Not Detected
- All Aroclors < Regional Screening Level (RSL)
- One or more Aroclors > RSL

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Locations that were not sampled or analyzed have no color hi-lighting.
4. The posted concentration category for a sample/sample duplicate pair is the higher of the two categories if they differ.
5. * = sample location NS20, Area 8h, indicated concentration greater than RSL for one or more Aroclors at 2.5 feet below ground surface (bgs). Underlying sample at 5 feet bgs indicated RSL of one Aroclor greater than the RSL.
6. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

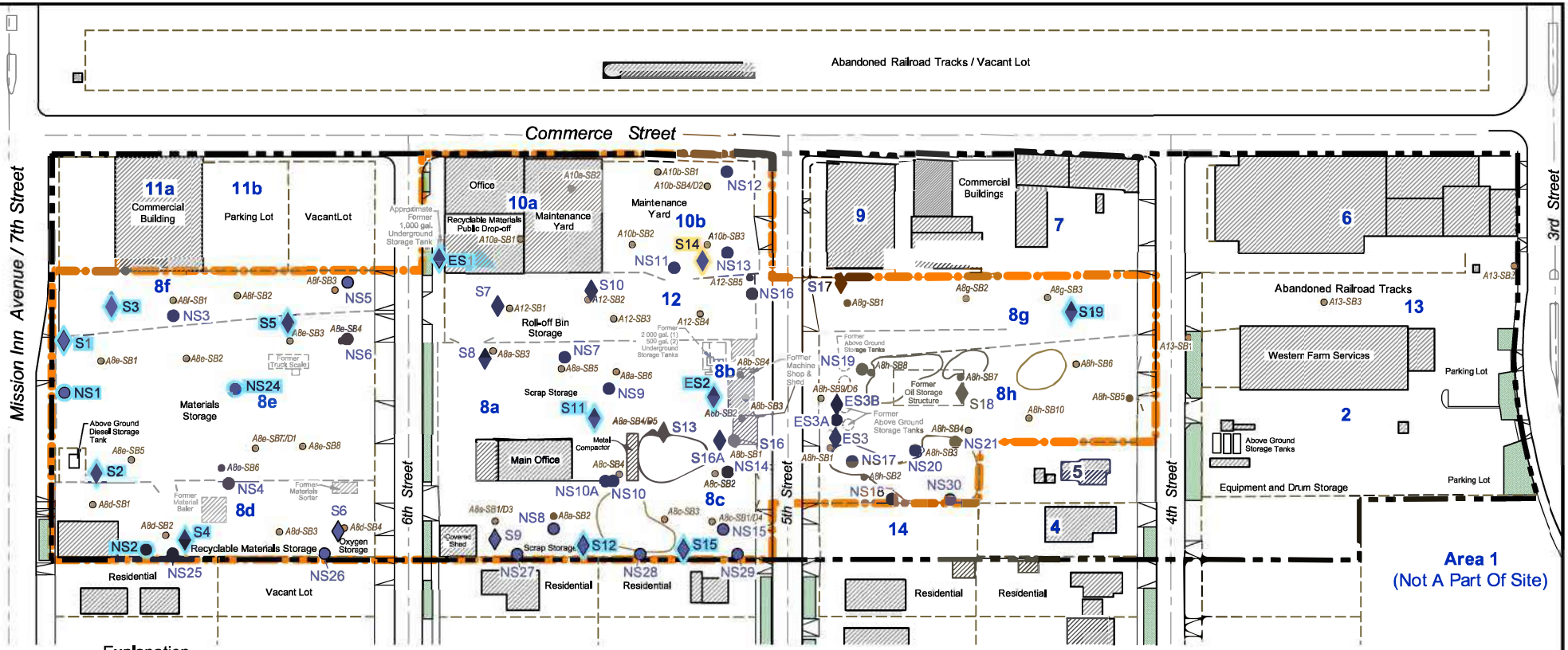
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

PCB CONCENTRATIONS IN SOIL
2.5 FEET
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure
Submitted By: grr	Drawn By: jrw	3c

Plot Date: 10/27/2015 9:03:53 AM, Plotted by: jaime.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468.004 (RSIM)\ACAD\Results-2015.dwg, PCBs_2.5



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ○ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ○ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Lead Concentrations

- Lead <Regional Screening Level (RSL) of 800 micrograms per kilogram
- Lead >RSL

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Locations that were not sampled or analyzed have no color hi-lighting.
4. The posted concentration category for sample/sample duplicate pairs is the higher of the two categories if they differ.
5. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

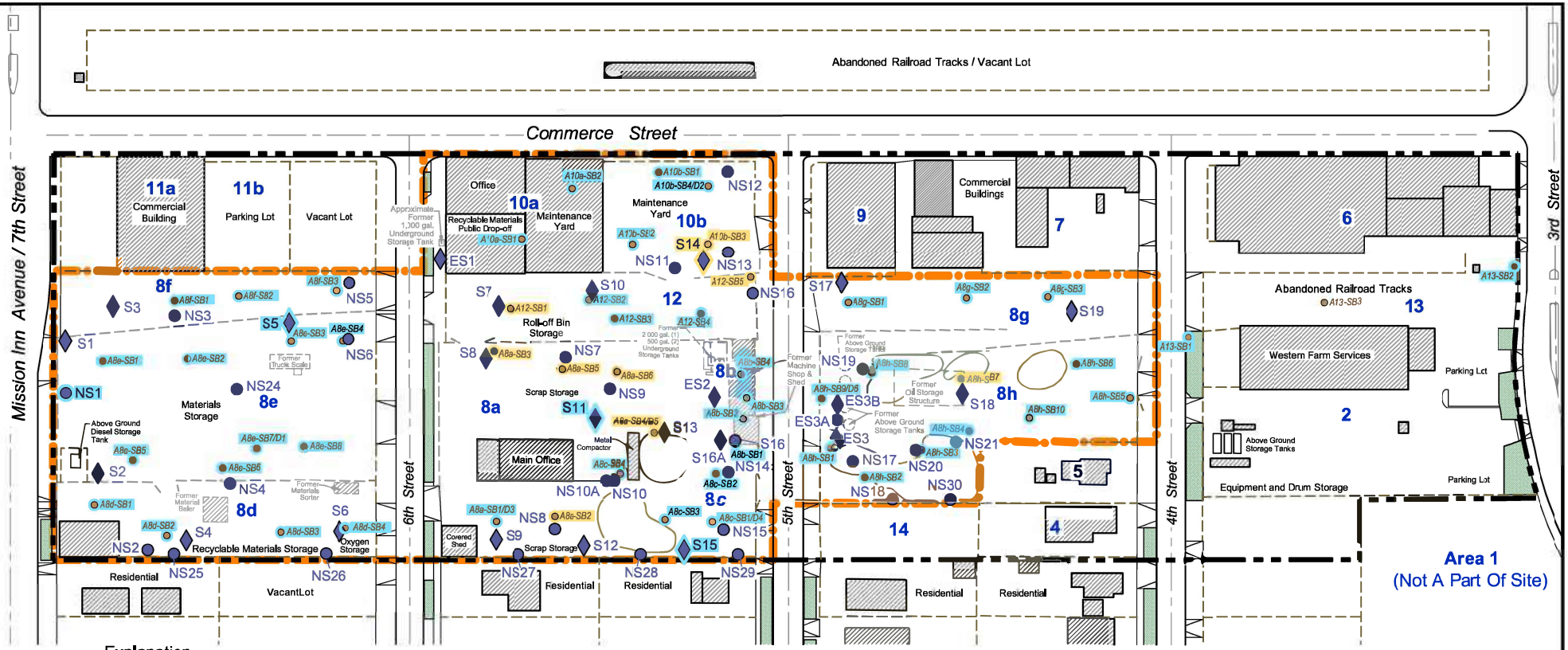
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

LEAD CONCENTRATIONS IN SOIL 0.25 FOOT
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure 4a
Submitted By: grr	Drawn By: jrw	

Plot Date: 10/27/2015 9:34:38 AM, Plotted by: joanna.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468_004 (RSIM)\ACAD\Results\8-2015.dwg Last: 0.25



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ○ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ○ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Lead Concentrations

- Lead <Regional Screening Level (RSL) of 800 micrograms per kilogram
- Lead >RSL

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Locations that were not sampled or analyzed have no color hi-lighting.
4. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

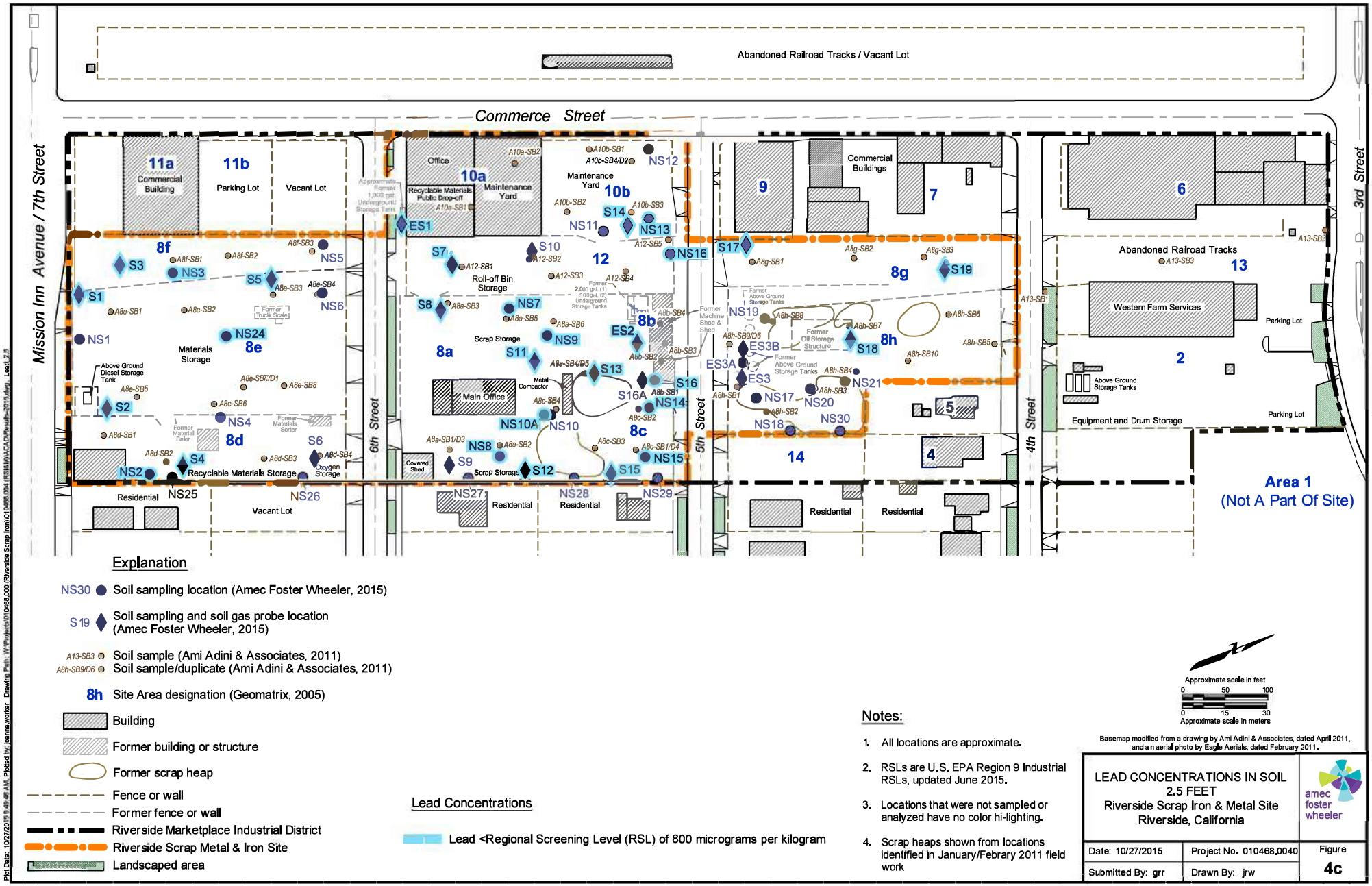
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

LEAD CONCENTRATIONS IN SOIL 0.5 - 1 FOOT
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure 4b
Submitted By: grr	Drawn By: jrw	

Plot Date: 10/27/2015 9:47:56 AM, Plotted by: joanna.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468.004 (RSIM)\ACAD\Results\fig-2015.dwg Layout: 0.5-1



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S 19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ⊙ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ⊙ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Lead Concentrations

- Lead <Regional Screening Level (RSL) of 800 micrograms per kilogram

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Locations that were not sampled or analyzed have no color hi-lighting.
4. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

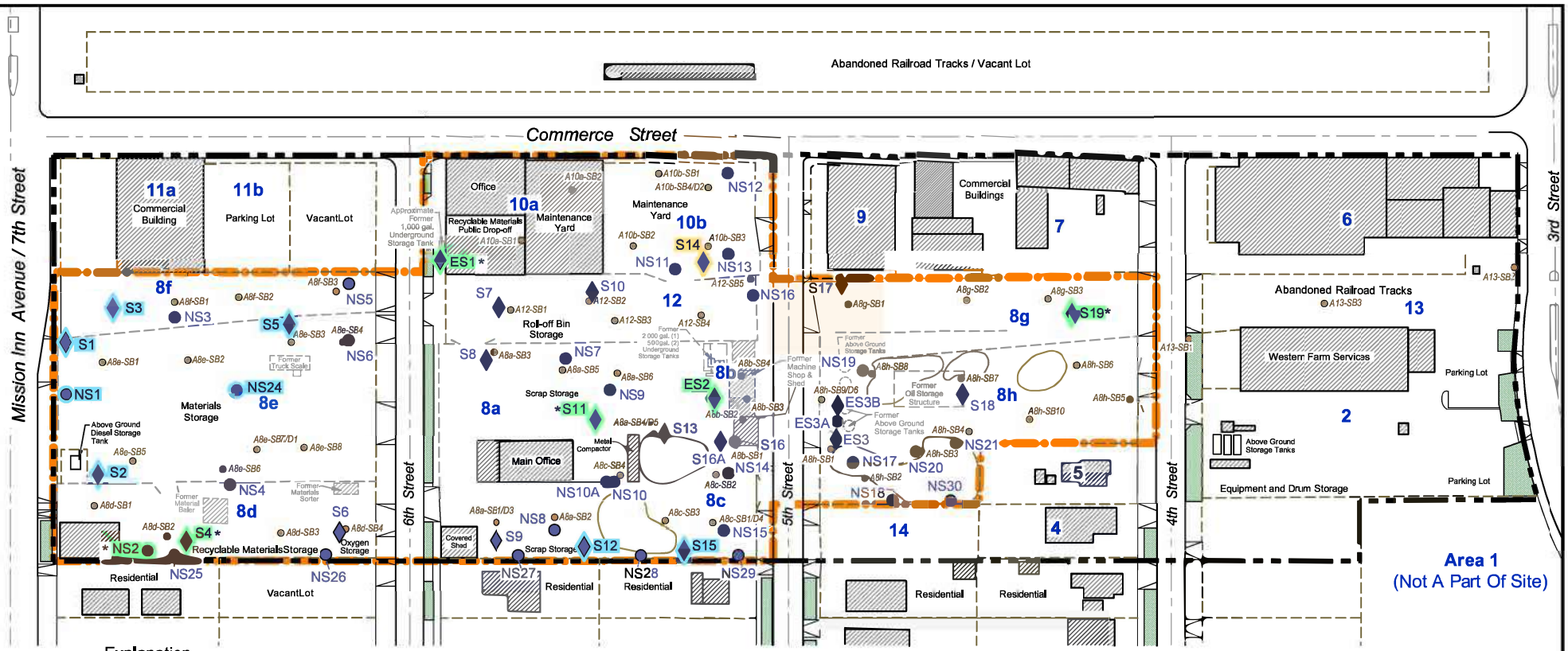
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

LEAD CONCENTRATIONS IN SOIL 2.5 FEET
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure
Submitted By: grr	Drawn By: jrw	4c

Plot Date: 10/27/2015 9:49:48 AM, Plotted by: joanna.worker Drawing Path: W:\Projects\010468,000 (Riverside Scrap Iron)\010468,004 (RSIM)\ACAD\Results-2015.dwg Last: 2.5



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ⊙ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ⊙ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Polynuclear Aromatic Hydrocarbon (PAH) Concentrations

- All PAHs with Regional Screening Level (RSL) Not Detected (* indicates laboratory reporting limits > RSL)
- All PAHs < RSL where available
- One or more PAHs > RSL

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

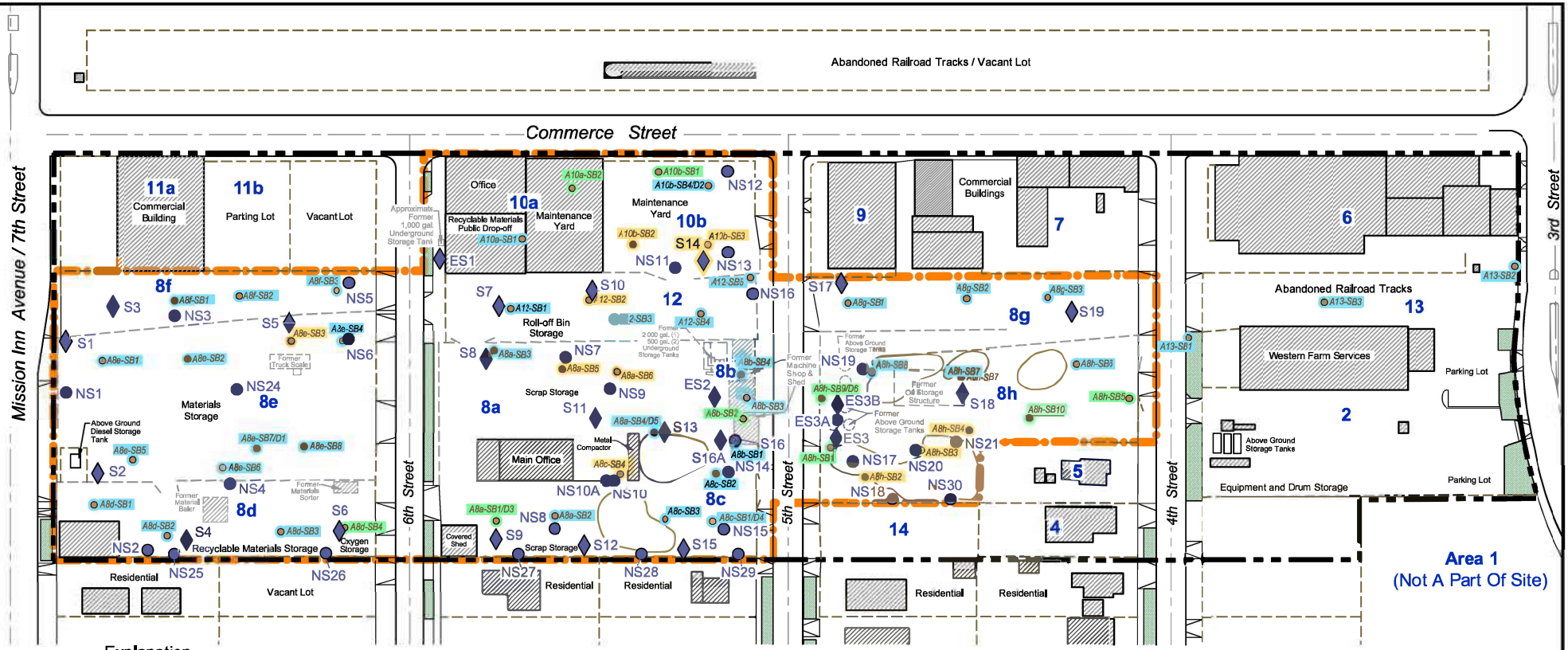
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

PAH CONCENTRATIONS IN SOIL 0.25 FOOT
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure 5a
Submitted By: grr	Drawn By: jrw	

Plot Date: 10/27/2015 9:25:38 AM, Plotted by: joanna.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468.004 (RSIM)\ACAD\Results\8-2015.dwg PAH 0.25



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ○ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ◎ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Polynuclear Aromatic Hydrocarbon (PAH) Concentrations

- All PAHs with Regional Screening Level (RSL) Not Detected
- All PAHs < RSL where available
- One or more PAHs > RSL

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

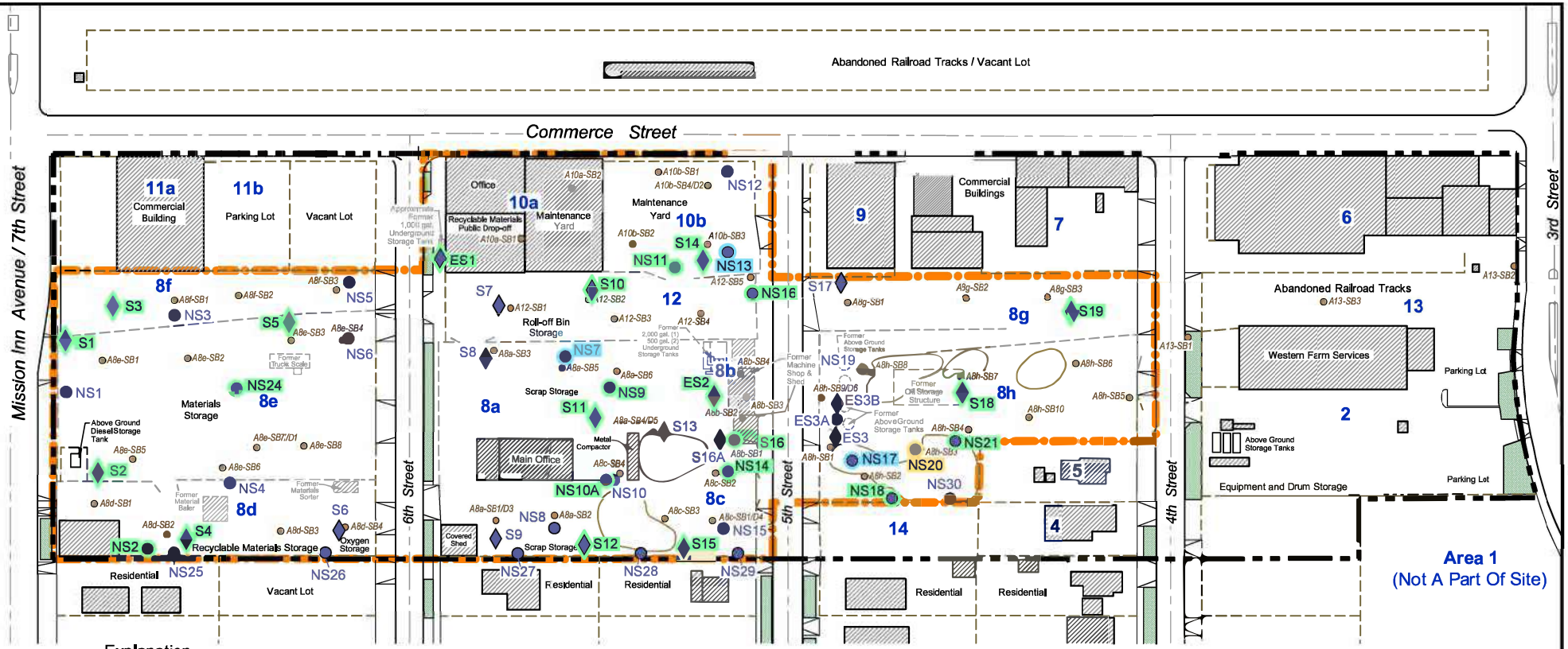
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

PAH CONCENTRATIONS IN SOIL 0.5 - 1 FOOT
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure 5b
Submitted By: grr	Drawn By: jrw	

Plot Date: 10/27/2015 9:27:09 AM Plotted by: joanna.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468.004 (RSIM)\ACAD\Results\8-2015.dwg PAH 0.5-1



Explanation

- NS30 ● Soil sampling location (Amec Foster Wheeler, 2015)
- S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)
- A13-SB3 ○ Soil sample (Ami Adini & Associates, 2011)
- A8h-SB9/D6 ◎ Soil sample/duplicate (Ami Adini & Associates, 2011)
- 8h Site Area designation (Geomatrix, 2005)
- Building
- Former building or structure
- Former scrap heap
- Fence or wall
- Former fence or wall
- Riverside Marketplace Industrial District
- Riverside Scrap Metal & Iron Site
- Landscaped area

Polynuclear Aromatic Hydrocarbon (PAH) Concentrations

- All PAHs with Regional Screening Level (RSL) Not Detected
- All PAHs < RSL where available
- One or more PAHs > RSL

Notes:

1. All locations are approximate.
2. RSLs are U.S. EPA Region 9 Industrial RSLs, updated June 2015.
3. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

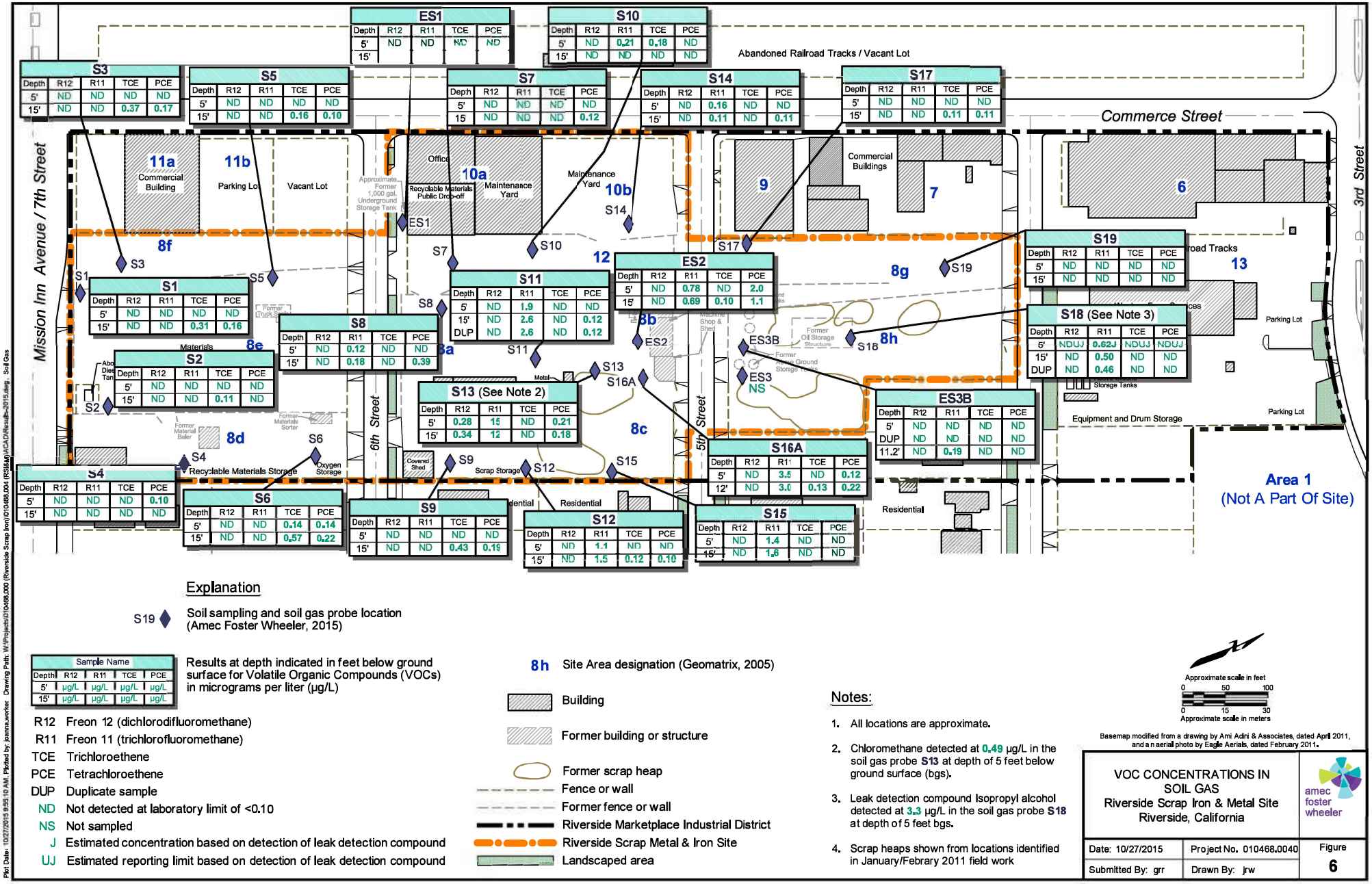
Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

PAH CONCENTRATIONS IN SOIL 2.5 FEET
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure 5c
Submitted By: grr	Drawn By: jrw	

Plot Date: 10/27/2015 9:29:29 AM Plotted by: joanna.worker Drawing Path: W:\Projects\010468,000 (Riverside Scrap Iron)\010468,004 (RSIM)\ACAD\Results-2015.dwg PAH 2.5



Explanation

S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)

Sample Name				
Depth	R12	R11	TCE	PCE
5'	µg/L	µg/L	µg/L	µg/L
15'	µg/L	µg/L	µg/L	µg/L

Results at depth indicated in feet below ground surface for Volatile Organic Compounds (VOCs) in micrograms per liter (µg/L)

- R12 Freon 12 (dichlorodifluoromethane)
- R11 Freon 11 (trichlorofluoromethane)
- TCE Trichloroethene
- PCE Tetrachloroethene
- DUP Duplicate sample
- ND Not detected at laboratory limit of <0.10
- NS Not sampled
- J Estimated concentration based on detection of leak detection compound
- UJ Estimated reporting limit based on detection of leak detection compound

8h Site Area designation (Geomatrix, 2005)

Building

Former building or structure

Former scrap heap

Fence or wall

Former fence or wall

Riverside Marketplace Industrial District

Riverside Scrap Metal & Iron Site

Landscaped area

Notes:

1. All locations are approximate.
2. Chloromethane detected at **0.49** µg/L in the soil gas probe **S13** at depth of 5 feet below ground surface (bgs).
3. Leak detection compound Isopropyl alcohol detected at **3.3** µg/L in the soil gas probe **S18** at depth of 5 feet bgs.
4. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

VOC CONCENTRATIONS IN SOIL GAS
Riverside Scrap Iron & Metal Site
Riverside, California

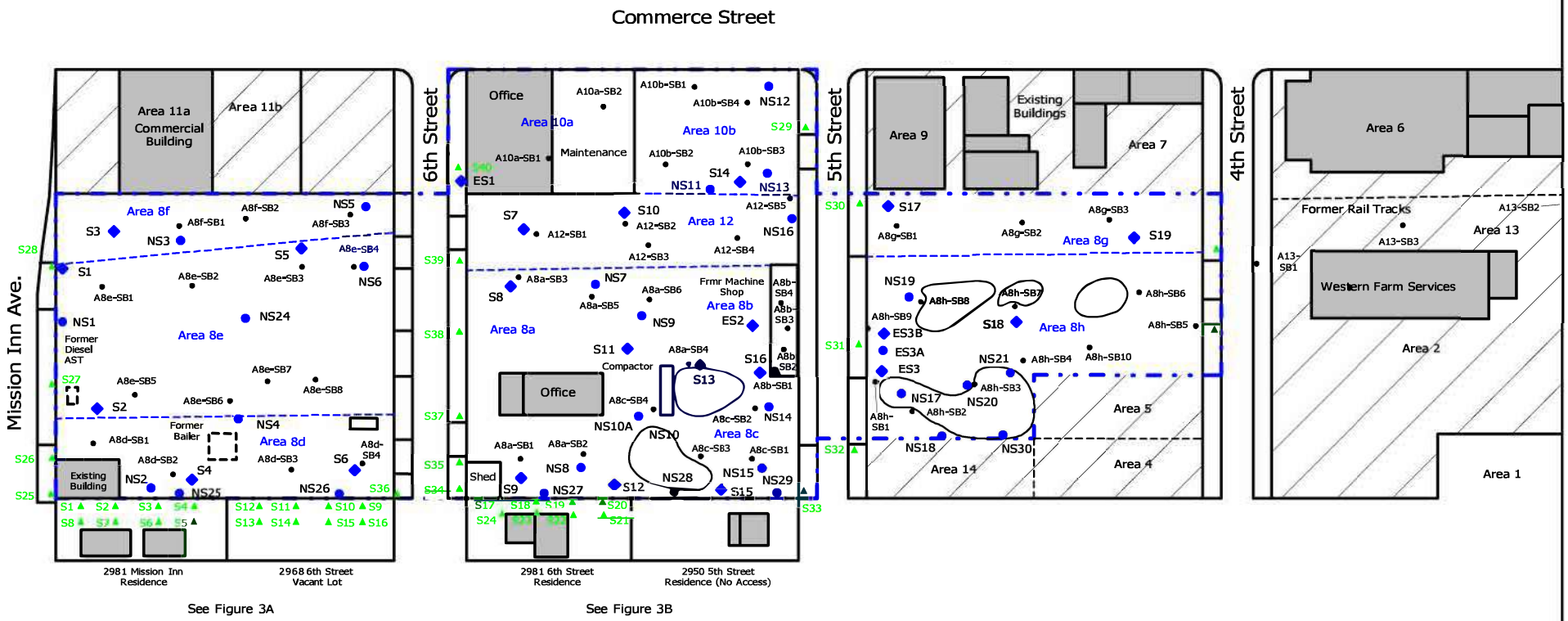
amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure
Submitted By: grr	Drawn By: jrw	6

Plot Date: 10/27/2015 8:55:10 AM, Plotted by: joanna.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468.004 (RSI&M)\ACAD\Results_2015.dwg, Soil Gas

APPENDIX E.

Historical Off-Site Sampling Locations



LEGEND

- Soil Sampling Locations (Amec 2015)
- Soil/Soil Gas Sampling Locations (Amec 2015)
- Soil Sampling Locations (AAA 2011)
- Off-Site Sampling Locations

FIGURE 2
GENERAL SITE PLAN
RIVERSIDE SCRAP IRON & METAL
Riverside, California

HILLMANN CONSULTING

N

APPROXIMATE SCALE IN FEET

0 150 300

HILLMANN CONSULTING

Scale

1-inch = 40 ft

North

FIGURE 3A
Off-Site Soil Sampling Locations
Riverside Scrap
Riverside CA

HILLMANN CONSULTING

Scale

1-inch = 40 ft

North

FIGURE 3B
Off-Site Soil Sampling Locations
Riverside Scrap
Riverside CA

APPENDIX F.

Summary Table for PCB Delineation

GSI ENVIRONMENTAL

Table 1

Polychlorinated Biphenyls (PCBs) in Soil
Remedial Action Plan
Riverside Scrap Iron & Metal Site
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)									
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
Area 8A															
A8a-SB1	8a	SB1	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.199	<0.05			0.199
A8a-SB2	8a	SB2	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.79	<0.05			0.79
A8a-SB3	8a	SB3	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	2.96	2.66	<0.05			5.62
A8a-SB4	8a	SB4	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8a-SB5	8a	SB5	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	8.15	4.6	<0.05			12.75
A8a-SB6	8a	SB6	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	26.8	5.95	<0.05			32.75
NS9	8a	NS9	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S12	8a	S12	NA	8/12/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S9	8a	S9	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	.120J	<0.02UJ	0.280J	0.130J			0.53
S11	8a	S11	NA	8/13/2015	0.25	<0.2	<0.2	<0.2	1.6	<0.2	1.4J	0.43			3.43
S11	8a	S11	NA	8/13/2015	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2			All ND
S11	8a	S11	NA	8/13/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S8	8a	S8	NA	8/13/2015	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2			All ND
S13	8a	S13	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	4.2	<0.02	1.6	0.3			6.1
NS7	8a	NS7	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	0.055	<0.02	0.11	0.058			0.223
NS8	8a	NS8	NA	8/21/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	2.2J	<0.02UJ	.350J	0.110J			2.66
NS8	8a	NS8	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
Area 8B															
A8b-SB2	8b	SB2	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8b-SB3	8b	SB3	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	0.18	0.274	<0.05			0.454
A8b-SB4	8b	SB4	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.903	<0.05			0.903
ES2	8b	ES2	NA	8/14/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	22J			22
ES2	8b	ES2	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S16	8b	S16	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
A8b-SB1	8b	SB1	Initial >50 Sample	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	369	125	<0.05			**494**
A8b-SB1X-2.5	8b	SB1	X	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8b-SB1A-1	8b	SB1	A	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
A8b-SB1A-2.5	8b	SB1	A	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
A8b-SB1B-1	8b	SB1	B	1/23/2018	1	<0.054	0.25	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.25
A8b-SB1B-2.5	8b	SB1	B	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8b-SB1C-1	8b	SB1	C	1/23/2018	1	<0.055	<0.055	<0.055	<0.055	0.26	0.14	<0.055	<0.055	<0.055	0.4
A8b-SB1C-2.5	8b	SB1	C	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8b-SB1D-1	8b	SB1	D	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
A8b-SB1D-2.5	8b	SB1	D	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND

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Table 1

Polychlorinated Biphenyls (PCBs) in Soil
Remedial Action Plan
Riverside Scrap Iron & Metal Site
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)									
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
Area 8C															
A8c-SB1	8c	SB1	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8c-SB2	8c	SB2	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	10.4	1.4	<0.05			11.8
A8c-SB3	8c	SB3	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	24.3	2.67	<0.05			26.97
A8c-SB4	8c	SB4	NA	1/27/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
NS14	8c	NS14	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS15	8c	NS15	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	1.5	<0.02	1.6	0.29			3.39
NS15	8c	NS15	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS10A	8c	NS10A	NA	8/21/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	.110J	<0.02UJ	.200J	0.100J			0.41
Area 8D															
A8d-SB1	8d	SB1	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8d-SB2	8d	SB2	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	5.84	<0.05			5.84
A8d-SB3	8d	SB3	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.903	<0.05			0.903
A8d-SB4	8d	SB4	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.372	<0.05			0.372
NS25	8d	NS25	NA	8/18/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	1.3J	0.140J			1.44
NS25	8d	NS25	NA	8/18/2015	1	<0.02	<0.02	<0.02	<0.02	<0.02	0.042	<0.02			0.042
NS26	8d	NS26	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	0.32J	<0.02UJ	12J	1.600J			13.92
NS26	8d	NS26	NA	8/12/2015	1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS27	8d	NS27	NA	8/12/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.012	0.097			0.109
NS28	8d	NS28	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	2.0J	<0.02UJ	0.86J	.180J			3.04
NS28	8d	NS28	NA	8/12/2015	1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS29	8d	NS29	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	0.058J	<0.02UJ	0.11J	0.089J			0.257
NS30	8d	NS30	NA	8/21/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	0.044J	0.045J			0.089
S4	8d	S4	NA	8/18/2015	0.25	<0.02	<0.02	<0.02	0.14	<0.02	0.94	0.071			1.151
S4	8d	S4	NA	8/18/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S5	8d	S5	NA	8/12/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.17	0.093			0.263
S5	8d	S5	NA	8/12/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS2	8d	NS2	NA	8/18/2015	0.25	<0.02	<0.02	<0.02	8.6	<0.02	28	2.3J			38.9
NS2	8d	NS2	Initial >50 Sample	8/18/2015	1	<0.02UJ	<0.02UJ	<0.02UJ	62J	<0.02UJ	290J	34J			**386**
NS2	8d	NS2	Initial >50 Sample	8/18/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	0.023	<0.02			0.023
NS2A-1	8d	NS2	A	1/23/2018	1	<55	<55	<55	<55	500	670	<55	<55	<55	**1170**
NS2A-2.5	8d	NS2	A	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	0.21	0.41	<0.054	<0.054	<0.054	0.62
NS2B-1	8d	NS2	B	1/23/2018	1	<53	<53	<53	<53	350	520	<53	<53	<53	**870**
NS2B-2.5	8d	NS2	B	1/23/2018	2.5	<0.27	<0.27	<0.27	<0.27	1.3	1.8	<0.27	<0.27	<0.27	3.1
NS2C-1	8d	NS2	C	1/23/2018	1	<5.7	<5.7	<5.7	<5.7	39	71	<5.7	<5.7	<5.7	**110**
NS2C-2.5	8d	NS2	C	1/23/2018	2.5	<0.28	<0.28	<0.28	<0.28	0.65	1.5	<0.28	<0.28	<0.28	2.15
NS2D-1	8d	NS2	D	1/23/2018	1	<55	<55	<55	<55	150	280	<55	<55	<55	**430**
NS2D-2.5	8d	NS2	D	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	0.12	0.2	<0.055	<0.055	<0.055	0.32
NS2E-0.5	8d	NS2	E	5/18/2018	0.5	<5.4	<5.4	<5.4	<5.4	17	23	<5.4	<5.4	<5.4	40
NS2E-1	8d	NS2	E	5/18/2018	1	<0.55	<0.55	<0.55	<0.55	1.1	1.8	<0.55	<0.55	<0.55	2.9
NS2F-0.5	8d	NS2	F	5/18/2018	0.5	<0.053	<0.053	<0.053	<0.053	0.2	0.11	<0.053	<0.053	<0.053	0.31
NS2F-1	8d	NS2	F	5/18/2018	1	<5.6	<5.6	<5.6	<5.6	11	13	<5.6	<5.6	<5.6	24
NS2G-0.5	8d	NS2	G	5/18/2018	0.5	<0.55	<0.55	<0.55	<0.55	4.3	8.3	<0.55	<0.55	<0.55	12.6
NS2G-1	8d	NS2	G	5/18/2018	1	<5.3	<5.3	<5.3	<5.3	13	28	<5.3	<5.3	<5.3	41
NS2H-0.5	8d	NS2	H	5/18/2018	0.5	<5.4	<5.4	<5.4	<5.4	210	330	<5.4	<5.4	<5.4	**540**
NS2H-1	8d	NS2	H	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	7.3	14	<2.7	<2.7	<2.7	21.3

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						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
NS2I-0.5	8d	NS2	I	5/18/2018	0.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
NS2I-1	8d	NS2	I	5/18/2018	1	<0.51	<0.51	<0.51	<0.51	0.78	2	<0.51	<0.51	<0.51	2.78
NS2K-0.5	8d	NS2	K	5/18/2018	0.5	<0.051	<0.051	<0.051	<0.051	0.21	0.12	<0.051	<0.051	<0.051	0.33
NS2K-1	8d	NS2	K	5/18/2018	1	<5.3	<5.3	<5.3	<5.3	43	67	<5.3	<5.3	<5.3	**110**
NS2KK-2.5	8d	NS2	KK	8/3/2018	2.5	<0.053	<0.053	<0.053	<0.053	0.082	0.16	<0.053	<0.053	<0.053	0.242
NS2KK1-1	8d	NS2	KK1	8/3/2018	1	<2.6	<2.6	<2.6	<2.6	6.8	29	<2.6	<2.6	<2.6	35.8
NS2L-0.5	8d	NS2	L	5/18/2018	0.5	<0.11	<0.11	<0.11	<0.11	0.49	0.26	<0.11	<0.11	<0.11	0.75
NS2L-1	8d	NS2	L	5/18/2018	1	<0.54	<0.54	<0.54	<0.54	75	280	<0.54	<0.54	<0.54	**355**
NS2LL-2.5	8d	NS2	LL	8/3/2018	2.5	<0.26	<0.26	<0.26	<0.26	<0.26	1.2	<0.26	<0.26	<0.26	1.2
NS2M-0.5	8d	NS2	M	5/18/2018	0.5	<5.4	<5.4	<5.4	<5.4	98	86	<5.4	<5.4	<5.4	**184**
NS2M-1	8d	NS2	M	5/18/2018	1	<0.57	<0.57	<0.57	<0.57	1.4	3	<0.57	<0.57	<0.57	4.4
NS2N-0.5	8d	NS2	N	5/18/2018	0.5	<0.5	<0.5	<0.5	<0.5	3.2	<0.5	<0.5	<0.5	<0.5	3.2
NS2N-1	8d	NS2	N	5/18/2018	1	<54	<54	<54	<54	410	670	<54	<54	<54	**1080**
NS2NN1-1	8d	NS2	NN	8/3/2018	1	<1.1	<1.1	<1.1	<1.1	5.3	12	<1.1	<1.1	<1.1	17.3
NS2NN-2.5	8d	NS2	NN	8/3/2018	2.5	<5.3	<5.3	<5.3	<5.3	14	30	<5.3	<5.3	<5.3	44
NS2O-0.5	8d	NS2	O	5/18/2018	0.5	<0.51	<0.51	<0.51	<0.51	3.9	<0.51	<0.51	<0.51	<0.51	3.9
NS2O-1	8d	NS2	O	5/18/2018	1	<5.2	<5.2	<5.2	<5.2	21	43	<5.2	<5.2	<5.2	**64**
NS2OO1-1	8d	NS2	OO	8/3/2018	1	<0.53	<0.53	<0.53	<0.53	4.5	4	<0.53	<0.53	<0.53	8.5
NS2OO-2.5	8d	NS2	OO	8/3/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	0.065	<0.054	<0.054	<0.054	0.065
NS2P-0.5	8d	NS2	P	5/18/2018	0.5	<0.054	<0.054	<0.054	<0.054	0.19	<0.054	<0.054	<0.054	<0.054	0.19
NS2P-1	8d	NS2	P	5/18/2018	1	<5.4	<5.4	<5.4	<5.4	44	25	<5.4	<5.4	<5.4	**69**
NS2PP1-1	8d	NS2	PP	8/3/2018	1	<5.3	<5.3	<5.3	<5.3	88	53	<5.3	<5.3	<5.3	**141**
NS2PP-2.5	8d	NS2	PP	8/3/2018	2.5	<0.054	<0.054	<0.054	<0.054	0.11	0.13	<0.054	<0.054	<0.054	0.24
NS2PP1-2.5	8d	NS2	PP1	8/3/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
NS2PP2-1	8d	NS2	PP2	8/3/2018	1	<0.52	<0.52	<0.52	<0.52	3.4	3.5	<0.52	<0.52	<0.52	6.9
NS2PP3-1.0	8d	NS2	PP3	9/27/2018	1	<5.2	<5.2	<5.2	<5.2	42	37	<5.2			**79**
NS2PP3-2.5	8d	NS2	PP3	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
NS2PP4-1.0	8d	NS2	PP4	9/27/2018	1	<0.52	<0.52	<0.52	<0.52	1.9	4.3	<0.52			6.2
NS2PP5-1.0	8d	NS2	PP5	9/27/2018	1	<55	<55	<55	<55	630	760	<55			**1390**
NS2PP5-2.5	8d	NS2	PP5	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	1.2	<0.054	<0.054	<0.054	1.2
NS2PP6-1.0	8d	NS2	PP6	9/27/2018	1	<5.4	<5.4	<5.4	<5.4	310	600	<5.4	<5.4	<5.4	**910**
NS2PP6-2.5	8d	NS2	PP6	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	0.19	0.25	<0.054	<0.054	<0.054	0.44
NS2PP7-1.0	8d	NS2	PP7	9/27/2018	1	<0.053	<0.053	<0.053	<0.053	<0.053	0.12	<0.053	<0.053	<0.053	0.12
NS2PP7-2.5	8d	NS2	PP7	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
NS2PP0-1	8d	NS2	PP9	9/27/2018	1	<0.052	<0.052	<0.052	<0.052	0.61	1	<0.052			1.61
NS2PP9-2.5	8d	NS2	PP9	9/27/2018	2.5	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	All ND
NS2PP10-1.0	8d	NS2	PP10	9/27/2018	1	<0.053	<0.053	<0.053	<0.053	11	19	<0.053	<0.053	<0.053	30
NS2PP10-2.5	8d	NS2	PP10	9/27/2018	2.5	<0.052	<0.052	<0.052	<0.052	0.13	0.1	<0.052	<0.052	<0.052	0.23
NS2Q-0.5	8d	NS2	Q	5/18/2018	0.5	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	All ND
NS2Q-1	8d	NS2	Q	5/18/2018	1	<0.054	<0.054	<0.054	<0.054	0.075	0.068	<0.054	<0.054	<0.054	0.143
S6	8d	S6	Initial >50 Sample	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	16J	<0.02UJ	51J	6.10J			**73.1**
S6X-2.5	8d	S6		1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	0.4	0.52	<0.054	<0.054	<0.054	0.92
S6A-1	8d	S6	A	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	0.062	<0.054	<0.054	<0.054	0.062
S6A-2.5	8d	S6	A	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	0.12	<0.054	<0.054	<0.054	0.12
S6B-1	8d	S6	B	1/23/2018	1	<0.053	<0.053	<0.053	<0.053	0.096	0.44	<0.053	<0.053	<0.053	0.536
S6B-2.5	8d	S6		1/23/2018	2.5	<0.053	<0.053	<0.053	<0.053	0.078	0.32	<0.053	<0.053	<0.053	0.398

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Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)									
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
S6C-1	8d	S6	C	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
S6C-2.5	8d	S6	C	1/23/2018	2.5	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	All ND
S6D-1	8d	S6	D	1/23/2018	1	<0.054	<0.054	<0.054	<0.054	0.39	0.66	<0.054	<0.054	<0.054	1.05
S6D-2.5	8d	S6	D	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
Area 8E															
A8e-SB1	8e	SB1	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.219	<0.05			0.219
A8e-SB2	8e	SB2	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.109	<0.05			0.109
A8e-SB3	8e	SB3	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8e-SB5	8e	SB5	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8e-SB6	8e	SB6	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	1.43	<0.05			1.43
A8e-SB7	8e	SB7	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8e-SB8	8e	SB8	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
NS1	8e	NS1	NA	8/10/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.094	0.057			0.151
NS24	8e	NS24	NA	8/10/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.024	0.021			0.045
NS24	8e	NS24	NA	8/10/2015	2.5	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ	<0.02UJ			All ND
NS4	8e	NS4	NA	8/10/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	0.13	0.033			0.163
NS6	8e	NS6	NA	8/10/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S1	8e	S1	NA	8/11/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S1	8e	S1	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S2	8e	S2	NA	8/12/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.051	<0.02			0.051
S2	8e	S2	NA	8/12/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
A8e-SB4	8e	SB4	Initial >50 Sample	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	62.8			**62.8**
A8e-SB4X-2.5	8e	SB4	X	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8e-SB4A-1	8e	SB4	A	1/23/2018	1	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
A8e-SB4A-2.5	8e	SB4	A	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8e-SB4B-1	8e	SB4	B	1/23/2018	1	<0.055	<0.055	<0.055	<0.055	0.35	0.39	<0.055	<0.055	<0.055	0.74
A8e-SB4B-2.5	8e	SB4	B	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
A8e-SB4C-1	8e	SB4	C	1/23/2018	1	<5.7	<5.7	<5.7	<5.7	48	76	<5.7	<5.7	<5.7	**124**
A8e-SB4C-2.5	8e	SB4	C	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8e-SB4D-1	8e	SB4	D	1/23/2018	1	<0.056	<0.056	<0.056	<0.056	0.16	0.39	<0.056	<0.056	<0.056	0.55
A8e-SB4D-2.5	8e	SB4	D	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
A8e-SB4E-0.5	8e	SB4	E	5/18/2018	0.5	<0.053	<0.053	<0.053	<0.053	0.17	0.2	<0.053	<0.053	<0.053	0.37
A8e-SB4E-1	8e	SB4	E	5/18/2018	1	<0.055	<0.055	<0.055	<0.055	0.11	0.072	<0.055	<0.055	<0.055	0.182
A8e-SB4F-0.5	8e	SB4	F	5/18/2018	0.5	<0.053	<0.053	<0.053	<0.053	0.18	0.25	0.11	<0.053	<0.053	0.54
A8e-SB4F-1	8e	SB4	F	5/18/2018	1	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	All ND
A8e-SB4G-0.5	8e	SB4	G	5/18/2018	0.5	<0.052	<0.052	<0.052	<0.052	0.17	0.71	<0.052	<0.052	<0.052	0.88
A8e-SB4G-1	8e	SB4	G	5/18/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
Area 8F															
A8f-SB1	8f	SB1	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8f-SB2	8f	SB2	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.161	<0.05			0.161
A8f-SB3	8f	SB3	NA	1/25/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	3.07	<0.05			3.07
NS3	8f	NS3	NA	8/10/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.047	0.043			0.09
NS5	8f	NS5	NA	8/10/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S3	8f	S3	NA	8/11/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	0.076	0.047			0.123
S3	8f	S3	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
Area 8G															

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Table 1

Polychlorinated Biphenyls (PCBs) in Soil
Remedial Action Plan
Riverside Scrap Iron & Metal Site
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)									
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
A8g-SB1	8g	SB1	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8g-SB2	8g	SB2	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8g-SB3	8g	SB3	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
S17	8g	S17	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	0.026	<0.02	0.06	0.03			0.116
S19	8g	S19	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S19	8g	S19	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
Area 8H															
A8h-SB1	8h	SB1	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8h-SB10	8h	SB10	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8h-SB2	8h	SB2	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	1.3	<0.05			1.3
A8h-SB3	8h	SB3	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	1.18	0.699	<0.05			1.879
A8h-SB4	8h	SB4	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	1.57	0.552	<0.05			2.122
A8h-SB5	8h	SB5	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A8h-SB6	8h	SB6	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	0.054	<0.05	<0.05			0.054
A8h-SB7	8h	SB7	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	1.73	1.81	<0.05			3.54
A8h-SB8	8h	SB8	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	1.49	0.536	<0.05			2.026
A8h-SB9	8h	SB9	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
ES3	8h	ES3	NA	8/14/2015	0.25	<0.02	<0.02	<0.02	0.2	<0.02	0.41	0.17			0.78
S18	8h	S18	NA	8/14/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS17	8h	NS17	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS18	8h	NS18	NA	8/21/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	.250J	<0.02UJ	.420J	0.150J			0.82
NS18	8h	NS18	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS19	8h	NS19	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS20	8h	NS20	NA	8/21/2015	2.5	<0.02UJ	<0.02UJ	<0.02UJ	3.2J	<0.02UJ	1.500J	1.1J			5.8
NS20	8h	NS20	NA	8/21/2015	5	<0.02UJ	<0.02UJ	<0.02UJ	1.1J	<0.02UJ	.480J	0.290J			1.87
NS21	8h	NS21	NA	8/21/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
Area 10A															
A10a-SB1	10a	SB1	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A10a-SB2	10a	SB2	NA	1/28/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
ES1	10a	ES1	NA	8/19/2015	0.25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2			All ND
ES1	10a	ES1	NA	8/19/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
Area 10B															
A10b-SB1	10b	SB1	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.112	<0.05			0.112
A10b-SB2	10b	SB2	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	2.19	1.29	<0.05			3.48
A10b-SB3	10b	SB3	NA	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	7.12	<0.05			7.12
S15	10b	S15	NA	8/12/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	0.230J	<0.02UJ	0.095J	0.023J			0.348
S15	10b	S15	NA	8/12/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			0
NS11	10b	NS11	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	0.039	0.027			0.066
NS12	10b	NS12	NA	8/13/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS13	10b	NS13	NA	8/13/2015	2.5	<0.02	<0.02	<0.02	0.071	<0.02	0.076	0.032			0.179
S14	10b	S14	Initial >50 Sample	8/13/2015	1	<0.2	<0.2	<0.2	48J	<0.02	50J	18.0J			**116**
S14	10b	S14	Initial >50 Sample	8/13/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	0.038	<0.02			0.038
S14	10b	S14	Initial >50 Sample	8/13/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	2.9J	<0.02UJ	15J	9.30J			27.2
S14A-1	10b	S14	A	1/23/2018	1	<5.7	<5.7	<5.7	<5.7	50	33	22	<5.7	<5.7	**105**
S14A-2.5	10b	S14	A	1/23/2018	2.5	<0.057	<0.057	<0.057	<0.057	0.097	<0.057	<0.057	<0.057	<0.057	0.097
S14B-1	10b	S14	B	1/23/2018	1	<2.8	<2.8	<2.8	<2.8	14	13	10	<2.8	<2.8	37

Table 1

Polychlorinated Biphenyls (PCBs) in Soil
Remedial Action Plan
Riverside Scrap Iron & Metal Site
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)									
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
S14B-2.5	10b	S14	B	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	0
S14C-1	10b	S14	C	1/23/2018	1	<0.54	<0.54	<0.54	<0.54	8.5	11	11	<0.54	<0.54	30.5
S14C-2.5	10b	S14	C	1/23/2018	2.5	<5.5	<5.5	<5.5	<5.5	82	47	8.9	<5.5	<5.5	**137.9**
S14C-5	10b	S14	C	1/23/2018	5	<0.055	<0.055	<0.055	<0.055	0.28	0.23	<0.055	<0.055	<0.055	0.51
S14D-1	10b	S14	D	1/23/2018	1	<3	<3	<3	<3	43	36	22	<3	<3	**101**
S14D-2.5	10b	S14	D	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
S14BB-0.5	10b	S14	BB	5/18/2018	0.5	<0.52	<0.52	<0.52	<0.52	9.3	7.8	8.3	<0.52	<0.52	25
S14BB-1	10b	S14	BB	5/18/2018	1	<0.54	<0.54	<0.54	<0.54	7.1	8.4	9.2	<0.54	<0.54	25
S14E-0.5	10b	S14	E	5/18/2018	0.5	<0.55	<0.55	<0.55	<0.55	6.7	<0.55	260	<0.55	<0.55	**270**
S14E-1	10b	S14	E	5/18/2018	1	<0.57	<0.57	<0.57	<0.57	39	13	4	<0.57	<0.57	**56**
S14F-0.5	10b	S14	F	5/18/2018	0.5	<5.2	<5.2	<5.2	<5.2	16	9.7	10	<5.2	<5.2	36
S14F-1	10b	S14	F	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	17	<2.7	37	<2.7	<2.7	**53**
S14G-0.5	10b	S14	G	5/18/2018	0.5	<2.6	<2.6	<2.6	<2.6	9.4	9.4	10	<2.6	<2.6	29
S14G-1	10b	S14	G	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	11	14	32	<2.7	<2.7	**57**
S14G-2.5	10b	S14	G	5/18/2018	2.5	<0.26	<0.26	<0.26	<0.26	0.6	2.5	5.2	<0.26	<0.26	8.2
S14H-0.5	10b	S14	H	5/18/2018	0.5	<2.5	<2.5	<2.5	<2.5	12	10	12	<2.5	<2.5	34
S14H-1	10b	S14	H	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	9.7	8	8.9	<2.7	<2.7	27
S14H-2.5	10b	S14	H	5/18/2018	2.5	<0.052	<0.052	<0.052	<0.052	0.23	0.32	0.52	<0.052	<0.052	1.1
S14I-0.5	10b	S14	I	5/18/2018	0.5	<5.4	<5.4	<5.4	<5.4	13	8.4	8.8	<5.4	<5.4	30
S14I-1	10b	S14	I	5/18/2018	1	<2.7	<2.7	<2.7	<2.7	3.7	<2.7	12	<2.7	<2.7	16
S14I-2.5	10b	S14	I	5/18/2018	2.5	<2.7	<2.7	<2.7	<2.7	6.3	<2.7	28	<2.7	<2.7	34
S14J-0.5	10b	S14	J	5/18/2018	0.5	<0.053	<0.053	<0.053	<0.053	0.26	0.089	0.064	<0.053	<0.053	0.42
S14J-1	10b	S14	J	5/18/2018	1	<0.61	<0.61	<0.61	<0.61	1.1	<0.61	30	<0.61	<0.61	31
S14K-0.5	10b	S14	K	5/18/2018	0.5	<0.52	<0.52	<0.52	<0.52	4.3	3	3.5	<0.52	<0.52	11
S14K-1	10b	S14	K	5/18/2018	1	<6	<6	<6	<6	13	13	20	<6	<6	46
S14L-0.5	10b	S14	L	5/18/2018	0.5	<0.25	<0.25	<0.25	<0.25	1.4	<0.25	1.3	<0.25	<0.25	2.7
S14L-1	10b	S14	L	5/18/2018	1	<0.55	<0.55	<0.55	<0.55	6.1	<0.55	57	<0.55	<0.55	**64**
S14M-0.5	10b	S14	M	5/18/2018	0.5	<0.51	<0.51	<0.51	<0.51	5.7	<0.51	75	<0.51	<0.51	**81**
S14M-1	10b	S14	M	5/18/2018	1	<0.54	<0.54	<0.54	<0.54	3.5	<0.54	28	<0.54	<0.54	31
S14E1-0.5	10b	S14	E1	7/26/2018	0.5	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	7.2	<0.53	<0.53	7.2
S14EE-2.5	10b	S14	EE	7/26/2018	2.5	<0.052	<0.052	<0.052	<0.052	0.085	<0.052	<0.052	<0.052	<0.052	0.085
S14FF-2.5	10b	S14	FF	7/26/2018	2.5	<0.054	<0.054	<0.054	<0.054	1.6	1.1	0.43	<0.054	<0.054	3.1
S14FF1-1	10b	S14	FF1	7/26/2018	1	<2.6	<2.6	<2.6	<2.6	12	19	15	<2.6	<2.6	46
S14G1-1	10b	S14	G1	7/26/2018	1	<2.6	<2.6	<2.6	<2.6	12	15	12	<2.6	<2.6	39
S14G2-1	10b	S14	G2	7/26/2018	1	<2.6	<2.6	<2.6	<2.6	9.8	14	11	<2.6	<2.6	35
S14LL-2.5	10b	S14	LL	7/26/2018	2.5	<0.055	<0.055	<0.055	<0.055	0.17	<0.055	0.2	<0.055	<0.055	0.37
S14LL1-1	10b	S14	LL1	7/26/2018	1	<0.55	<0.55	<0.55	<0.55	3.3	3.3	2.7	<0.55	<0.55	9.4
S14LL2-1	10b	S14	LL2	7/26/2018	1	<0.54	<0.54	<0.54	<0.54	6.9	<0.54	1.3	<0.54	<0.54	8.2
S14LL3-0.5	10b	S14	LL3	7/26/2018	0.5	<0.52	<0.52	<0.52	<0.52	9.4	6.9	1.7	<0.52	<0.52	18
S14LL3-1	10b	S14	LL3	7/26/2018	1	<0.056	<0.056	<0.056	<0.056	15	12	13	<0.056	<0.056	40
S14M1-0.5	10b	S14	M1	7/26/2018	0.5	<2.5	<2.5	<2.5	<2.5	17	12	7.5	<2.5	<2.5	36
S14M1-1	10b	S14	M1	7/26/2018	1	<2.6	<2.6	<2.6	<2.6	44	<2.6	5	<2.6	<2.6	49
A10b-SB4	10b	SB4	Initial >50 Sample	1/26/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	73.8			**73.8**
A10b-SB4X-2.5	10b	SB4	X	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	0.087	<0.055	0.35	<0.055	<0.055	0.44
A10b-SB4A-1	10b	SB4	A	1/23/2018	1	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	37	<5.6	<5.6	37
A10b-SB4A-2.5	10b	SB4	A	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.14	<0.055	<0.055	0.14

Table 1

Polychlorinated Biphenyls (PCBs) in Soil
Remedial Action Plan
Riverside Scrap Iron & Metal Site
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)									
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
A10b-SB4B-1	10b	SB4	B	1/23/2018	1	<28	<28	<28	<28	<28	<28	140	<28	<28	**140**
A10b-SB4B-2.5	10b	SB4	B	1/23/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	0.24	<0.056	<0.056	0.24
A10b-SB4C-1	10b	SB4	C	1/23/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	1.1	<0.055	<0.055	1.2
A10b-SB4C-2.5	10b	SB4	C	1/23/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.13	<0.054	<0.054	0.13
A10b-SB4D-1	10b	SB4	D	1/23/2018	1	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	19	<5.6	<5.6	19
A10b-SB4D-2.5	10b	SB4	D	1/23/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.12	<0.055	<0.055	0.12
A10b-SB4AA-0.5	10b	SB4	AA	5/18/2018	0.5	<0.52	<0.52	<0.52	<0.52	6.8	<0.52	87	<0.52	<0.52	**94**
A10b-SB4AA-1	10b	SB4	AA	5/18/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
A10b-SB4E-0.5	10b	SB4	E	5/18/2018	0.5	<1.1	<1.1	<1.1	<1.1	2.7	<1.1	26	<1.1	<1.1	29
A10b-SB4E-1	10b	SB4	E	5/18/2018	1	<0.28	<0.28	<0.28	<0.28	0.72	<0.28	21	<0.28	<0.28	22
A10b-SB4F-0.5	10b	SB4	F	5/18/2018	0.5	<0.056	<0.056	<0.056	<0.056	0.26	0.31	0.46	<0.056	<0.056	1
A10b-SB4F-1	10b	SB4	F	5/18/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.096	<0.055	<0.055	0.096
A10b-SB4G-0.5	10b	SB4	G	5/18/2018	0.5	<0.27	<0.27	<0.27	<0.27	0.91	1.8	2.1	<0.27	<0.27	4.8
A10b-SB4G-1	10b	SB4	G	5/18/2018	1	<27	<27	<27	<27	<27	<27	2600	<27	<27	**2600**
A10b-SB4J-0.5	10b	SB4	J	5/18/2018	0.5	<0.27	<0.27	<0.27	<0.27	0.32	0.64	1.3	<0.27	<0.27	2.2
A10b-SB4J-1	10b	SB4	J	5/18/2018	1	<0.055	<0.055	<0.055	<0.055	0.057	<0.055	0.13	<0.055	<0.055	0.19
A10b-SB4K-0.5	10b	SB4	K	5/18/2018	0.5	<0.054	<0.054	<0.054	<0.054	0.11	<0.054	2.4	<0.054	<0.054	2.5
A10b-SB4K-1	10b	SB4	K	5/18/2018	1	<27	<27	<27	<27	<27	<27	180	<27	<27	**180**
SB4AA1-0.5	10b	SB4	AA	7/26/2018	0.5	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	55	<5.4	<5.4	**55**
SB4AA1-1	10b	SB4	AA	7/26/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.24	<0.054	<0.054	0.24
SB4AA2-0.5	10b	SB4	AA2	7/26/2018	0.5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	50	<5.2	<5.2	**50**
SB4AA2-1	10b	SB4	AA2	7/26/2018	1	<0.53	<0.53	<0.53	<0.53	0.54	<0.53	2.4	<0.53	<0.53	2.9
SB4AA7-0.5	10b	SB4	AA7	9/27/2018	0.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	13			13
SB4AA7-1.0	10b	SB4	AA7	9/27/2018	1	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052			All ND
SB4AA8-0.5	10b	SB4	AA8	9/27/2018	0.5	<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	4.2			4.2
SB4AA8-1.0	10b	SB4	AA8	9/27/2018	1	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052			All ND
SB4GG-2.5	10b	SB4	GG	7/26/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK1-1	10b	SB4	KK	7/26/2018	1	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	110	<5.5	<5.5	**110**
SB4KK-2.5	10b	SB4	KK	7/26/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
SB4KK1-2.5	10b	SB4	KK1	7/26/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK2-1	10b	SB4	KK2	7/26/2018	1	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	27	<5.4	<5.4	27
SB4KK3-1	10b	SB4	KK3	7/26/2018	1	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	21	<5.4	<5.4	21
SB4AA3-0.5	10b	SB4	AA3	8/3/2018	0.5	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	1.7	<0.26	<0.26	1.7
SB4AA3-1	10b	SB4	AA3	8/3/2018	1	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.85	<0.054	<0.054	0.85
SB4AA4-0.5	10b	SB4	AA4	8/3/2018	0.5	<25	<25	<25	<25	<25	<25	140	<25	<25	**140**
SB4AA4-1	10b	SB4	AA4	8/3/2018	1	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	0.058	<0.053	<0.053	0.058
SB4AA5-0.5	10b	SB4	AA5	8/3/2018	0.5	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	0.1	<0.051	<0.051	0.1
SB4AA5-1	10b	SB4	AA5	8/3/2018	1	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	All ND
SB4AA6-0.5	10b	SB4	AA6	8/3/2018	0.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.072	<0.055	<0.055	0.072
SB4AA6-1	10b	SB4	AA6	8/3/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.31	<0.055	<0.055	0.31
SB4KK4-1	10b	SB4	KK4	8/3/2018	1	<27	<27	<27	<27	<27	<27	170	<27	<27	**170**
SB4KK4-2.5	10b	SB4	KK4	8/3/2018	2.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	0.06
SBKK5-1	10b	SB4	KK5	8/3/2018	1	<54	<54	<54	<54	70	<54	140	<54	<54	**210**
SB4KK5-2.5	10b	SB4	KK5	8/3/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	0.21	<0.056	<0.056	0.21
SB4KK6-0.5	10b	SB4	KK6	9/27/2018	0.5	<0.5	<0.5	<0.5	<0.5	4.5	2.9	2.1			9.5
SB4KK6-1.0	10b	SB4	KK6	9/27/2018	1	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	11			11

Table 1

Polychlorinated Biphenyls (PCBs) in Soil
Remedial Action Plan
Riverside Scrap Iron & Metal Site
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)									
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
SB4KK7-0.5	10b	SB4	KK7	9/27/2018	0.5	<0.25	<0.25	<0.25	<0.25	1.6	0.81	0.69			3.1
SB4KK7-1.0	10b	SB4	KK7	9/27/2018	1	<5.4	<5.4	<5.4	<5.4	19	<5.4	87			**110**
SB4KK7-2.5	10b	SB4	KK7	9/27/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK8-0.5	10b	SB4	KK8	9/27/2018	0.5	<0.5	<0.5	<0.5	<0.5	2.2	1.1	0.84			4.1
SB4KK8-1.0	10b	SB4	KK8	9/27/2018	1	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	76			**76**
SB4KK9-0.5	10b	SB4	KK9	9/27/2018	0.5	<0.26	<0.26	<0.26	<0.26	1.5	0.39	<0.26			2.1
SB4KK9-1.0	10b	SB4	KK9	9/27/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.88			0.88
SB4KK11-0.5	10b	SB4	KK11	9/27/2018	0.5	<0.5	<0.5	<0.5	<0.5	30	7.7	4	<0.5	<0.5	41
SB4KK11-1.0	10b	SB4	KK11	9/27/2018	1	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	76	<0.54	<0.54	**76**
SB4KK11-2.5	10b	SB4	KK11	9/27/2018	2.5	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	All ND
SB4KK12-0.5	10b	SB4	KK12	9/27/2018	0.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
SB4KK12-1.0	10b	SB4	KK12	9/27/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK12-2.5	10b	SB4	KK12	9/27/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK13-0.5	10b	SB4	KK13	9/27/2018	0.5	<0.05	<0.05	<0.05	<0.05	0.45	0.43	0.37	<0.05	<0.05	1.3
SB4KK13-1.0	10b	SB4	KK13	9/27/2018	1	<2.8	<2.8	<2.8	<2.8	18	<2.8	59	<2.8	<2.8	**77**
SB4KK13-2.5	10b	SB4	KK13	9/27/2018	2.5	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	All ND
SB4KK14-0.5	10b	SB4	KK14	9/27/2018	0.5	<0.05	<0.05	<0.05	<0.05	3.4	3	3.2	<0.05	<0.05	9.6
SB4KK14-1.0	10b	SB4	KK14	9/27/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	13	<0.055	<0.055	13
SB4KK14-2.5	10b	SB4	KK14	9/27/2018	2.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK17-0.5	10b	SB4	KK17	12/20/2018	0.5	<0.055	<0.055	<0.055	<0.055	0.083	0.088	0.08	<0.055	<0.055	0.25
SB4KK17-1	10b	SB4	KK17	12/20/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	All ND
SB4KK18-0.5	10b	SB4	KK18	12/20/2018	0.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	12	<0.055	<0.055	12
SB4KK18-1	10b	SB4	KK18	12/20/2018	1	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	0.53	<0.055	<0.055	0.53
SB4KK19-0.5	10b	SB4	KK19	12/20/2018	0.5	<0.055	<0.055	<0.055	<0.055	1.9	2.8	2.9	<0.055	<0.055	7.6
SB4KK19-1	10b	SB4	KK19	12/20/2018	1	<0.055	<0.055	<0.055	<0.055	110	<0.055	7	<0.055	<0.055	**120**
SB4KK20-0.5	10b	SB4	KK20	12/20/2018	0.5	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	11	<0.055	<0.055	11
SB4KK20-1	10b	SB4	KK20	12/20/2018	1	<0.055	<0.055	<0.055	<0.055	90	<0.055	4.5	<0.055	<0.055	**95**
SB4KK19-2.5	10b	SB4	KK19	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	0.12	<0.056	<0.056	<0.056	<0.056	0.12
SB4KK19-5	10b	SB4	KK19	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	0.26	<0.056	0.12	<0.056	<0.056	0.38
SB4KK20-2.5	10b	SB4	KK20	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK20-5	10b	SB4	KK20	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK24-0.5	10b	SB4	KK24	12/20/2018	0.5	<0.056	<0.056	<0.056	<0.056	33	<0.056	1.8	<0.056	<0.056	35
SB4KK24-1	10b	SB4	KK24	12/20/2018	1	<0.056	<0.056	<0.056	<0.056	30	<0.056	1.7	<0.056	<0.056	32
SB4KK24-2.5	10b	SB4	KK24	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	0.32	<0.056	0.058	<0.056	<0.056	0.37
SB4KK24-5	10b	SB4	KK24	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	0.07	<0.056	<0.056	<0.056	<0.056	0.07
SB4KK25-0.5	10b	SB4	KK25	12/20/2018	0.5	<0.056	<0.056	<0.056	<0.056	0.83	<0.056	3.4	<0.056	<0.056	4.3
SB4KK25-1	10b	SB4	KK25	12/20/2018	1	<0.056	<0.056	<0.056	<0.056	7.5	<0.056	0.28	<0.056	<0.056	7.8
SB4KK25-2.5	10b	SB4	KK25	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK25-5	10b	SB4	KK25	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK26-0.5	10b	SB4	KK26	12/20/2018	0.5	<0.056	<0.056	<0.056	<0.056	0.91	3.1	2.5	<0.056	<0.056	6.5
SB4KK26-1	10b	SB4	KK26	12/20/2018	1	<0.056	<0.056	<0.056	<0.056	87	<0.056	6.4	<0.056	<0.056	**93**
SB4KK26-2.5	10b	SB4	KK26	12/20/2018	2.5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND
SB4KK26-5	10b	SB4	KK26	12/20/2018	5	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	All ND

Table 1

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Remedial Action Plan
Riverside Scrap Iron & Metal Site
Riverside, California

Sample/ Boring ID	Area	Sample Location	2018 Investigation Step-Out Sample Designation or Information	Sample Date	depth (feet bgs)	EPA Method 8082 (mg/kg)									
						PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260			Total PCBs
Area 12															
A12-SB1	12	SB1	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	23			23
A12-SB2	12	SB2	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			All ND
A12-SB3	12	SB3	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	0.123	<0.05	<0.05			0.123
A12-SB4	12	SB4	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	0.205	0.12	<0.05			0.325
A12-SB5	12	SB5	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	6.2			6.2
S10	12	S10	NA	8/11/2015	0.25	<0.02UJ	<0.02UJ	<0.02UJ	1.4J	<0.02UJ	4.3J	3.50J			9.2
S10	12	S10	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
S7	12	S7	NA	8/11/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
NS16	12	NS16	NA	8/13/2015	2.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			All ND
Area 13															
A13-SB1	13	SB1	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	0.425	<0.05			0.425
A13-SB2	13	SB2	NA	1/31/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			ALL ND
A13-SB3	13	SB3	NA	2/3/2011	1	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05			ALL ND

Notes and Data Qualifiers

USEPA Region IX Regional Screening Levels (RSLs), June 2015, screening levels for industrial soil and residential soil.

J = The analyte was detected at a concentration above the method detection limit, but below the reporting limit and is an approximate concentration of the analyte in the sample.

UJ = The analyte was not detected above the laboratory reporting limit but the reporting limit is approximate due either to the quality of the data generated because certain quality control criteria were not met or the sample was analyzed outside the holding time for extraction.

J-flagged results are included in the calculation of "Total PCBs"

The following PCB Arochlors were not detected in any sample above laboratory reporting limits: PCB-1016, PCB-1232, PCB-1262, and PCB-1268.

Note that some Aroclor's with higher concentrations required dilution to report within calibration range, which resulted in elevated laboratory reporting limits. During excavation confirmation sampling activities, chain-of-custody instructions will note to report each Arochlor at the lowest dilution possible that either has a reportable result or ND at the applicable reporting limit.

Abbreviations

bgs = Below ground surface
NA = Not applicable to 2018 investigation
< = Not detected at the reporting limit shown
PCBs = Polychlorinated biphenyls
RSL = Regional soil screening level
USEPA = United States Environmental Protection Agency
mg/kg = milligrams per kilogram

APPENDIX G.

2023 Soil Vapor Investigation Reports

SOIL VAPOR INVESTIGATION REPORT

FORMER RIVERSIDE SCRAP IRON & METAL PROPERTY
2993 6th Street
Riverside, California 92507
Department of Toxic Substances Control Docket No HAS-FY21/22-032

Issued: January 17, 2023

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SOIL VAPOR INVESTIGATION REPORT

FORMER RIVERSIDE SCRAP IRON & METAL PROPERTY
2993 6th Street
Riverside, California 92507
Department of Toxic Substances Control Docket No HAS-FY21/22-032

This Soil Vapor Investigation Report was prepared by the staff of GSI Environmental Inc., under the supervision of the Engineer(s) and/or Geologist(s) whose signatures appear hereon.

The findings, recommendations, specifications, or professional opinions were prepared in accordance with generally accepted professional engineering and/or geologic practice. No warranty is expressed or implied.

Issued: January 17, 2023

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GSI Job No.: 6239
Issued: January 17, 2023

SOIL VAPOR INVESTIGATION REPORT
Former Riverside Scrap Iron & Metal Property
2993 6th Street
Riverside, California 92507

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SOIL VAPOR INVESTIGATION REPORT
Former Riverside Scrap Iron & Metal Property
2993 6th Street
Riverside, California 92507

1.0 INTRODUCTION

On behalf of Iron Lofts LLC (Iron Lofts), GSI Environmental Inc. (GSI) has prepared this Soil Vapor Investigation Report (SVI Report) for the former Riverside Scrap Iron & Metal (RSIM) property located at 2993 6th Street in Riverside, California (the Site; Figures 1 and 2).

The Site has a 45-year history of use as a scrap metal recycling facility and is located in a mixed-use area that is adjoined by residential and commercial properties. Redevelopment plans for the Site are to construct a multi-family, multi-story residential building development, similar to the recently constructed residential development located adjacent, across Mission Inn Avenue, to the south of the Site.

In 2015, AMEC Foster Wheeler conducted a soil vapor investigation at the Site, and results identified VOCs in soil vapor at concentrations above residential screening levels (GSI, 2022). The objective of the work summarized in this SVI Report is to further evaluate PCE and TCE in soil vapor and provide the additional assessment data required to support the planned multifamily redevelopment planning, design, and regulatory oversight, and for the evaluation of unrestricted Site use.

2.0 SITE DESCRIPTION

The Site is approximately 7 acres in size and is identified as "light industrial" by the Riverside County Assessor's Office. Surrounding properties are mixed commercial and residential. The Site is located within the former Marketplace Brownfields Study Area in the City of Riverside, bound by Commerce Street to the northwest, Mission Inn Avenue and 7th Street to the southwest, and 4th Street to the northeast. The Site is being planned for redevelopment for multi-family residential use, similar to surrounding recent redevelopment projects. The current layout of the Site is shown on Figure 2. Two existing historic buildings ("Buildings of Merit") with crawl spaces remain at the Site (approximately 1,200 and 5,000 square feet) and will be repurposed for use as amenity space (i.e., gymnasium, club room, co-working space).

2.1 Current and Historical Uses

The Site was used as a scrap metal recycling yard for over 45 years and formerly maintained underground and aboveground storage tanks on the western portion of the Site that were used to store and dispense fuel and oil. The scrap metal and recycling business ceased operations in 2015. By August 2015, the Site had been cleared of utilities and most mixed trash, debris and scrap metal, and currently consists mostly of unpaved bare earth and paved surfaces with some remaining debris. Surrounding land uses to the north and west are primarily commercial. Residential housing is located along the eastern border of the Site and across Mission Inn Avenue to the south.

2.2 Site Geology and Hydrogeology

The Site is located in the Riverside-Arlington Subbasin of the Upper Santa Ana River Groundwater Basin and within the Peninsular Ranges Geomorphic Province of California. The subbasin is bounded by the impermeable rocks on the south by Arlington Mountain, on the southeast by the Box Springs Mountains, on the northwest by the La Sierra Heights and Mount Rubidoux, and on the north by the Jurupa Mountains. The northeast boundary is defined as the

Rialto-Colton fault and a portion of the groundwater divide beneath the city of Bloomington and the Santa Ana River flows over the northern portion of the subbasin (Department of Water Resources [DWR], 2004).

Groundwater in the subbasin is dominantly found in young Quaternary-aged alluvial deposits from the lateral migration of the Santa Ana River over time and consist chiefly of sand, gravel, silt, and clay. The geology in the surrounding mountains and basement rock consists of Quaternary alluvium, Pleistocene nonmarine, and Mesozoic granitic rocks (California Division of Mines and Geology [CDMG], 1965). Based on the drilling logs provided in AMEC's 2015 Soil and Soil Vapor Investigation, soils beneath the Site consist primarily of silty sand and sandy silt with occasional thin layers of clay from near surface to 20 feet bgs, the maximum depth of exploration (AMEC, 2015).

In December 2009, the depth to groundwater ranged from 114 to 125 feet bgs with a southwestern groundwater gradient direction at the former Ken's Arco property, located approximately 650 feet southeast of the Site at 2871 University Avenue (as reported by Pacific Edge Engineering, Inc. and referenced in AMEC's 2015 Soil and Soil Vapor Investigation). Based on the general drought conditions since this measurement was taken, currently groundwater levels would be expected to be deeper than reported in December 2009.

3.0 SCOPE OF WORK

Soil vapor sample locations were selected to provide Site coverage and target historical Site features and are presented in Figure 2. Soil vapor probe installation and sampling was performed in accordance with the Cal-EPA July 2015 *Advisory for Active Soil Gas Investigations (*Advisory*).*

Soil vapor probes were installed at 21 locations on November 3, 4, and 7, 2022, and 47 soil vapor samples were collected on November 16, 2022 from the following depths:

- 5 feet: VP-1 through VP-21 (21 locations)
- 13 to 15 feet: VP-1 through VP-14 and VP-16 through VP-21 (20 locations)
- 22 to 30 feet: VP-1, VP-9, VP-12, VP-14, VP-19, and VP-20 (6 locations)

Soil samples were not collected during drilling. At each soil vapor sample location, the recovered soil core was screened for organic vapors using a photoionization detector (PID). No elevated PID readings or stained soil was observed.

3.1 Pre-field Activities

Prior to the sampling activities, the Site-Specific Health and Safety Plan (HASP) was updated in accordance with the requirements of the State of California General Industry Safety Order 5192 and Title 29 of the Code of Federal Regulations, Section 1910.120. The HASP was kept on-Site during field activities. Proposed investigation locations were marked by GSI, and Underground Services Alert (USA) was contacted a minimum of two full working days prior to initiating the field activities. In addition, GSI retained a private geophysical subcontractor to perform utility locating services to assess for the presence of underground utilities and other potential subsurface obstructions in the vicinity of the proposed investigation locations.

3.2 Soil Vapor Probe Installation

Soil vapor probes were installed at 21 locations identified on Figure 2. The probe locations included the following:

- 1 single probe set at 5 feet bgs;
- 14 dual nested probes (probes at 5 and 15 feet bgs); and
- 6 triple nested probes (probes at 5, 15, and approximately 30 feet).

Each soil vapor probe location was manually cleared to approximately 1-foot bgs using a hand auger. Direct push equipment was utilized to initially penetrate through any surface concrete and the boring was advanced from approximately 1-foot bgs to the final borehole depths.

During probe installation, the proposed 15-foot bgs soil vapor probe installation at VP-6 was adjusted to 13 feet bgs, and the 30-foot bgs soil vapor probe at VP-14 was adjusted to 22 feet bgs ,due to refusal during drilling operations. Only one soil vapor probe was installed to 5 feet bgs at VP-15 due to refusal while attempting to reach the target depth of 15.5 feet bgs. The soil vapor probe proposed as VP-22 was not completed due to borehole collapse in soft fill material.

Soil vapor probes were constructed using nominal ¼-inch diameter Nylaflow tubing connected to a porous polyethylene soil vapor sample probe, set within approximately 1 foot of #3 sand placed around the sample probe. A dry bentonite seal of at least 6 inches followed by a cement and bentonite grout seal was placed on top of the sand pack to the ground surface or to the next soil vapor prove interval. The tubing was capped with a vapor-tight two-way valve or cap at the surface to eliminate the potential for barometric pressure fluctuations inducing vapor transport between the subsurface and the atmosphere. The two-way valve or cap was installed in the closed position and allowed equilibration of soil vapor concentrations after installation.

All probe locations were completed as semi-permanent, with probes protected with a plastic bag and covered with a bentonite patch and sand, with a labeled survey flag. The tubing was labeled and color coded at the surface[1] to identify the probe location and depth. In addition, the length of the tubing at the surface corresponds to the relative depth of the probe, with the shortest surface tubing corresponding with the shallowest probe, and the longest surface tubing corresponding with the deepest probe.

3.3 Soil Vapor Sampling and Analysis

Soil vapor samples were collected after an equilibration time of more than 48 hours following installation. Prior to the commencement of sampling, shut-in tests were conducted on the soil vapor probes. The probe heads were attached to the sampling train assembly of tubing, valves, and fittings and connected to a purge pump. A minimum vacuum of 100 inches of water column (W.C.) was applied to the sealed sampling train and monitored for at least 1 minute. After a successful shut-in test was completed, the soil vapor probe and sampling train was purged. A total of 3 purge volumes were removed from soil vapor probes prior to sampling. Each soil vapor probe was purged at a rate of 200 milliliters per minute (mL/min) and at a vacuum less than of 100 inches W.C. One purge volume is equal to the internal sample tubing volume and volume of stagnant air within the sand pack and dry bentonite layers (assuming 40 percent porosity). During

[1] See associated boring logs for color codes.

purging and sampling, 1,1-difluoroethane (DFA) was applied as a leak-check tracer gas to check for ambient air leaks near the above-ground probe tubing and sampling train.

Following the completion of purging, soil vapor samples were collected into Summa canisters through flow controllers at a rate of approximately 200 mL/min. Duplicate soil vapor samples were collected at a frequency of one per day. In addition, one field quality assurance/quality control sample consisting of an ambient-air blank was collected by drawing ambient air into a Summa canister through an attached sampling train.

Soil vapor samples were analyzed for VOCs using United States Environmental Protection Agency (USEPA) Method TO-15.

3.4 Equipment Decontamination

Downhole drilling and sampling equipment was washed with a potable water-detergent solution and rinsed twice with potable water before each use.

3.5 Investigation Derived Wastes

Soil cuttings were left onsite near the boring locations pending Site excavation activities. Minimal decontamination water was produced during the drilling activities and left onsite pending waste characterization for disposal.

4.0 SOIL VAPOR SAMPLE RESULTS

This section presents the results of soil vapor sampling and analysis, including a presentation of the analytical results, and a comparison of analytical results to risk-based screening criteria. Analytical results for soil vapor samples are presented in Table 1. The analytical laboratory reports for soil vapor samples are presented in Appendix A.

4.1 Soil Lithology

Soil vapor probes were installed at 21 locations in a generally gridded pattern throughout the vacant Site, and recovered soil was observed and described in accordance with the Unified Soil Classification System (USCS). Soil encountered generally consisted of silt with silty sand and/or poorly to well graded sand with silt intervals at greater depths. Soil boring logs are included as Appendix B.

4.2 Data Quality Summary

Analytical results for soil vapor sampling were reviewed to determine the data usability. Each laboratory data package was reviewed consistent with guidance provided by the USEPA. A sample evaluation was completed for primary and duplicate soil vapor samples and is presented in Appendix C. The following quality assurance/quality control (QA/QC) criteria from the analysis of the project samples were reviewed as applicable: sample preservation and holding time compliance, reporting limits and sample dilution, blank sample analysis, surrogate recovery compliance, laboratory control samples, field duplicate samples and use of laboratory data qualifiers. No data qualifiers were applied based on the results of the data validation review.

Field quality control measures included leak testing with DFA and the collection of a split-t duplicate pair of soil vapor samples. The leak test compound DFA was evaluated by comparison to an action level of 10,000 µg/m^3, which is equivalent to 3.7 parts per million by volume (ppmv). DFA was not detected in any soil vapor samples at a concentration exceeding this action level. DFA was detected in the soil vapor sample VP-8-5 at 5 feet bgs at a maximum concentration of

520 µg/m^3, which is equivalent to 0.19 ppmv. This low concentration of DFA does not represent an ambient air leak that could affect the soil vapor results.

4.3 Soil Vapor Results

Soil vapor samples were collected at 21 locations from soil vapor probes with inlets installed at depths between 5 and 30 feet bgs in November 2022 (Figure 2).

Analytical results for soil vapor samples are evaluated by comparison to risk-based screening levels for residential and commercial/industrial Site use. Screening levels (SLs) for soil vapor are developed by applying an attenuation factor to screening levels for indoor air:

$$\text{Soil Vapor Screening Level } (SL_{sv}) = \frac{SL_{ia}}{AF}$$

Where:

SLsv	=	Soil vapor screening level (µg/m^3)
SLia	=	Indoor air screening level (µg/m^3)
AF	=	Attenuation factor (unitless)

For this evaluation, Regional Screening Levels (RSLs) for residential air published by USEPA (2022) and endorsed or modified by the DTSC (2022) were selected as the indoor air SLs. Soil vapor SLs were calculated using the default attenuation factors published by DTSC for residential use (0.001 for future residential buildings; DTSC, 2011 and 2022); these soil vapor SLs are referred to in this report as the "DTSC AF SLs." In addition, soil vapor data also are presented in Table 1 with soil vapor SLs calculated using the USEPA default attenuation factor (0.03 for all buildings; USEPA, 2015); these soil vapor SLs are referred to in this report as the "USEPA AF SLs." Soil vapor data are evaluated by comparison to the DTSC AF SLs and USEPA AF SLs.

As shown in Table 1, 17 VOCs were detected in at least one soil vapor sample. PCE, TCE, chloroform, 1,2-dichloroethane (1,2-DCA), and benzene were the only VOCs detected in at least one soil vapor sample at a concentration exceeding its residential DTSC AF SL, and the results for these VOCs are summarized below:

- PCE was detected in all soil vapor samples collected at concentrations ranging from 8 to 840 µg/m^3. The highest PCE concentrations in soil vapor were observed in the soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel (720 µg/m^3 at VP-1-30, 670 µg/m^3 at VP-9-30, and 840 µg/m^3 at VP-19-30) and southeastern property boundary of the central parcel (710 µg/m^3 at VP-20-30 and 750 µg/m^3 at VP-20-30 Rep). The highest concentrations of PCE identified in soil vapor samples (up to 840 µg/m^3) slightly exceed the residential DTSC AF SL of 460 µg/m^3.

- TCE was detected in 43 of 49 total soil vapor samples at concentrations ranging from 6.4 to 1,700 µg/m^3. The highest TCE concentrations in soil vapor were also observed at the same soil vapor samples with the highest PCE concentrations. Specifically, TCE was detected at the highest concentrations in in the soil vapor sample collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel (1,700 µg/m^3 at VP-1-30, 1700 µg/m^3 at VP-9-30, and 1,500 µg/m^3 at VP-19-30) and southeastern property boundary of the central parcel (1,600 µg/m^3 at VP-20-30 and 1,700 µg/m^3 at VP-20-30 Rep). The highest concentrations of TCE identified in soil vapor samples (up to 1,700 µg/m^3) exceed the residential DTSC AF SL of 480 µg/m^3.

- Chloroform was detected in sixteen soil vapor samples at concentrations ranging from 5.9 to 34 µg/m^3, all of which exceed the residential USEPA AF SL for chloroform of 4.0 µg/m^3 but do not exceed the residential DTSC AF SL of 120 µg/m^3.

- 1,2-DCA was detected in only one soil vapor sample (VP-15-5) at a concentration of 17 µg/m^3, which exceeds the residential USEPA AF SL for 1,2-DCA of 3.7 µg/m^3 but does not exceed the residential DTSC AF SL of 120 µg/m^3.

- Benzene was detected in thirteen soil vapor samples at concentrations ranging from 3.4 to 39 µg/m^3, all of which exceed the residential USEPA AF SL for benzene of 3.2 µg/m^3 but do not exceed the residential DTSC AF SL of 97 µg/m^3.

5.0 SUMMARY AND CONCLUSIONS

Soil vapor sampling was completed at locations throughout the Site in November 2022. Specifically, 47 primary soil vapor samples (and 2 duplicate soil vapor samples) were collected from 21 locations installed at depths ranging between 5 and 30 feet bgs. The key findings of the soil vapor survey are summarized below:

- PCE and TCE were the primary VOCs detected in soil vapor samples. PCE was detected in every soil vapor sample, but at relatively low concentrations (up to 840 µg/m^3). TCE was detected less frequently (43 of 49 total samples), but at slightly higher concentrations (up to 1700 µg/m^3).
- PCE and TCE concentrations in soil vapor are consistent with an off-site source.
    - Concentrations increased with depth at all soil vapor sample locations (i.e., higher concentrations were detected in deeper soil vapor samples) with the exception of two locations (VP-4 and VP-5).
    - The highest PCE and TCE concentrations in soil vapor were observed from soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel and southeastern property boundary of the central parcel.
    - A source of PCE or TCE to soil vapor was not identified on the Site and the low concentrations of PCE and TCE detected in soil vapor samples and increasing concentrations with depth are not indicative of an on-Site release. It is possible that the low concentrations are attributed to minor releases associated with historical on-Site operations and/or an off-Site release that is migrating in deeper soil vapor or groundwater to the Site.
- To mitigate potential for PCE and TCE detected in soil vapor to migrate to indoor air, vapor intrusion mitigation systems are recommended for future on-Site buildings. As part of the repurposing of the two existing historic buildings for amenity space, existing crawl spaces will be vented passively, and the structures will be improved and built out, including installation of modern HVAC systems. Following completion of building improvements, indoor air samples will be collected to confirm the effectiveness of the vapor mitigation measures.

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TABLE

Table 1. Analytical Results for Volatile Organic Compounds in Soil Vapor Samples

GSI ENVIRONMENTAL

TABLE 1: Volatile Organic Compounds (VOCs) in Soil Vapor [1]
Former Riverside Scrap Iron & Metal Property
Riverside, California

Sample Location	Sample ID	Probe Depth (feet bgs)	Date Sampled	Units	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Chloroform	1,1-Dichloroethene (1,1-DCE)	1,2-Dichloroethane (1,2-DCA)	Benzene	Ethylbenzene	Toluene	Xylene	1,1,1-Trichloroethane	1,1,2-Trichloro-trifluoroethane (F113)	1,2,4-Trimethylbenzene	2-Butanone (MEK)	Carbon disulfide	Dichlorodifluoromethane (F12)	Methylene chloride (Dichloromethane)	Trichloro-fluoromethane (F11)	1,1-difluoroethane (DFA) (leak check compound)
VP-1	VP-1-5	5	11/16/2022	µg/m³	150	97	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	94	<5	<30	<6.3	<5	<3.5	22	<5.5
	VP-1-15	15	11/16/2022	µg/m³	390	**680**	12	49	<4.1	25	<4.4	6.3	<8.8	<5.5	290	<5	69	69	<5	<3.5	66	<5.5
	VP-1-30	30	11/16/2022	µg/m³	**720**	**1700**	20	120	<4.1	8.7	<4.4	4.4	<8.8	<5.5	370	<5	54	20	8.5	<3.5	85	<5.5
VP-2	VP-2-5	5	11/16/2022	µg/m³	110	48	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	72	<5	<30	7.5	<5	<3.5	23	<5.5
	VP-2-15	15	11/16/2022	µg/m³	450	510	33	17	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	210	<5	<30	7.4	8.2	<3.5	56	<5.5
VP-3	VP-3-5	5	11/16/2022	µg/m³	12	28	11	<4	<4.1	6.7	<4.4	14	<8.8	<5.5	8.3	<5	<30	19	<5	9.1	5.9	14
	VP-3-15	15	11/16/2022	µg/m³	240	250	23	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	140	<5	<30	<6.3	7.9	<3.5	66	<5.5
VP-4	VP-4-5	5	11/17/2022	µg/m³	35	19	<4.9	<4	<4.1	<3.2	<4.4	11	<8.8	<5.5	15	<5	<30	67	<5	<3.5	64	<5.5
	VP-4-15	15	11/17/2022	µg/m³	180	13	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	26	<5	<30	<6.3	<5	<3.5	99	<5.5
VP-5	VP-5-5	5	11/17/2022	µg/m³	12	180	17	<4	<4.1	6.3	<4.4	23	4.9	<5.5	<7.7	<5	<30	71	<5	26	60	<5.5
	VP-5-15	15	11/17/2022	µg/m³	110	11	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	20	<5	<30	<6.3	6.7	<3.5	220	<5.5
VP-6	VP-6-5	5	11/17/2022	µg/m³	39	<5.5	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	35	<5	<30	<6.3	7.8	<3.5	91	<5.5
	VP-6-13	13	11/17/2022	µg/m³	140	32	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	39	<5	<30	73	7.2	<3.5	100	<5.5
VP-7	VP-7-5	5	11/17/2022	µg/m³	47	14	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	<7.7	<5	<30	<6.3	<5	<3.5	53	<5.5
	VP-7-15	15	11/17/2022	µg/m³	210	40	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	26	<5	<30	<6.3	6.1	<3.5	180	<5.5
VP-8	VP-8-5	5	11/17/2022	µg/m³	30	<5.5	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	<7.7	<5	<30	<6.3	<5	<3.5	14	520
	VP-8-15	15	11/17/2022	µg/m³	140	190	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	50	<5	<30	52	6.8	5.3	85	<5.5
VP-9	VP-9-5	5	11/16/2022	µg/m³	71	17	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	51	<5	<30	15	<5	<3.5	13	<5.5
	VP-9-15	15	11/16/2022	µg/m³	250	380	6.4	6.5	<4.1	6.2	<4.4	4.7	<8.8	<5.5	230	<5	40	29	6.8	<3.5	53	<5.5
	VP-9-30	30	11/16/2022	µg/m³	**670**	**1700**	20	110	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	370	<5	62	12	8.4	<3.5	86	<5.5
VP-10	VP-10-5	5	11/16/2022	µg/m³	80	70	<4.9	<4	<4.1	3.5	<4.4	<3.8	<8.8	<5.5	37	<5	<30	8	<5	<3.5	23	<5.5
	VP-10-15	15	11/16/2022	µg/m³	270	430	<4.9	17	<4.1	<3.2	<4.4	4.3	<8.8	<5.5	99	<5	<30	13	6.3	<3.5	51	<5.5
VP-11	VP-11-5	5	11/16/2022	µg/m³	89	29	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	95	<5	<30	<6.3	5.3	<3.5	34	<5.5
	VP-11-15	15	11/16/2022	µg/m³	**460**	**770**	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	240	<5	<30	<6.3	7.9	<3.5	90	<5.5
VP-12	VP-12-5	5	11/17/2022	µg/m³	94	<5.5	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	27	<5	<30	<6.3	<5	<3.5	68	<5.5
	VP-12-15	15	11/17/2022	µg/m³	210	73	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	50	<5	<30	13	8.7	<3.5	100	<5.5
	VP-12-30	30	11/17/2022	µg/m³	330	310	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	79	<5	32	<6.3	10	<3.5	230	<5.5
VP-13	VP-13-5	5	11/17/2022	µg/m³	40	20	<4.9	<4	<4.1	3.4	<4.4	6.9	<8.8	<5.5	14	<5	<30	32	<5	3.6	180	<5.5
	VP-13-15	15	11/17/2022	µg/m³	120	36	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	22	<5	<30	<6.3	8.2	<3.5	410	<5.5
VP-14	VP-14-5	5	11/17/2022	µg/m³	160	94	5.9	<4	<4.1	15	6.3	77	20.1	<5.5	21	7.9	<30	120	8.4	6.2	200	<5.5
	VP-14-15	15	11/17/2022	µg/m³	**460**	120	<4.9	<4	<4.1	6.5	<4.4	27	23.4	<5.5	23	7.6	<30	<6.3	8.9	3.6	200	<5.5
	VP-14-22	22	11/17/2022	µg/m³	**570**	360	8.5	<4	<4.1	3.8	<4.4	8.7	<8.8	<5.5	51	<5	<30	16	13	<3.5	350	<5.5
VP-15	VP-15-5	5	11/17/2022	µg/m³	14	<5.5	6.9	<4	17	<3.2	<4.4	<3.8	<8.8	9.4	10	<5	<30	13	<5	<3.5	460	<5.5
VP-16	VP-16-5	5	11/17/2022	µg/m³	97	6.4	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	16	<5	<30	<6.3	<5	<3.5	23	<5.5
	VP-16-15	15	11/17/2022	µg/m³	360	190	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	44	<5	<30	<6.3	<5	<3.5	50	<5.5
VP-17	VP-17-5	5	11/16/2022	µg/m³	76	55	<4.9	<4	<4.1	<3.2	<4.4	6.5	<8.8	<5.5	23	<5	<30	9.3	<5	<3.5	11	<5.5
	VP-17-15	15	11/16/2022	µg/m³	180	290	<4.9	<4	<4.1	<3.2	<4.4	6.6	<8.8	<5.5	49	<5	39	11	<5	<3.5	19	<5.5
	VP-17-15 Rep	15	11/16/2022	µg/m³	180	300	<4.9	<4	<4.1	<3.2	<4.4	6.7	<8.8	<5.5	51	<5	74	12	<5	<3.5	19	<5.5
VP-18	VP-18-5	5	11/16/2022	µg/m³	49	7.6	<4.9	<4	<4.1	<3.2	<4.4	4.1	<8.8	<5.5	14	<5	<30	<6.3	<5	<3.5	41	<5.5
	VP-18-15	15	11/16/2022	µg/m³	200	110	<4.9	<4	<4.1	<3.2	<4.4	6.6	<8.8	<5.5	43	<5	100	16	<5	<3.5	79	<5.5
VP-19	VP-19-5	5	11/17/2022	µg/m³	91	41	<4.9	<4	<4.1	8.1	<4.4	6.5	<8.8	<5.5	32	<5	<30	44	<5	<3.5	11	<5.5
	VP-19-15	15	11/17/2022	µg/m³	420	380	<4.9	<4	<4.1	4.9	<4.4	10	<8.8	<5.5	100	<5	<30	71	<5	<3.5	52	<5.5
	VP-19-30	30	11/17/2022	µg/m³	**840**	1500	7.5	26	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	180	<5	<30	<6.3	<5	<3.5	64	<5.5

GSI ENVIRONMENTAL

TABLE 1: Volatile Organic Compounds (VOCs) in Soil Vapor [1]
Former Riverside Scrap Iron & Metal Property
Riverside, California

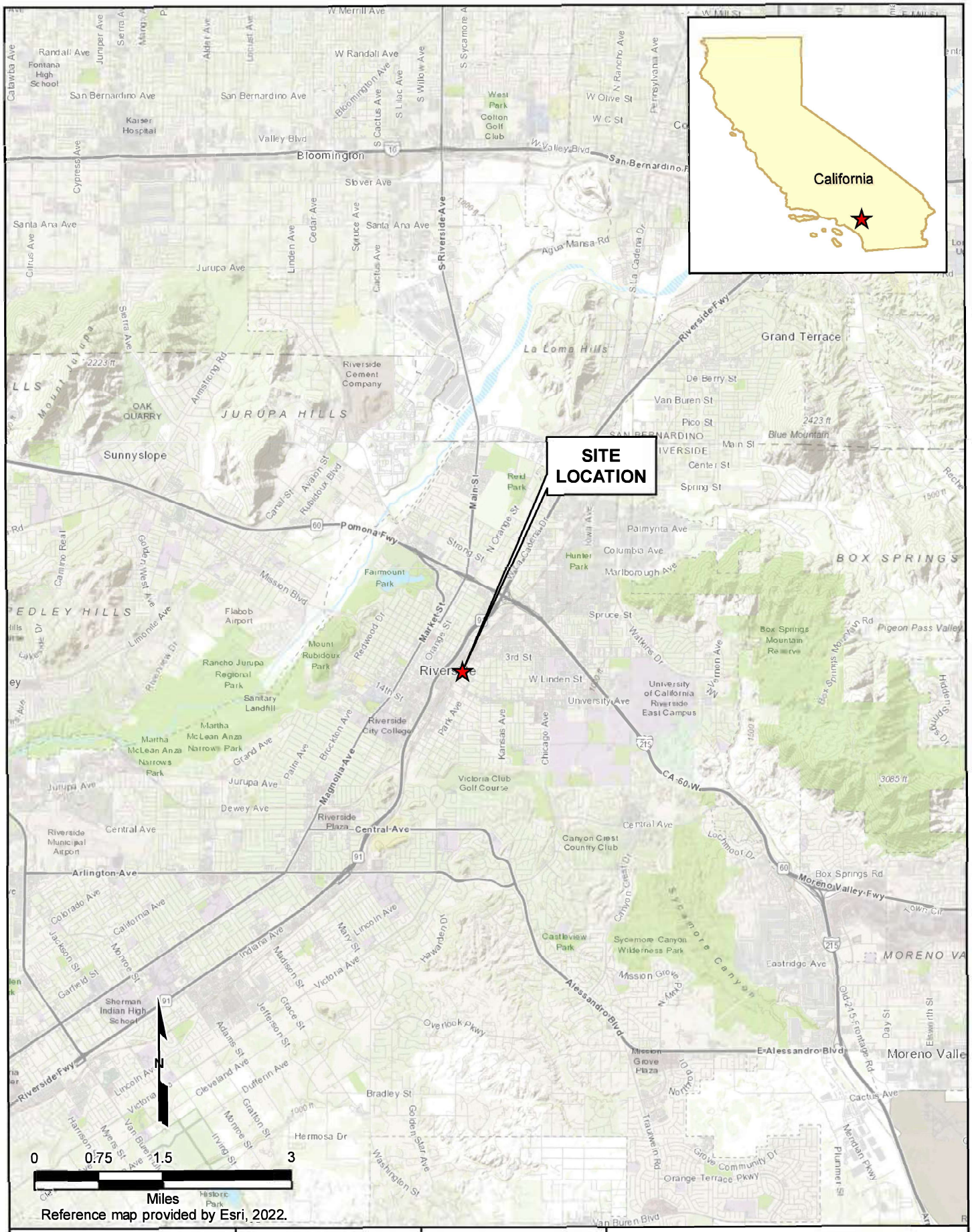
Sample Location	Sample ID	Probe Depth (feet bgs)	Date Sampled	Units	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Chloroform	1,1-Dichloroethene (1,1-DCE)	1,2-Dichloroethane (1,2-DCA)	Benzene	Ethylbenzene	Toluene	Xylene	1,1,1-Trichloroethane	1,1,2-Trichloro-trifluoroethane (F113)	1,2,4-Trimethylbenzene	2-Butanone (MEK)	Carbon disulfide	Dichlorodifluoromethane (F12)	Methylene chloride (Dichloromethane)	Trichloro-fluoromethane (F11)	1,1-difluoroethene (DFA) (leak check compound)
VP-20	VP-20-5	5	11/17/2022	µg/m³	91	51	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	19	<5	<30	<6.3	<5	<3.5	22	<5.5
	VP-20-15	15	11/17/2022	µg/m³	450	650	6.7	<4	<4.1	<3.2	<4.4	4.4	<8.8	<5.5	73	<5	<30	<6.3	6.9	<3.5	82	<5.5
	VP-20-30	30	11/17/2022	µg/m³	710	1600	21	32	<4.1	<3.2	<4.4	4.3	<8.8	<5.5	130	<5	<30	<6.3	8.9	<3.5	130	<5.5
	VP-20-30 Rep	30	11/17/2022	µg/m³	750	1700	22	31	<4.1	<3.2	<4.4	5	<8.8	<5.5	140	<5	<30	<6.3	9.9	<3.5	160	<5.5
VP-21	VP-21-5	5	11/17/2022	µg/m³	8	<5.5	34	<4	<4.1	39	<4.4	10	<8.8	<5.5	<7.7	<5	<30	92	<5	<3.5	160	11
	VP-21-15	15	11/17/2022	µg/m³	150	<5.5	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	39	<5	<30	<6.3	7.3	<3.5	510	<5.5
Maximum Detected Concentration				**µg/m³**	**840**	**1700**	**34**	**120**	**17**	**39**	**6.3**	**77**	**23**	**9.4**	**370**	**7.9**	**100**	**120**	**13**	**26**	**510**	**520**
Soil Vapor Screening Levels																						
Commercial/Industrial Soil Vapor Screening Levels [2]																						
DTSC AF SL (AF=0.001) Existing Commercial/Industrial Buildings				µg/m³	2,000	3,000	530	310,000	470	420	4,900	1,300,000	440,000	1,000,000	5,200,000	260,000	5,200,000	730,000	100,000	1,000	1,300,000	NA
USEPA AF SL (AF=0.03) All Commercial/Industrial Buildings				µg/m³	67	100	18	10,000	16	14	160	43,000	15,000	33,000	170,000	8,700	170,000	24,000	3,300	33	43,000	NA
Residential Soil Vapor Screening Levels [3]																						
DTSC AF SL (AF=0.001) Existing Residential Buildings				µg/m³	460	480	120	73,000	110	97	1,100	310,000	100,000	4,400,000	22,000,000	63,000	22,000,000	3,100,000	440,000	12,000	5,300,000	NA
USEPA AF SL (AF=0.03) All Residential Buildings				µg/m³	15	16	4.0	2,400	3.7	3.2	37	10,000	3,300	150,000	730,000	2,100	730,000	100,000	14,700	400	180,000	NA

Notes:
[1] Soil vapor samples collected by H&P Mobile Geochemistry, Inc. (H&P) of Carlsbad, CA into batch-certified, 400 or 450 milliliter summa canisters under the field oversight of GSI Environmental Inc., and analyzed by H&P at a fixed laboratory using USEPA Method TO-15.
[2] Soil vapor results are compared to soil vapor screening levels generated by applying default attenuation factors (AF) for all buildings (0.03), as published by the USEPA (2015), or for current commercial buildings (0.001), as published by the California Department of Toxic Substances Control (DTSC, 2011) to regional screening levels for indoor air under residential land use published by the USEPA (2022) and modified by the DTSC (2022).
[3] Soil vapor results are compared to soil vapor screening levels generated by applying default attenuation factors (AF) for all buildings (0.03), as published by the USEPA (2015), or for current commercial buildings (0.001), as published by the California Department of Toxic Substances Control (DTSC, 2011) to regional screening levels for indoor air under residential land use published by the USEPA (2022) and modified by the DTSC (2022).
µg/m³ = micrograms per cubic meter
NA = Not available

References:
California Environmental Protection Agency (Cal/EPA). 2011. Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). DTSC. October.
Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment (HHRA) Note, HERO HHRA Note 3, DTSC-modified Screening Levels (DTSC-SLs). May.
United States Environmental Protection Agency (USEPA). 2022. Regional Screening Levels (RSLs). November.

FIGURES

Figure 1. Site Location Map
Figure 2. Site Map with Sample Locations
Figure 3. PCE and TCE Concentrations in Soil Vapor (µg/m^3)



Reference map provided by Esri, 2022.

GSI ENVIRONMENTAL

GSI Job No.	6239	Drawn by:	AV
Issued:	2-Jun-2022	Chk'd by:	SC
Revised:		Aprv'd by:	TFW
Map ID:	RS6239_SLM	**FIGURE 1**	

SITE LOCATION MAP

Riverside Scrap Iron & Metal
Riverside, California

LEGEND

- 5 Foot Soil Vapor Probe
- 5 and 15 Foot Soil Vapor Probe
- 5, 15, and 30 Foot Soil Vapor Probe
- Site Boundary

Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) VP-6 probes were installed at 5' and 13'. VP-14 probes were installed at 5', 15', and 22'.

SCALE (Feet)
0 50 100

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

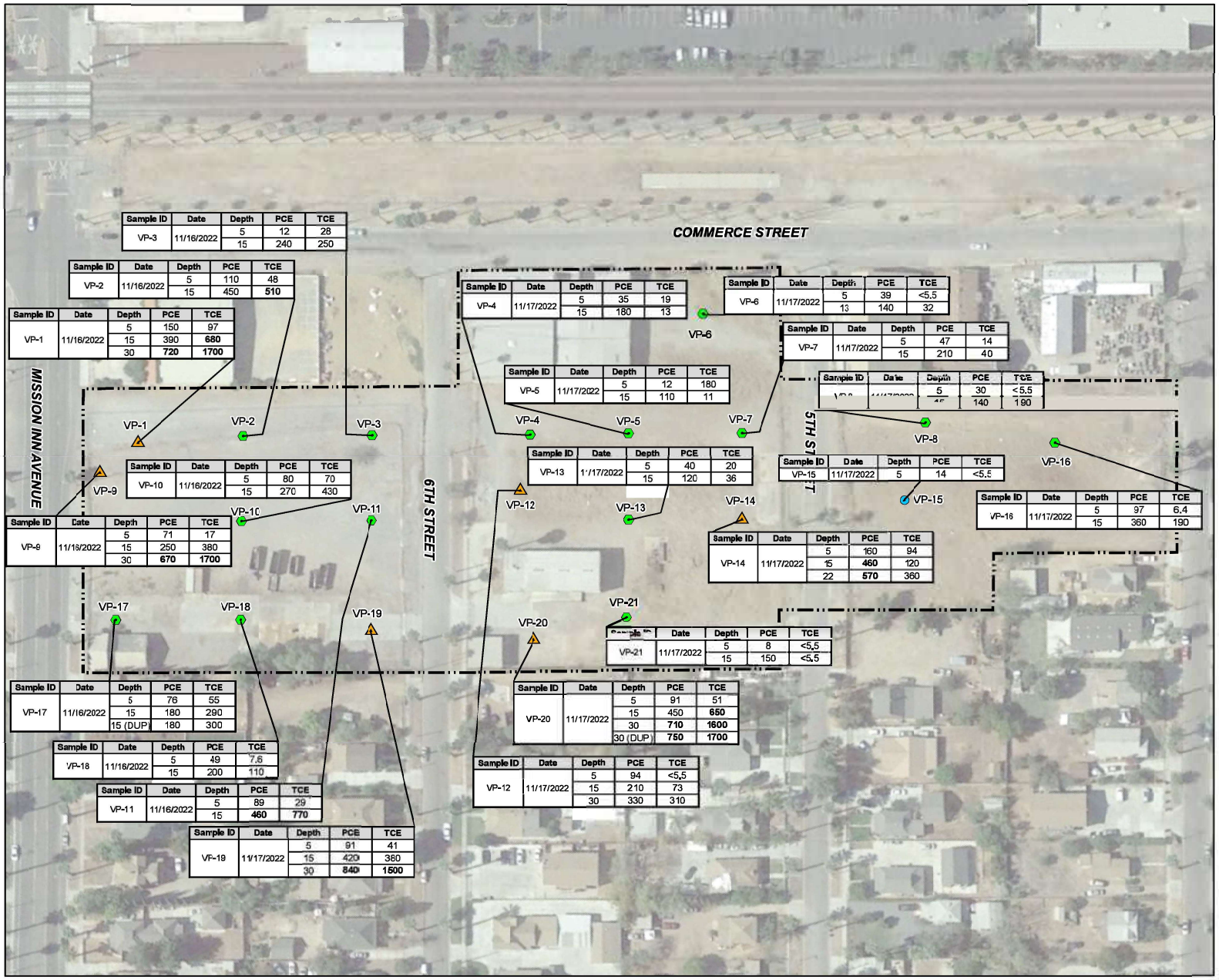
GSI ENVIRONMENTAL

SOIL VAPOR SAMPLE LOCATIONS

Riverside Scrap Iron & Metal
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	22-Nov-2022	Chk'd By:	SC
Map ID:	RS6239_SVPNov22	Appv'd By:	SC

FIGURE 2



Sample ID	Date	Depth	PCE	TCE
VP-3	11/16/2022	5	12	28
		15	240	250

Sample ID	Date	Depth	PCE	TCE
VP-2	11/16/2022	5	110	48
		15	450	**510**

Sample ID	Date	Depth	PCE	TCE
VP-1	11/16/2022	5	150	97
		15	390	**680**
		30	**720**	**1700**

Sample ID	Date	Depth	PCE	TCE
VP-4	11/17/2022	5	35	19
		15	180	13

Sample ID	Date	Depth	PCE	TCE
VP-6	11/17/2022	5	39	<5.5
		13	140	32

Sample ID	Date	Depth	PCE	TCE
VP-7	11/17/2022	5	47	14
		15	210	40

Sample ID	Date	Depth	PCE	TCE
VP-5	11/17/2022	5	12	180
		15	110	11

Sample ID	Date	Depth	PCE	TCE
[illegible]	[illegible]	5	30	<5.5
		[illegible]	140	190

Sample ID	Date	Depth	PCE	TCE
VP-10	11/16/2022	5	80	70
		15	270	430

Sample ID	Date	Depth	PCE	TCE
VP-13	11/17/2022	5	40	20
		15	120	36

Sample ID	Date	Depth	PCE	TCE
VP-15	11/17/2022	5	14	<5.5

Sample ID	Date	Depth	PCE	TCE
VP-16	11/17/2022	5	97	6.4
		15	360	190

Sample ID	Date	Depth	PCE	TCE
VP-9	11/16/2022	5	71	17
		15	250	380
		30	**670**	**1700**

Sample ID	Date	Depth	PCE	TCE
VP-14	11/17/2022	5	160	94
		15	**460**	120
		22	**570**	360

Sample ID	Date	Depth	PCE	TCE
VP-21	11/17/2022	5	8	<5.5
		15	150	<5.5

Sample ID	Date	Depth	PCE	TCE
VP-17	11/16/2022	5	76	55
		15	180	290
		15 (DUP)	180	300

Sample ID	Date	Depth	PCE	TCE
VP-20	11/17/2022	5	91	51
		15	450	**650**
		30	**710**	**1600**
		30 (DUP)	**750**	**1700**

Sample ID	Date	Depth	PCE	TCE
VP-18	11/16/2022	5	49	7.6
		15	200	110

Sample ID	Date	Depth	PCE	TCE
VP-12	11/17/2022	5	94	<5.5
		15	210	73
		30	330	310

Sample ID	Date	Depth	PCE	TCE
VP-11	11/16/2022	5	89	29
		15	**460**	**770**

Sample ID	Date	Depth	PCE	TCE
VP-19	11/17/2022	5	91	41
		15	420	380
		30	840	**1500**

LEGEND

- 5 Foot Soil Vapor Probe
- 5 and 15 Foot Soil Vapor Probe
- 5, 15, and 30 Foot Soil Vapor Probe
- Site Boundary

Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) VP-6 probes were installed at 5' and 13'. VP-14 probes installed at 5', 15', and 22'.
3) Depth = feet below ground surface; < = not detected above the designated laboratory reporting limit; DUP = duplicate sample; PCE = tetrachloroethene; TCE = trichloroethene.
4) Concentrations are in micrograms per cubic meter (µg/m3)

SCALE (Feet)
0 50 100

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

GSI ENVIRONMENTAL

PCE AND TCE IN SOIL VAPOR

Riverside Scrap Iron & Metal
Riverside, California

GSI Job No. 6239	Drawn By: AV
Issued: 9-Dec-2022	Chk'd By: SC
Map ID: RS6239_SVP_PCETCE	App'd By: SC

FIGURE 3

APPENDICES

Appendix A. Analytical Laboratory Reports – Soil Vapor
Appendix B. Boring Logs
Appendix C. Duplicate Soil Vapor Sample Evaluation
Appendix D. Soil Vapor Purge Volumes
Appendix E. Historical Soil Vapor Data

APPENDIX A

Analytical Laboratory Reports – Soil Vapor

H&P Mobile Geochemistry Inc.

08 December 2022

Samantha Curtis
GSI Environmental, Inc
7595 Irvine Center Dr, Ste 250
Irvine, CA 92618

H&P Project: GSI111722-10
Client Project: 6239 / Riverside

Dear Samantha Curtis:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 11/16/2022-11/17/2022which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Lisa Eminhizer
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC) for the fields of proficiency and analytes listed on those certificates. H& P is approved as an Environmental Testing Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs for the fields of proficiency and analytes included in the certification process and to the extent offered by the accreditation agency . Unless otherwise noted, accreditation certificate numbers, expiration of certificates, and scope of accreditation can be found at: www.handpmg.com/about/certifications . Fields of services and analytes contained in this report that are not listed on the certificates should be considered uncertified or unavailable for certification.

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VP-1-30	E211049-01	Vapor	16-Nov-22	16-Nov-22
VP-1-15	E211049-02	Vapor	16-Nov-22	16-Nov-22
VP-1-5	E211049-03	Vapor	16-Nov-22	16-Nov-22
AA	E211049-04	Vapor	16-Nov-22	16-Nov-22
VP-9-30	E211049-05	Vapor	16-Nov-22	16-Nov-22
VP-9-15	E211049-06	Vapor	16-Nov-22	16-Nov-22
VP-9-5	E211049-07	Vapor	16-Nov-22	16-Nov-22
VP-2-15	E211049-08	Vapor	16-Nov-22	16-Nov-22
VP-2-5	E211049-09	Vapor	16-Nov-22	16-Nov-22
VP-3-15	E211049-10	Vapor	16-Nov-22	16-Nov-22
VP-3-5	E211049-11	Vapor	16-Nov-22	16-Nov-22
VP-11-15	E211049-12	Vapor	16-Nov-22	16-Nov-22
VP-11-5	E211049-13	Vapor	16-Nov-22	16-Nov-22
VP-10-15	E211049-14	Vapor	16-Nov-22	16-Nov-22
VP-10-5	E211049-15	Vapor	16-Nov-22	16-Nov-22
VP-17-15	E211049-16	Vapor	16-Nov-22	16-Nov-22
VP-17-5	E211049-17	Vapor	16-Nov-22	16-Nov-22
VP-17-5 Rep	E211049-18	Vapor	16-Nov-22	16-Nov-22
VP-18-15	E211049-19	Vapor	16-Nov-22	16-Nov-22
VP-18-5	E211049-20	Vapor	16-Nov-22	16-Nov-22
VP-19-30	E211050-01	Vapor	17-Nov-22	17-Nov-22
VP-19-15	E211050-02	Vapor	17-Nov-22	17-Nov-22
VP-19-5	E211050-03	Vapor	17-Nov-22	17-Nov-22
VP-20-30	E211050-04	Vapor	17-Nov-22	17-Nov-22
VP-20-30 Rep	E211050-05	Vapor	17-Nov-22	17-Nov-22
VP-20-15	E211050-06	Vapor	17-Nov-22	17-Nov-22
VP-20-5	E211050-07	Vapor	17-Nov-22	17-Nov-22
VP-12-15	E211050-08	Vapor	17-Nov-22	17-Nov-22

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VP-12-5	E211050-09	Vapor	17-Nov-22	17-Nov-22
VP-12-30	E211050-10	Vapor	17-Nov-22	17-Nov-22
VP-13-15	E211050-11	Vapor	17-Nov-22	17-Nov-22
VP-13-5	E211050-12	Vapor	17-Nov-22	17-Nov-22
VP-14-22	E211050-13	Vapor	17-Nov-22	17-Nov-22
VP-14-15	E211050-14	Vapor	17-Nov-22	17-Nov-22
VP-14-5	E211050-15	Vapor	17-Nov-22	17-Nov-22
VP-4-15	E211050-16	Vapor	17-Nov-22	17-Nov-22
VP-4-5	E211050-17	Vapor	17-Nov-22	17-Nov-22
VP-5-15	E211050-18	Vapor	17-Nov-22	17-Nov-22
VP-5-5	E211050-19	Vapor	17-Nov-22	17-Nov-22
VP-7-15	E211050-20	Vapor	17-Nov-22	17-Nov-22
VP-7-5	E211050-21	Vapor	17-Nov-22	17-Nov-22
VP-6-13	E211050-22	Vapor	17-Nov-22	17-Nov-22
VP-6-5	E211050-23	Vapor	17-Nov-22	17-Nov-22
VP-16-15	E211050-24	Vapor	17-Nov-22	17-Nov-22
VP-16-5	E211050-25	Vapor	17-Nov-22	17-Nov-22
VP-8-15	E211050-26	Vapor	17-Nov-22	17-Nov-22
VP-8-5	E211050-27	Vapor	17-Nov-22	17-Nov-22
VP-15-5	E211050-28	Vapor	17-Nov-22	17-Nov-22
VP-21-15	E211050-29	Vapor	17-Nov-22	17-Nov-22
VP-21-5	E211050-30	Vapor	17-Nov-22	17-Nov-22

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Batch EK23015

The percent recoveries for Dichlorodifluoromethane and Chloromethane fell above the method criteria in the continuing calibration verification (CCV). Any results for these analytes, for samples included in this batch, may be biased high.

Batch EL20615

The percent recovery for Hexachlorobutadiene fell below the method criteria in the CCV. Any results for this analyte, for samples included in this batch, may be biased low.

Batch El20716

The percent recoveries for 2-Butanone, 1,2,4-Trichlorobenzene and Hexachlorobutadiene fell below the method criteria in the CCV. Any results for these analytes, for samples included in this batch, may be biased low.

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DETECTIONS SUMMARY

Sample ID: **VP-1-30** Laboratory ID: **E211049-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.5**	5.0	ug/m3	EPA TO-15	
Chloromethane	**3.5**	2.1	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**85**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**120**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**370**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**20**	6.3	ug/m3	EPA TO-15	
2-Butanone (MEK)	**54**	30	ug/m3	EPA TO-15	
Chloroform	**20**	4.9	ug/m3	EPA TO-15	
Benzene	**8.7**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**1700**	5.5	ug/m3	EPA TO-15	
Toluene	**4.4**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**720**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-1-15** Laboratory ID: **E211049-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**66**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**49**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**290**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**69**	6.3	ug/m3	EPA TO-15	
2-Butanone (MEK)	**69**	30	ug/m3	EPA TO-15	
Chloroform	**12**	4.9	ug/m3	EPA TO-15	
Benzene	**25**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**680**	5.5	ug/m3	EPA TO-15	
Toluene	**6.3**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**390**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-1-5** Laboratory ID: **E211049-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**22**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**94**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**97**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**150**	6.9	ug/m3	EPA TO-15	

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Sample ID: **AA** Laboratory ID: **E211049-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
No Detections Reported					

Sample ID: **VP-9-30** Laboratory ID: **E211049-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.4**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**86**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**110**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**370**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**12**	6.3	ug/m3	EPA TO-15	
2-Butanone (MEK)	**62**	30	ug/m3	EPA TO-15	
Chloroform	**20**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**1700**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**670**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-9-15** Laboratory ID: **E211049-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**6.8**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**53**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**6.5**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**230**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**29**	6.3	ug/m3	EPA TO-15	
2-Butanone (MEK)	**40**	30	ug/m3	EPA TO-15	
Chloroform	**6.4**	4.9	ug/m3	EPA TO-15	
Benzene	**6.2**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**380**	5.5	ug/m3	EPA TO-15	
Toluene	**4.7**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**250**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-9-5** Laboratory ID: **E211049-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**13**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**51**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**15**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**17**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**71**	6.9	ug/m3	EPA TO-15	

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Sample ID: **VP-2-15** Laboratory ID: **E211049-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.2**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**56**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**17**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**210**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**7.4**	6.3	ug/m3	EPA TO-15	
Chloroform	**33**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**510**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**450**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-2-5** Laboratory ID: **E211049-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**23**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**72**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**7.5**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**48**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**110**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-3-15** Laboratory ID: **E211049-10**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**7.9**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**66**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**140**	7.7	ug/m3	EPA TO-15	
Chloroform	**23**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**250**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**240**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-3-5** Laboratory ID: **E211049-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Difluoroethane (LCC)	**14**	5.5	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**5.9**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**8.3**	7.7	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**9.1**	3.5	ug/m3	EPA TO-15	
Carbon disulfide	**19**	6.3	ug/m3	EPA TO-15	
Chloroform	**11**	4.9	ug/m3	EPA TO-15	
Benzene	**6.7**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**28**	5.5	ug/m3	EPA TO-15	

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Sample ID: **VP-3-5** Laboratory ID: **E211049-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	**14**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**12**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-11-15** Laboratory ID: **E211049-12**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**7.9**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**90**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**240**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**770**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**460**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-11-5** Laboratory ID: **E211049-13**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**5.3**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**34**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**95**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**29**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**89**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-10-15** Laboratory ID: **E211049-14**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**6.3**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**51**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**17**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**99**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**13**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**430**	5.5	ug/m3	EPA TO-15	
Toluene	**4.3**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**270**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-10-5** Laboratory ID: **E211049-15**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**23**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**37**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**8.0**	6.3	ug/m3	EPA TO-15	

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Sample ID: **VP-10-5** Laboratory ID: **E211049-15**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**3.5**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**70**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**80**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-17-15** Laboratory ID: **E211049-16**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**19**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**49**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**11**	6.3	ug/m3	EPA TO-15	
2-Butanone (MEK)	**39**	30	ug/m3	EPA TO-15	
Trichloroethene	**290**	5.5	ug/m3	EPA TO-15	
Toluene	**6.6**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**180**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-17-5** Laboratory ID: **E211049-17**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**11**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**23**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**9.3**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**55**	5.5	ug/m3	EPA TO-15	
Toluene	**6.5**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**76**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-17-5 Rep** Laboratory ID: **E211049-18**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**19**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**51**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**12**	6.3	ug/m3	EPA TO-15	
2-Butanone (MEK)	**74**	30	ug/m3	EPA TO-15	
Trichloroethene	**300**	5.5	ug/m3	EPA TO-15	
Toluene	**6.7**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**180**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-18-15** Laboratory ID: **E211049-19**

Analyte	Result	Reporting Limit	Units	Method	Notes

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Sample ID: **VP-18-15** Laboratory ID: **E211049-19**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**79**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**43**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**16**	6.3	ug/m3	EPA TO-15	
2-Butanone (MEK)	**100**	30	ug/m3	EPA TO-15	
Trichloroethene	**110**	5.5	ug/m3	EPA TO-15	
Toluene	**6.6**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**200**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-18-5** Laboratory ID: **E211049-20**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**41**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**14**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**7.6**	5.5	ug/m3	EPA TO-15	
Toluene	**4.1**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**49**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-19-30** Laboratory ID: **E211050-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**64**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**26**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**180**	7.7	ug/m3	EPA TO-15	
Chloroform	**7.5**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**1500**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**840**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-19-15** Laboratory ID: **E211050-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**52**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**100**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**71**	6.3	ug/m3	EPA TO-15	
Benzene	**4.9**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**380**	5.5	ug/m3	EPA TO-15	
Toluene	**10**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**420**	6.9	ug/m3	EPA TO-15	

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Sample ID: **VP-19-5** Laboratory ID: **E211050-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**11**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**32**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**44**	6.3	ug/m3	EPA TO-15	
Benzene	**8.1**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**41**	5.5	ug/m3	EPA TO-15	
Toluene	**6.5**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**91**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-20-30** Laboratory ID: **E211050-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.9**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**130**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**32**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**130**	7.7	ug/m3	EPA TO-15	
Chloroform	**21**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**1600**	5.5	ug/m3	EPA TO-15	
Toluene	**4.3**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**710**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-20-30 Rep** Laboratory ID: **E211050-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**9.9**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**160**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**31**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**140**	7.7	ug/m3	EPA TO-15	
Chloroform	**22**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**1700**	5.5	ug/m3	EPA TO-15	
Toluene	**5.0**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**750**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-20-15** Laboratory ID: **E211050-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**6.9**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**82**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**73**	7.7	ug/m3	EPA TO-15	
Chloroform	**6.7**	4.9	ug/m3	EPA TO-15	

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Sample ID: **VP-20-15** Laboratory ID: **E211050-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**650**	5.5	ug/m3	EPA TO-15	
Toluene	**4.4**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**450**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-20-5** Laboratory ID: **E211050-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**22**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**19**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**51**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**91**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-12-15** Laboratory ID: **E211050-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.7**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**100**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**50**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**13**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**73**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**210**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-12-5** Laboratory ID: **E211050-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**68**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**27**	7.7	ug/m3	EPA TO-15	
Tetrachloroethene	**94**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-12-30** Laboratory ID: **E211050-10**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**10**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**230**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**79**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**32**	30	ug/m3	EPA TO-15	
Trichloroethene	**310**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**330**	6.9	ug/m3	EPA TO-15	

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Sample ID: **VP-13-15** Laboratory ID: **E211050-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.2**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**410**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**22**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**36**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**120**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-13-5** Laboratory ID: **E211050-12**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**180**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**14**	7.7	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**3.6**	3.5	ug/m3	EPA TO-15	
Carbon disulfide	**32**	6.3	ug/m3	EPA TO-15	
Benzene	**3.4**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**20**	5.5	ug/m3	EPA TO-15	
Toluene	**6.9**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**40**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-14-22** Laboratory ID: **E211050-13**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**13**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**350**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**51**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**16**	6.3	ug/m3	EPA TO-15	
Chloroform	**8.5**	4.9	ug/m3	EPA TO-15	
Benzene	**3.8**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**360**	5.5	ug/m3	EPA TO-15	
Toluene	**8.7**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**570**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-14-15** Laboratory ID: **E211050-14**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.9**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**200**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**23**	7.7	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**3.6**	3.5	ug/m3	EPA TO-15	
Benzene	**6.5**	3.2	ug/m3	EPA TO-15	

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Sample ID: **VP-14-15** Laboratory ID: **E211050-14**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**120**	5.5	ug/m3	EPA TO-15	
Toluene	**27**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**460**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**17**	8.8	ug/m3	EPA TO-15	
o-Xylene	**6.4**	4.4	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**7.6**	5.0	ug/m3	EPA TO-15	

Sample ID: **VP-14-5** Laboratory ID: **E211050-15**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.4**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**200**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**21**	7.7	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**6.2**	3.5	ug/m3	EPA TO-15	
Carbon disulfide	**120**	6.3	ug/m3	EPA TO-15	
Chloroform	**5.9**	4.9	ug/m3	EPA TO-15	
Benzene	**15**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**94**	5.5	ug/m3	EPA TO-15	
Toluene	**77**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**160**	6.9	ug/m3	EPA TO-15	
Ethylbenzene	**6.3**	4.4	ug/m3	EPA TO-15	
m,p-Xylene	**13**	8.8	ug/m3	EPA TO-15	
o-Xylene	**7.1**	4.4	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**7.9**	5.0	ug/m3	EPA TO-15	

Sample ID: **VP-4-15** Laboratory ID: **E211050-16**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**99**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**26**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**13**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**180**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-4-5** Laboratory ID: **E211050-17**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**64**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**15**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**67**	6.3	ug/m3	EPA TO-15	

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Sample ID: **VP-4-5** Laboratory ID: **E211050-17**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**19**	5.5	ug/m3	EPA TO-15	
Toluene	**11**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**35**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-5-15** Laboratory ID: **E211050-18**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**6.7**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**220**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**20**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**11**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**110**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-5-5** Laboratory ID: **E211050-19**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**60**	5.6	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**26**	3.5	ug/m3	EPA TO-15	
Carbon disulfide	**71**	6.3	ug/m3	EPA TO-15	
Chloroform	**17**	4.9	ug/m3	EPA TO-15	
Benzene	**6.3**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**180**	5.5	ug/m3	EPA TO-15	
Toluene	**23**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**12**	6.9	ug/m3	EPA TO-15	
o-Xylene	**4.9**	4.4	ug/m3	EPA TO-15	QL-1H

Sample ID: **VP-7-15** Laboratory ID: **E211050-20**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**6.1**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**180**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**26**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**40**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**210**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-7-5** Laboratory ID: **E211050-21**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**53**	5.6	ug/m3	EPA TO-15	

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Sample ID: **VP-7-5** Laboratory ID: **E211050-21**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**14**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**47**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-6-13** Laboratory ID: **E211050-22**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**7.2**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**100**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**39**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**73**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**32**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**140**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-6-5** Laboratory ID: **E211050-23**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**7.8**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**91**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**35**	7.7	ug/m3	EPA TO-15	
Tetrachloroethene	**39**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-16-15** Laboratory ID: **E211050-24**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**50**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**44**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**190**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**360**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-16-5** Laboratory ID: **E211050-25**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**23**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**16**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**6.4**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**97**	6.9	ug/m3	EPA TO-15	

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Sample ID: **VP-8-15** Laboratory ID: **E211050-26**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**6.8**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**85**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**50**	7.7	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**5.3**	3.5	ug/m3	EPA TO-15	
Carbon disulfide	**52**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**190**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**140**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-8-5** Laboratory ID: **E211050-27**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Difluoroethane (LCC)	**520**	5.5	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**14**	5.6	ug/m3	EPA TO-15	
Tetrachloroethene	**30**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-15-5** Laboratory ID: **E211050-28**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**460**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**10**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**13**	6.3	ug/m3	EPA TO-15	
Chloroform	**6.9**	4.9	ug/m3	EPA TO-15	
1,1,1-Trichloroethane	**9.4**	5.5	ug/m3	EPA TO-15	
1,2-Dichloroethane (EDC)	**17**	4.1	ug/m3	EPA TO-15	
Tetrachloroethene	**14**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-21-15** Laboratory ID: **E211050-29**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**7.3**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**510**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**39**	7.7	ug/m3	EPA TO-15	
Tetrachloroethene	**150**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-21-5** Laboratory ID: **E211050-30**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Difluoroethane (LCC)	**11**	5.5	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**160**	5.6	ug/m3	EPA TO-15	

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Sample ID: **VP-21-5** Laboratory ID: **E211050-30**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon disulfide	**92**	6.3	ug/m3	EPA TO-15	
Chloroform	**34**	4.9	ug/m3	EPA TO-15	
Benzene	**39**	3.2	ug/m3	EPA TO-15	
Toluene	**10**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**8.0**	6.9	ug/m3	EPA TO-15	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-30 (E211049-01) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.5**	5.0	"	"	"	"	"	"	
Chloromethane	**3.5**	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**85**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**120**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**370**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**20**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**54**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**20**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**8.7**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**1700**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.4**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**720**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-30 (E211049-01) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*117 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.5 %*		*77-127*	"	"	"	"	
VP-1-15 (E211049-02) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**66**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**49**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**290**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**69**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**69**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**12**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**25**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-15 (E211049-02) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**680**	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.3**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**390**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*118 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.6 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-5 (E211049-03) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**22**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**94**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**97**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**150**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-5 (E211049-03) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*117 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.2 %*		*77-127*	"	"	"	"	
AA (E211049-04) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
AA (E211049-04) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,2-Dichloropropane	ND	9.4	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*118 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*108 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.4 %*	*77-127*		"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-30 (E211049-05) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.4**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**86**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**110**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**370**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**12**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**62**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**20**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**1700**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**670**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-30 (E211049-05) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*118 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.4 %*		*77-127*	"	"	"	"	
VP-9-15 (E211049-06) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**6.8**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**53**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**6.5**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**230**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**29**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**40**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**6.4**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**6.2**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-15 (E211049-06) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**380**	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.7**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**250**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*121 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.6 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-5 (E211049-07) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**13**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**51**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**15**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**17**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**71**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-5 (E211049-07) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*121 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*108 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.8 %*		*77-127*	"	"	"	"	
VP-2-15 (E211049-08) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.2**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**56**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**17**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**210**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**7.4**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**33**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-2-15 (E211049-08) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**510**	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**450**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*123 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.7 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-2-5 (E211049-09) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**23**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**72**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**7.5**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**48**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**110**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-2-5 (E211049-09) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*125 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*110 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.1 %*		*77-127*	"	"	"	"	
VP-3-15 (E211049-10) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**7.9**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**66**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**140**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**23**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-3-15 (E211049-10) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**250**	5.5	ug/m3	1	EK23015	30-Nov-22	30-Nov-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**240**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*124 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*108 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.0 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-3-5 (E211049-11) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	**14**	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**5.9**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**8.3**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**9.1**	3.5	"	"	"	"	"	"	
Carbon disulfide	**19**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**11**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**6.7**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**28**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**14**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**12**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-3-5 (E211049-11) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*124 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*109 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.9 %*		*77-127*	"	"	"	"	
VP-11-15 (E211049-12) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**7.9**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**90**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**240**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-11-15 (E211049-12) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**770**	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**460**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*124 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.2 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-11-5 (E211049-13) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**5.3**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**34**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**95**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**29**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**89**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-11-5 (E211049-13) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*122 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*110 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.8 %*		*77-127*	"	"	"	"	
VP-10-15 (E211049-14) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**6.3**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**51**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**17**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**99**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**13**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-10-15 (E211049-14) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**430**	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.3**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**270**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*124 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.6 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-10-5 (E211049-15) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**23**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**37**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**8.0**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**3.5**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**70**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**80**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-10-5 (E211049-15) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*125 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*110 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.6 %*		*77-127*	"	"	"	"	
VP-17-15 (E211049-16) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**19**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**49**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**11**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**39**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-17-15 (E211049-16) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**290**	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.6**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**180**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*129 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.9 %*		*77-127*	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-17-5 (E211049-17) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**11**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**23**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**9.3**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**55**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.5**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**76**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-17-5 (E211049-17) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*127 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*111 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.4 %*		*77-127*	"	"	"	"	
VP-17-5 Rep (E211049-18) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**19**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**51**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**12**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**74**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-17-5 Rep (E211049-18) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**300**	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.7**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**180**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*125 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*79.6 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-18-15 (E211049-19) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**79**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**43**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**16**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**100**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**110**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.6**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**200**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-18-15 (E211049-19) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*127 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.3 %*		*77-127*	"	"	"	"	
VP-18-5 (E211049-20) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**41**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**14**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-18-5 (E211049-20) Vapor Sampled: 16-Nov-22 Received: 16-Nov-22									
Trichloroethene	**7.6**	5.5	ug/m3	1	EK23015	30-Nov-22	01-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.1**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**49**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*128 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*111 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.2 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-30 (E211050-01) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**64**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**26**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**180**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**7.5**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**1500**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**840**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-30 (E211050-01) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*97.4 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.5 %*		*77-127*	"	"	"	"	
VP-19-15 (E211050-02) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**52**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**100**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**71**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**4.9**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-15 (E211050-02) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**380**	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**10**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**420**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.2 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*97.3 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-5 (E211050-03) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**11**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**32**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**44**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**8.1**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**41**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.5**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**91**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-5 (E211050-03) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.1 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*97.8 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*		*77-127*	"	"	"	"	
VP-20-30 (E211050-04) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.9**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**130**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**32**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**130**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**21**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-30 (E211050-04) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**1600**	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.3**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**710**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.0 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.1 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-30 Rep (E211050-05) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**9.9**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**160**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**31**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**140**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**22**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**1700**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**5.0**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**750**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-30 Rep (E211050-05) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.4 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*98.4 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.6 %*		*77-127*	"	"	"	"	
VP-20-15 (E211050-06) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**6.9**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**82**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**73**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**6.7**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-15 (E211050-06) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**650**	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.4**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**450**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*94.9 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-5 (E211050-07) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**22**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**19**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**51**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**91**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-5 (E211050-07) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.0 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*98.4 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.6 %*		*77-127*	"	"	"	"	
VP-12-15 (E211050-08) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.7**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**100**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**50**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**13**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-15 (E211050-08) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**73**	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**210**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*98.7 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.6 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-5 (E211050-09) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**68**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**27**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**94**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-5 (E211050-09) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.3 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*98.4 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*77-127*	"	"	"	"	
VP-12-30 (E211050-10) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**10**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**230**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**79**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**32**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-30 (E211050-10) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**310**	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**330**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.6 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*95.9 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.4 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-13-15 (E211050-11) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.2**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**410**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**22**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**36**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**120**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-13-15 (E211050-11) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20615	06-Dec-22	06-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.7 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*95.9 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.4 %*		*77-127*	"	"	"	"	
VP-13-5 (E211050-12) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**180**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**14**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**3.6**	3.5	"	"	"	"	"	"	
Carbon disulfide	**32**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**3.4**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-13-5 (E211050-12) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**20**	5.5	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.9**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**40**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.7 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*97.4 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.8 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-22 (E211050-13) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**13**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**350**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**51**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**16**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**8.5**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**3.8**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**360**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**8.7**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**570**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-22 (E211050-13) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.5 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*96.4 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*77-127*	"	"	"	"	
VP-14-15 (E211050-14) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.9**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**200**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**23**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**3.6**	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**6.5**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-15 (E211050-14) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**120**	5.5	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**27**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**460**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**17**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**6.4**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**7.6**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*95.3 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.0 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-5 (E211050-15) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.4**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**200**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**21**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**6.2**	3.5	"	"	"	"	"	"	
Carbon disulfide	**120**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**5.9**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**15**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**94**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**77**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**160**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**6.3**	4.4	"	"	"	"	"	"	
m,p-Xylene	**13**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-5 (E211050-15) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	**7.1**	4.4	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**7.9**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*97.2 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*96.6 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*77-127*	"	"	"	"	
VP-4-15 (E211050-16) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**99**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**26**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-4-15 (E211050-16) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**13**	5.5	ug/m3	1	EL20615	06-Dec-22	07-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**180**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*97.8 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*95.7 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-4-5 (E211050-17) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**64**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**15**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**67**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**19**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**11**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**35**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-4-5 (E211050-17) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*74.3 %*		*77-127*	"	"	"	"	*S-GC*
VP-5-15 (E211050-18) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**6.7**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**220**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**20**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-5-15 (E211050-18) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**11**	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**110**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*75.2 %*		*77-127*	"	"	"	"	*S-GC*

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-5-5 (E211050-19) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**60**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**26**	3.5	"	"	"	"	"	"	
Carbon disulfide	**71**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**17**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**6.3**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**180**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**23**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**12**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
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Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-5-5 (E211050-19) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	**4.9**	4.4	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	QL-1H
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*110 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*78.1 %*		*77-127*	"	"	"	"	
VP-7-15 (E211050-20) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**6.1**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**180**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**26**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-7-15 (E211050-20) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**40**	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**210**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.0 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.8 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-7-5 (E211050-21) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**53**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**14**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**47**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-7-5 (E211050-21) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*97.2 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.7 %*		*77-127*	"	"	"	"	
VP-6-13 (E211050-22) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**7.2**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**100**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**39**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**73**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-6-13 (E211050-22) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**32**	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**140**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*95.8 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.8 %*		*77-127*	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-6-5 (E211050-23) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**7.8**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**91**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**35**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**39**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-6-5 (E211050-23) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.4 %*		*77-127*	"	"	"	"	
VP-16-15 (E211050-24) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**50**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**44**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-16-15 (E211050-24) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**190**	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**360**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.9 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-16-5 (E211050-25) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**23**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**16**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**6.4**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**97**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-16-5 (E211050-25) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.6 %*		*77-127*	"	"	"	"	
VP-8-15 (E211050-26) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**6.8**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**85**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**50**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**5.3**	3.5	"	"	"	"	"	"	
Carbon disulfide	**52**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-8-15 (E211050-26) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	**190**	5.5	ug/m3	1	EL20716	07-Dec-22	07-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**140**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.3 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.3 %*		*77-127*	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-8-5 (E211050-27) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	**520**	5.5	ug/m3	1	EL20716	07-Dec-22	08-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**14**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**30**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-8-5 (E211050-27) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20716	07-Dec-22	08-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*100 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.7 %*		*77-127*	"	"	"	"	
VP-15-5 (E211050-28) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	08-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**460**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**10**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**13**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**6.9**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	**9.4**	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	**17**	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-15-5 (E211050-28) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	ND	5.5	ug/m3	1	EL20716	07-Dec-22	08-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**14**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*107 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.0 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-21-15 (E211050-29) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EL20716	07-Dec-22	08-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	**7.3**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**510**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**39**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**150**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-21-15 (E211050-29) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
o-Xylene	ND	4.4	ug/m3	1	EL20716	07-Dec-22	08-Dec-22	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.5 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*77.3 %*		*77-127*	"	"	"	"	
VP-21-5 (E211050-30) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
1,1-Difluoroethane (LCC)	**11**	5.5	ug/m3	1	EL20716	07-Dec-22	08-Dec-22	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**160**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**92**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**34**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**39**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-21-5 (E211050-30) Vapor Sampled: 17-Nov-22 Received: 17-Nov-22									
Trichloroethene	ND	5.5	ug/m3	1	EL20716	07-Dec-22	08-Dec-22	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**10**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**8.0**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*107 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*73.0 %*		*77-127*	"	"	"	"	*S-GC*

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK23015 - TO-15										
Blank (EK23015-BLK1)				Prepared & Analyzed: 30-Nov-22						
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3							
Dichlorodifluoromethane (F12)	ND	5.0	"							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK23015 - TO-15										
Blank (EK23015-BLK1)				Prepared & Analyzed: 30-Nov-22						
Chlorobenzene	ND	4.7	ug/m3							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							
Surrogate: 1,2-Dichloroethane-d4	*247*		"	*214*		*116*	*76-134*			
Surrogate: Toluene-d8	*215*		"	*208*		*104*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*262*		"	*363*		*72.1*	*77-127*			*S-GC*
LCS (EK23015-BS1)				Prepared & Analyzed: 30-Nov-22						
Dichlorodifluoromethane (F12)	120	5.0	ug/m3	101		122	59-128			
Vinyl chloride	62	2.6	"	52.0		120	64-127			
Chloroethane	70	8.0	"	53.6		130	63-127			QL-1H
Trichlorofluoromethane (F11)	110	5.6	"	113		100	62-126			
1,1-Dichloroethene	83	4.0	"	80.8		103	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	150	7.7	"	155		97.1	66-126			
Methylene chloride (Dichloromethane)	71	3.5	"	70.8		101	62-115			
trans-1,2-Dichloroethene	83	8.0	"	80.8		103	67-124			
1,1-Dichloroethane	90	4.1	"	82.4		109	68-126			
cis-1,2-Dichloroethene	82	4.0	"	80.0		103	70-121			
Chloroform	100	4.9	"	99.2		104	68-123			
1,1,1-Trichloroethane	110	5.5	"	111		101	68-125			
1,2-Dichloroethane (EDC)	91	4.1	"	82.4		111	65-128			

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Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK23015 - TO-15										
LCS (EK23015-BS1)				Prepared & Analyzed: 30-Nov-22						
Benzene	62	3.2	ug/m3	64.8		96.3	69-119			
Carbon tetrachloride	130	6.4	"	128		99.1	68-132			
Trichloroethene	100	5.5	"	110		95.3	71-123			
Toluene	74	3.8	"	76.8		96.1	66-119			
1,1,2-Trichloroethane	110	5.5	"	111		95.2	73-119			
Tetrachloroethene	120	6.9	"	138		84.6	66-124			
1,1,1,2-Tetrachloroethane	110	7.0	"	140		79.7	67-129			
Ethylbenzene	70	4.4	"	88.4		79.0	70-124			
m,p-Xylene	67	8.8	"	88.4		76.3	61-134			
o-Xylene	76	4.4	"	88.4		86.5	67-125			
1,1,2,2-Tetrachloroethane	140	7.0	"	140		97.9	65-127			
Surrogate: 1,2-Dichloroethane-d4	*256*		"	*214*		*120*	*76-134*			
Surrogate: Toluene-d8	*210*		"	*208*		*101*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*322*		"	*363*		*88.7*	*77-127*			
Batch EL20615 - TO-15										
Blank (EL20615-BLK1)				Prepared & Analyzed: 06-Dec-22						
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3							
Dichlorodifluoromethane (F12)	ND	5.0	"							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL20615 - TO-15										
Blank (EL20615-BLK1)				Prepared & Analyzed: 06-Dec-22						
cis-1,2-Dichloroethene	ND	4.0	ug/m3							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							
Chlorobenzene	ND	4.7	"							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							

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Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL20615 - TO-15										
Blank (EL20615-BLK1)				Prepared & Analyzed: 06-Dec-22						
Surrogate: 1,2-Dichloroethane-d4	*204*		*ug/m3*	*214*		*95.3*	*76-134*			
Surrogate: Toluene-d8	*200*		*"*	*208*		*96.4*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*371*		*"*	*363*		*102*	*77-127*			
LCS (EL20615-BS1)				Prepared & Analyzed: 06-Dec-22						
Dichlorodifluoromethane (F12)	100	5.0	ug/m3	101		99.6	59-128			
Vinyl chloride	55	2.6	"	52.0		105	64-127			
Chloroethane	53	8.0	"	53.6		98.7	63-127			
Trichlorofluoromethane (F11)	96	5.6	"	113		84.6	62-126			
1,1-Dichloroethene	78	4.0	"	80.8		96.6	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	170	7.7	"	155		107	66-126			
Methylene chloride (Dichloromethane)	68	3.5	"	70.8		95.9	62-115			
trans-1,2-Dichloroethene	78	8.0	"	80.8		96.8	67-124			
1,1-Dichloroethane	80	4.1	"	82.4		97.0	68-126			
cis-1,2-Dichloroethene	79	4.0	"	80.0		98.8	70-121			
Chloroform	100	4.9	"	99.2		102	68-123			
1,1,1-Trichloroethane	110	5.5	"	111		99.5	68-125			
1,2-Dichloroethane (EDC)	82	4.1	"	82.4		99.6	65-128			
Benzene	64	3.2	"	64.8		98.1	69-119			
Carbon tetrachloride	130	6.4	"	128		101	68-132			
Trichloroethene	120	5.5	"	110		107	71-123			
Toluene	79	3.8	"	76.8		103	66-119			
1,1,2-Trichloroethane	120	5.5	"	111		107	73-119			
Tetrachloroethene	150	6.9	"	138		106	66-124			
1,1,1,2-Tetrachloroethane	140	7.0	"	140		103	67-129			
Ethylbenzene	89	4.4	"	88.4		101	70-124			
m,p-Xylene	98	8.8	"	88.4		111	61-134			
o-Xylene	91	4.4	"	88.4		103	67-125			
1,1,2,2-Tetrachloroethane	140	7.0	"	140		97.3	65-127			
Surrogate: 1,2-Dichloroethane-d4	*206*		*"*	*214*		*96.7*	*76-134*			
Surrogate: Toluene-d8	*207*		*"*	*208*		*99.5*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*364*		*"*	*363*		*100*	*77-127*			

H&P Mobile
Geochemistry Inc.

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760-804-9678 Phone
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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL20615 - TO-15										
Batch EL20716 - TO-15										
Blank (EL20716-BLK1)				Prepared & Analyzed: 07-Dec-22						
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3							
Dichlorodifluoromethane (F12)	ND	5.0	"							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL20716 - TO-15										
Blank (EL20716-BLK1)				Prepared & Analyzed: 07-Dec-22						
1,2-Dibromoethane (EDB)	ND	7.8	ug/m3							
1,1,1,2-Tetrachloroethane	ND	7.0	"							
Chlorobenzene	ND	4.7	"							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							
Surrogate: 1,2-Dichloroethane-d4	*218*		"	*214*		*102*	*76-134*			
Surrogate: Toluene-d8	*216*		"	*208*		*104*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*268*		"	*363*		*73.8*	*77-127*			*S-GC*
LCS (EL20716-BS1)				Prepared & Analyzed: 07-Dec-22						
Dichlorodifluoromethane (F12)	120	5.0	ug/m3	101		114	59-128			
Vinyl chloride	60	2.6	"	52.0		116	64-127			
Chloroethane	57	8.0	"	53.6		106	63-127			
Trichlorofluoromethane (F11)	95	5.6	"	113		83.8	62-126			
1,1-Dichloroethene	83	4.0	"	80.8		102	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	170	7.7	"	155		108	66-126			
Methylene chloride (Dichloromethane)	76	3.5	"	70.8		108	62-115			
trans-1,2-Dichloroethene	82	8.0	"	80.8		101	67-124			
1,1-Dichloroethane	87	4.1	"	82.4		106	68-126			
cis-1,2-Dichloroethene	81	4.0	"	80.0		102	70-121			
Chloroform	110	4.9	"	99.2		107	68-123			

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL20716 - TO-15										
LCS (EL20716-BS1)				Prepared & Analyzed: 07-Dec-22						
1,1,1-Trichloroethane	120	5.5	ug/m3	111		107	68-125			
1,2-Dichloroethane (EDC)	86	4.1	"	82.4		105	65-128			
Benzene	68	3.2	"	64.8		105	69-119			
Carbon tetrachloride	130	6.4	"	128		105	68-132			
Trichloroethene	120	5.5	"	110		112	71-123			
Toluene	80	3.8	"	76.8		104	66-119			
1,1,2-Trichloroethane	130	5.5	"	111		113	73-119			
Tetrachloroethene	150	6.9	"	138		111	66-124			
1,1,1,2-Tetrachloroethane	170	7.0	"	140		120	67-129			
Ethylbenzene	96	4.4	"	88.4		109	70-124			
m,p-Xylene	100	8.8	"	88.4		114	61-134			
o-Xylene	110	4.4	"	88.4		127	67-125			QL-1H
1,1,2,2-Tetrachloroethane	190	7.0	"	140		135	65-127			QL-1H
Surrogate: 1,2-Dichloroethane-d4	*216*		"	*214*		*101*	*76-134*			
Surrogate: Toluene-d8	*207*		"	*208*		*99.6*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*309*		"	*363*		*85.2*	*77-127*			

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GSI Environmental, Inc	Project: GSI111722-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / Riverside	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	08-Dec-22 14:54

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
QL-1H	The LCS and/or LCSD recoveries fell above the established control specifications for this analyte. Any result for this compound is qualified and should be considered biased high.
QL-1H	The LCS and/or LCSD recoveries fell above the established control specifications for this analyte. Any result for this compound is qualified and should be considered biased high.
LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

All soil results are reported in wet weight.

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15, EPA Method 8260B and H&P 8260SV.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743 & 2745.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

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VAPOR / AIR Chain of Custody

DATE: 11-16-22
Page 1 of 2

Lab Client and Project Information

Lab Client/Consultant: GSI	Project Name / #: 6239
Lab Client Project Manager: Samantha Curtis	Project Location: 2993 6th St Riverside
Lab Client Address: 7595 Irvine Center Dr Suite 250	Report E-Mail(s): scurtis@gsi-net.com KRGrachock@" "
Lab Client City, State, Zip: Irvine CA 92618	
Phone Number: 949-892-5239	

Sample Receipt (Lab Use Only)

Date Rec'd: 11/17	Control#: 220726.02
H&P Project #	GSI 111722-10
Lab Work Order #	E211049
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	Lab PM Initials: KB

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☒ Excel EDD ☐ Other EDD: _____
☐ CA Geotracker Global ID: _____

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify): _____

Sampler Information

Sampler(s): Mike Hertlein
Signature:
Date: 11-16-22

Additional Instructions to Laboratory:

* *Preferred VOC units (please choose one):*
☒ µg/L ☒ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
VP-1-30		11-16-22	826	SV	400 ml	150	-0.23	X						X						
VP-1-15			825			158	-0.13	X						X						
VP-1-5			849	SV		156	-0.73	X						X						
AA			856	AA		229	-0.78	X						X	-no	DFA used				
VP-9-30			922	SV		136	-0.20	X						X						
VP-9-15			921			148	-2.19	X						X						
VP-9-5			937			135	-0.55	X						X						
VP-2-15			1006			107	-0.39	X						X						
VP-2-5			1005			234	-1.42	X						X						
VP-3-15		"	1051	"	"	006	-1.35	X						X						

Approved/Relinquished by:	Company: GST	Date: 11/16/2022	Time: 13	Received by:	Company: H&P	Date: 11-16-22	Time: 14:00 11/21/22
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

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VAPOR / AIR Chain of Custody

DATE: 11-16-22
Page 2 of 2

Lab Client and Project Information

Lab Client/Consultant: GSI	Project Name / #: 6239
Lab Client Project Manager: Samantha Curtis	Project Location: 2993 6th St Riverside
Lab Client Address: 7595 Irvine Center Dr Suite 250	Report E-Mail(s): Scurtis@gsi-net.com KKGrochocki;" "
Lab Client City, State, Zip: Irvine CA 92618	
Phone Number: 949-892-5239	

Reporting Requirements

- [x] Standard Report [ ] Level III [ ] Level IV
- [x] Excel EDD [ ] Other EDD: _____
- [ ] CA Geotracker Global ID: _____

Turnaround Time

- [x] **Standard** (7 days for preliminary report, 10 days for final report)
- [ ] **Rush** (specify): _____

Sampler Information

Sampler(s): Mike Hartford
Signature:
Date: 11-16-22

Sample Receipt (Lab Use Only)

Date Rec'd: 11/17	Control#: 32086.02
H&P Project #	GSI111722-10
Lab Work Order #	E211049

Sample Intact: [x] Yes [ ] No [ ] See Notes Below

Receipt Gauge ID: 60206 Temp: RT

Outside Lab:

Receipt Notes/Tracking #:

Lab PM Initials: KB

Additional Instructions to Laboratory:

* *Preferred VOC units (please choose one):*
[x] µg/L [ ] µg/m³ [ ] ppbv [ ] ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List [ ] 8260SV [x] TO-15	VOCs Short List / Project List [ ] 8260SV [ ] TO-15	Oxygenates [ ] 8260SV [ ] TO-15	Naphthalene [ ] 8260SV [ ] TO-15	TPHv as Gas [ ] 8260SVm [ ] TO-15m	Aromatic/Aliphatic Fractions [ ] 8260SVm [ ] TO-15m	Leak Check Compound [x] DFA [ ] IPA [ ] He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 [ ] CO2 [ ] O2 [ ] N2				
VP-3-5		11-16-22	1050	SV	400mT	106	-0.90	X						X							
VP-11-15			1124			052	-1.25	X						X							
VP-11-5			1123			071	-0.93	X						X							
VP-10-15			1159			086	-0.66	X						X							
VP-10-5			1168			050	-0.88	X						X							
VP-17-15			1230			072	-1.68	X						X							
VP-17-5			1229			007	-0.73	X						X							
VP-17-15 Rep			1235			081	-0.95	X						X							
VP-18-15			1302			074	-1.81	X						X							
VP-18-5			1300			010	-1.08	X						X							

Approved/Relinquished by:	Company: GSI	Date: 11/16/22	Time:	Received by:	Company: H&P	Date: 11-16-22	Time: 14:00
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

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VAPOR / AIR Chain of Custody

DATE: 11-17-22
Page 1 of 3

Lab Client and Project Information

Lab Client/Consultant: GSI	Project Name / #: 6239
Lab Client Project Manager: Samantha Curtis	Project Location: 3993 6th St Riverside
Lab Client Address: 7695 Irvine Center Dr Suite 250	Report E-Mail(s): scurtis@gsi-net.com; KKGrochocki" "
Lab Client City, State, Zip: Irvine CA 92618	
Phone Number: 949-892-5239	

Reporting Requirements
- [x] Standard Report [ ] Level III [ ] Level IV
- [ ] Excel EDD [ ] Other EDD:
- [ ] CA Geotracker Global ID:

Turnaround Time
- [x] **Standard** (7 days for preliminary report, 10 days for final report)
- [ ] **Rush** (specify):

Sampler Information
Sampler(s): Mike Herrera
Signature:
Date: 11-17-22

Sample Receipt (Lab Use Only)

Date Rec'd: 11/18	Control #: 22077602
H&P Project #	GSI111722-10
Lab Work Order #	E211050
Sample Intact: [x] Yes [ ] No [ ] See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: WB	

Additional Instructions to Laboratory:

* Preferred VOC units (please choose one):
[x] µg/L [x] µg/m³ [ ] ppbv [ ] ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List [ ] 8260SV [x] TO-15	VOCs Short List / Project List [ ] 8260SV [ ] TO-15	Oxygenates [ ] 8260SV [ ] TO-15	Naphthalene [ ] 8260SV [ ] TO-15	TPHv as Gas [ ] 8260SV/m [ ] TO-15m	Aromatic/Aliphatic Fractions [ ] 8260SV/m [ ] TO-15m	Leak Check Compound [x] DFA [ ] IPA [ ] He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 [ ] CO2 [ ] O2 [ ] N2				
VP-19-30		11-17-22	738	SV	400 ml	211	-0.22	X						X						
VP-19-15		"	737	"	"	205	-0.48	X						X						
VP-19-5		"	752	"	"	220	-0.53	X						X						
VP-20-30		"	827	"	"	471	-0.11	X						X						
VP-20-30 Dup		"	831	"	"	267	-0.18	X						X						
VP-20-15		"	826	"	"	192	-0.23	X						X						
VP-20-5		"	845	"	"	213	-0.19	X						X						
VP-12-15		"	918	"	"	223	-1.02	X						X						
VP-12-5		"	934	"	"	264	-2.21	X						X						
VP-12-30		"	919	"	"	241	-1.00	X						X						

Approved/Relinquished by:	Company: GSI	Date: 11/17/22	Time: 1445	Received by:	Company: H&P	Date: 11-17-22	Time: 1449
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

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VAPOR / AIR Chain of Custody

DATE: 11-17-22
Page 2 of 3

Lab Client and Project Information

Lab Client/Consultant: GSI	Project Name / #: 6289
Lab Client Project Manager: Samantha Curtis	Project Location: 2993 6th St Riverside
Lab Client Address: 7595 Irvine Center Dr Suite 250	Report E-Mail(s): Scurtis@gsi-net.com kkrochocki" "
Lab Client City, State, Zip: Irvine CA 92618	
Phone Number: 949-892-5239	

Sample Receipt (Lab Use Only)

Date Rec'd: 11/18	Control#: 220726.02
H&P Project # GSI111722-10	
Lab Work Order # E211050	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: MB	

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☒ Excel EDD ☐ Other EDD: _____
☐ CA Geotracker Global ID: _____

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify): _____

Sampler Information

Sampler(s): Mike Hamilton
Signature:
Date: 11-17-22

Additional Instructions to Laboratory:

* *Preferred VOC units (please choose one):*
☒ µg/L ☐ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2
VP-13-15		11-17-22	956	SV	400 ml	790	-1.05	X						X		
VP-13-5		"	955	"	"	789	-1.41	X						X		
VP-14-22		"	1101	"	"	792	-1.54	X						X		
VP-14-15		"	1103	"	"	783	-1.93	X						X		
VP-14-5		"	1158	"	"	773	-1.55	X						X		
VP-4-15		"	1142	"	"	786	-1.60	X						X		
VP-4-5		"	1148	"	"	742	-1.98	X						X		
VP-5-15		"	1213	"	"	763	-2.78	X						X		
VP-5-5		"	1209	"	"	773	-2.63	X						X		
VP-7-5		"	1231	"	"	741	-2.51	X						X		

	Company	Date	Time	Received by	Company	Date	Time
Approved/Relinquished by:	GSI	11/17/22	1445		H&P	11-17-22	1445
Approved/Relinquished by:				Received by:			
Approved/Relinquished by:				Received by:			

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

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2470 Impala Drive, Carlsbad, CA 92010
& Field Office - Signal Hill, CA
W handpmg.com E info@handpmg.com
P 760.804.9678 F 760.804.9159

VAPOR / AIR Chain of Custody

DATE: 11-17-22
Page 3 of 3

Lab Client and Project Information

Lab Client/Consultant: GSI	Project Name / #: 6239
Lab Client Project Manager: Samantha Curtis	Project Location: 2993 6th St Riverside
Lab Client Address: 7595 Irvine Center Dr. Suite 250	Report E-Mail(s): Scurtis@gsi-net.com
Lab Client City, State, Zip: Irvine CA 92618	KKrochocki " "
Phone Number: 949-892-5239	

Sample Receipt (Lab Use Only)

Date Rec'd: 11/18	Control #: 210726.02
H&P Project # GSI 111722-10	
Lab Work Orcer # F211050	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: KB	

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☒ Excel EDD ☐ Other EDD: _____
☐ CA Geotracker Global ID: _____

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify): _____

Sampler Information

Sampler(s): Mike Hertford
Signature:
Date: 11-17-22

Additional Instructions to Laboratory:

* *Preferred VOC units (please choose one):*
☒ µg/L ☒ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
VP-7-5		11-17-22	1232	SV	400ml	784	-1.84	X						X						
VP-6-13		"	1264	"	"	734	-2.33	X						X						
VP-6-5		"	1252	"	"	740	-3.10	X						X						
VP-16-15		"	1319	"	"	735	-1.36	X						X						
VP-16-5		"	1320	"	"	738	-2.19	X						X						
VP-8-15		"	1345	"	"	619	-1.91	X						X						
VP-8-5		"	1344	"	"	730	-1.21	X						X						
VP-15-5		"	1403	"	"	633	-2.42	X						X						
VP-21-15		"	1023	"	"	787	-1.60	X						X						
VP-21-5		"	1035	"	"	786	-1.24	X						X						

Approved/Relinquished by:	Company: 651	Date: 11/17/22	Time: 1445	Received by:	Company: H&P	Date: 11-17-22	Time: 1445
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

H&P Mobile Geochemistry Inc.

FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: G51111622-Tech
Date: 11-16-22
Site Address: 2993 6th Street Riverside
Page: 1 of 2
Consultant: G51
H&P Rep(s): Mike Hertford
Reviewed: DSB
Consultant Rep(s): Konrad Grochacki
Scanned:

Equipment Info
Inline Gauge ID#:
Pump ID#: 207 3040

Purge Volume Information
PV Amount: 3PV
PV Includes: ☒ Tubing ☒ Sand 40% ☐ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information						
	Point ID	Summa ID #	Sample Kit ID#	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O
1	VP-1-30	150	132	823	-30+	826	0	30	31.5	1/4	12	2.25	6	2.25	✓	✓	2733	200	10:10	200	-10
2	VP-1-15	158	056	822	-29	825	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	200	-20
3	VP-1-5	156	013	844	-30+	849	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	200	-5
4	AA	224	275	853	-26	856	0	-	-	-	-	-	-	-	-	-	-	-	-	200	0
5	VP-9-30	136	235	918	-29	922	0	30	31.5	1/4	12	2.25	6	2.25	✓	✓	2733	200	10:10	200	-10
6	VP-9-15	148	346	917	-27	921	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	200	-15
7	VP-9-5	135	016	934 418	-29 -28	937	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	9:03	200	-20
8	VP-2-15	107	379	1003	-26	1006	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	200	-10
9	VP-2-5	234	374	1007	-27	1009	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	200	-15
10	VP-3-15	006	007	1048	-30+	1051	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	200	-10
11	VP-3-5	106	380	1047	-28	1050	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	200	-10
12	VP-11-15	052	051	1121	-30+	1124	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	200	-15

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
Color coded Probes
Yellow - Shallow
Blue - Middle
Red - Deep

H&P Mobile Geochemistry Inc.

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: GSI 111622-Tech
Date: 11-15-22
Site Address: 2993 6th Street Riverside
Page: 2 of 2
Consultant: GSI
H&P Rep(s): Mike Herrifield
Reviewed: BB
Consultant Rep(s): Konrad Grochoski
Scanned:

Equipment Info
Inline Gauge ID#:
Pump ID#: 0477 0410

Purge Volume Information
PV Amount: 3PV PV Includes: ☑ Tubing ☑ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information						
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☑ H_2O
1	VP-11-5	071	215	1120	-28	1123	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	200	-5
2	VP-10-15	046	262	1156	-27	1159	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	200	-10
3	VP-10-5	050	399	1155	-28	1158	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	200	-5
4	VP-17-15	072	213	1227	-26	1230	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	200	-25
5	VP-17-5	007	126	1226	-27	1229	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	200	-10
6	VP-17-15 Dup	051	213	1231	-28	1235	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	21-36	200	-	200	-25
7	VP-18-15	074	386	1258	-27	1302	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	200	-10
8	VP-18-5	010	350	1257	-26	1300	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	200	-5
9																					
10																					
11																					
12																					

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):

H&P Mobile Geochemistry Inc.

FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: GS1111672 - Tech
Date: 11-17-22
Site Address: 2993 6th Street Riverside
Page: 1 of 3
Consultant: GSI
H&P Rep(s): Mike Hereford
Reviewed: DB
Consultant Rep(s): Konrad
Scanned:

Equipment Info
Inline Gauge ID#:
Pump ID#: 207 3040

Purge Volume Information
PV Amount: 3PV
PV Includes: ☒ Tubing ☒ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☑ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information						
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O
1	VP-19-30	211	074	735	-25	738	0	30	31.5	1/4	12	2.25	6	2.25	✓	✓	2033	200	10:10	<200	-10
2	VP-19-15	205	3916	734	-25	737	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	0
3	VP-19-5	220	366	741	-27	752	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-5
4	VP-20-30	471	054	824	-28	827	0	30	31.5	1/4	12	2.25	6	2.25	✓	✓	2033	200	10:10	<200	-15
5	VP-20-30 Dup	267	054	828	-26	831	0	30	31.5	1/4	12	2.25	6	2.25	✓	✓	2033	200	-	<200	-15
6	VP-20-15	192	320	823	-26	826	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-5
7	VP-20-5	213	397	842	-27	845	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	9:03	<200	-10
8	VP-12-30	241	383	916	-27	919	0	30	31.5	1/4	12	2.25	6	2.25	✓	✓	2033	200	10:10	<200	-15
9	VP-12-15	223	169	915	-26	919	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-16
10	VP-12-5	264	203	4131	-27	934	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-5
11	VP-13-15	240	147	953	-27	956	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-10
12	VP-13-5	284	282	452	-25	955	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-10

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):

Mobile Geochemistry Inc.

FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: GS111622-Tech
Date: 11-17-22
Site Address: 2993 6th Street Riverside
Page: 2 of 3
Consultant: GSI
H&P Rep(s): Mike Hamilford
Reviewed: DVP
Consultant Rep(s): Konrad
Scanned:

Equipment Info
Inline Gauge ID#:
Pump ID#: 007-30446

Purge Volume Information
PV Amount: 3PV
PV Includes: ☑ Tubing ☒ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information						
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End/ Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☐ H_2O
1	VP-21-15	789	123	1020	-28	1023	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-10
2	VP-21-5	788	330	1025	-29	1035	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-90
3	VP-14-22	792	345	1038	-28	1101	0	22	23.5	1/4	12	2.25	6	2.25	✓	✓	1896	200	9:30	<200	-5
4	VP-14-15	788	032	1057	-30+	1103	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-10
5	VP-14-5	775	263	1115	-29	1118	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-5
6	VP-4-15	786	0010	1139	-28	1142	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-10
7	VP-4-5	742	043	1138	-30+	1148	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-5
8	VP-5-15	763	110	1206	-30+	1213	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-10
9	VP-5-5	773	253	1205	-29	1209	-1	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-60
10	VP-7-15	741	201	1228	-28	1231	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-10
11	VP-7-5	734	066	1227	-30+	1232	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-5
12	VP-6-13	734	207	1250	-27	1254	0	13	14.25	1/4	12	2.25	6	2.25	✓	✓	1746	200	8:44	<200	-10

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
② High vac, but no flow. Turned the pump on/off to wait for dissipation to complete the purge

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FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: 651111622-Tech
Site Address: 2993 6th Street Riverside
Consultant: GSI
Consultant Rep(s): Konrad

Date: 11-17-22
Page: 3 of 3
H&P Rep(s): Mike Herrifield

Reviewed: DB
Scanned:

Equipment Info
Inline Gauge ID#:
Pump ID#: 097 3040

Purge Volume Information
PV Amount: 3PV
PV Includes: ☒ Tubing ☒ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information						
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O
1	VP-6-5	740	270	1249	-27	1252	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-15
2	VP-16-15	735	131	1314	-28	1319	-9	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-10
3	VP-16-5	738	297	1313	-30	1320	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-10
4	VP-8-15	619	411	1341	-27	1345	0	15	16.25	1/4	12	2.25	6	2.25	✓	✓	1778	200	8:54	<200	-45
5	VP-8-5	730	022	1340	-27	1344	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-5
6	VP-15-5	633	021	1400	-27	1403	0	5	6	1/4	12	2.25	6	2.25	✓	✓	1607	200	8:03	<200	-25
7																					
8																					
9																					
10																					
11																					
12																					

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):

APPENDIX B

Boring Logs

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-1

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine sand, medium stiff		ML							Temporary soil vapor probes installed at 5', 15' and 30' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Red - 30' Blue - 15' Yellow - 5'
5								0		
10								0		
15								0		
	~10% fine to coarse sand		ML							
			ML							

(Continued Next Page)

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:11 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-1

CLIENT Iron Lofts **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 **PROJECT LOCATION** Riverside, CA

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	Continued		ML					0		
25								0		
30								0		

Total Depth = 30.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:11 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-2

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
5								0		
10								0		
15	Slight increase in fine sand							0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-3

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~90% fines, ~10% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
	~95% fines, ~5% sand		ML							
5								0		
10								0		
15	WELL GRADED SAND WITH SILT (SW-SM): dark yellowish brown (10YR 4/6), ~90% fine to coarse sand, ~10% fines		SW-SM					0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-4

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 4 Nov 2022 **COMPLETED** 4 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel and Silt mix									Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
	SILT (ML): dark brown (10YR 3/3), moist, ~95% fines, ~5% fine to coarse sand		ML							
	Dark yellowish brown (10YR 4/6), moist		ML							
5								0.1		
10								0		
	SILT WITH SAND dark yellowish brown (10YR 4/6), moist, ~85% fines, ~15% fine to coarse sand		ML							
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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Log of Soil Boring: VP-5

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 4 Nov 2022 **COMPLETED** 4 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel and Silt mix									
	SILT (ML): dark brown (10YR 3/3), moist, ~95% fines, ~5% fine to coarse sand		ML							
	Dark yellowish brown (10YR 4/6), moist		ML							
5								0.1		
10								0		
	SILT WITH SAND dark yellowish brown (10YR 4/6), moist, ~85% fines, ~15% fine to coarse sand		ML							
15								0		

Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface.
Probe Depth Color Codes
Blue - 15'
Yellow - 5'

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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Log of Soil Boring: VP-6

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 7 Nov 2022 **COMPLETED** 7 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel/Silt **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel and silt mix									
	Crushed concrete									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 13' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 13' Yellow - 5'
5								0		
10								0		
15								0		collapsed at depth, attempted to drill to 15.5'. Refusal at 13.5'

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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Telephone: 949-679-1070

Log of Soil Boring: VP-7

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 4 Nov 2022 **COMPLETED** 4 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel and Silt mix									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
	Increase in coarse sand and fine gravel		ML							
5			ML					0.1		
10								0.1		
	SILT WITH SAND dark yellowish brown (10YR 4/6), moist, ~85% fines, ~15% fine to coarse sand		ML							
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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Log of Soil Boring: VP-8

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Telephone: 949-679-1070

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 7 Nov 2022 **COMPLETED** 7 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 6600
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel and silt mix									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
5								0		
10								0		
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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Log of Soil Boring: VP-9

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Telephone: 949-679-1070

CLIENT Iron Lofts **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 **PROJECT LOCATION** Riverside, CA

DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022 **GROUND ELEVATION** NA **DATUM** NA

DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling **TOP OF CASING ELEVATION** NA **DATUM** NA

DRILLING METHOD Direct Push, Hand Auger **LATITUDE** **LONGITUDE**

DRILLING EQUIPMENT Geoprobe 7822DT **LOGGED BY** Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki

GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25 **APPROVED BY**

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	GRAVEL									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5', 15' and 30' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Red - 30' Blue - 15' Yellow - 5'
5								0		
10								0		
15								0		
	SILTY SAND (SM): dark yellowish brown (10YR 4/6), moist, ~80% sand, ~20% fines		SM							
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to medium sand		ML							

(Continued Next Page)

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

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Log of Soil Boring: VP-9

CLIENT Iron Lofts **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 **PROJECT LOCATION** Riverside, CA

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	Continued		ML					0		
25								0		
	POORLY GRADED SAND (SP-SM): dark yellowish brown (10YR 4/6), moist, ~95% fine sand, ~10% fines		SP-SM							
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine sand		ML							
30								0		

Total Depth = 30.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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Log of Soil Boring: VP-10

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Irvine, CA 92612
Telephone: 949-679-1070

CLIENT Iron Lofts
GSI JOB NUMBER 6239
DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
DRILLING METHOD Direct Push, Hand Auger
DRILLING EQUIPMENT Geoprobe 7822DT
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25

PROJECT NAME Iron Lofts
PROJECT LOCATION Riverside, CA
GROUND ELEVATION NA **DATUM** NA
TOP OF CASING ELEVATION NA **DATUM** NA
LATITUDE _____ **LONGITUDE** _____
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
APPROVED BY _____

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
5								0		
10								0		
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

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Log of Soil Boring: VP-11

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Telephone: 949-679-1070

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
5	Crushed gray rock							0		
10								0		
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

Log of Soil Boring: VP-12

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Telephone: 949-679-1070

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 4 Nov 2022 **COMPLETED** 4 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel/ Debris **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Mix of gravel and debris (plastic, glass, and other material fragments)									Temporary soil vapor probes installed at 5', 15' and 30' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Red - 30' Blue - 15' Yellow - 5'
	Mix of gravel and silt fill material									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to medium sand		ML							
5								0		
10								0		
15								0		
	SILT WITH SAND (ML): dark yellowish brown (10YR 4/6), moist, ~85% fines, ~5% fine to medium sand		ML							

(Continued Next Page)

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

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Telephone: 949-679-1070

Log of Soil Boring: VP-12

CLIENT Iron Lofts **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 **PROJECT LOCATION** Riverside, CA

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	Continue		ML					0		
25								0		
	WELL GRADED SAND WITH SILT (SW-SM): dark yellowish brown (10YR 4/6), moist, ~90% fine to coarse sand, ~10% fines		SW-SM							
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine sand		ML							
30								0		

Total Depth = 30.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

Log of Soil Boring: VP-13

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Telephone: 949-679-1070

CLIENT Iron Lofts
GSI JOB NUMBER 6239
DATE STARTED 4 Nov 2022 **COMPLETED** 4 Nov 2022
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
DRILLING METHOD Direct Push, Hand Auger
DRILLING EQUIPMENT Geoprobe 7822DT
GROUND SURFACE Gravel/ Debris **BORING DIAMETER (in)** 3.25/2.25

PROJECT NAME Iron Lofts
PROJECT LOCATION Riverside, CA
GROUND ELEVATION NA **DATUM** NA
TOP OF CASING ELEVATION NA **DATUM** NA
LATITUDE _____ **LONGITUDE** _____
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
APPROVED BY _____

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel mixed with debris (plastic, glass, and wood fragments)									
	SILT (ML): dark brown (10YR 3/3), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
	Dark yellowish brown (10YR 4/6), moist, ~5% fine to medium sand		ML							
5								0		
10								0		
	SILT WITH SAND dark yellowish brown (10YR 4/6), moist, ~85% fines, ~15% fine to coarse sand		ML							
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

Log of Soil Boring: VP-14

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 4 Nov 2022 **COMPLETED** 4 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel and mix of broken glass, wood and other debris									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to medium sand		ML							Temporary soil vapor probes installed at 5', 15' and 22' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Red - 22' Blue - 15' Yellow - 5'
5								0		
10								0		
	WELL GRADED SAND WITH SILT (SW-SM): dark yellowish brown (10YR 4/6), ~90% fine to coarse sand, ~10% fines		SW-SC							
15								0		
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to medium sand		ML							

(Continued Next Page)

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-14

CLIENT Iron Lofts **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 **PROJECT LOCATION** Riverside, CA

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
								0		Refusal at 22.5' after multiple attempts

Total Depth = 22.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-15

CLIENT Iron Lofts | **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 | **PROJECT LOCATION** Riverside, CA

DATE STARTED 7 Nov 2022 **COMPLETED** 7 Nov 2022 | **GROUND ELEVATION** NA **DATUM** NA

DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling | **TOP OF CASING ELEVATION** NA **DATUM** NA

DRILLING METHOD Direct Push, Hand Auger | **LATITUDE** _____ **LONGITUDE** _____

DRILLING EQUIPMENT Geoprobe 6600 | **LOGGED BY** Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki

GROUND SURFACE Gravel/ Silt/ Debris | **BORING DIAMETER (in)** 3.25/2.25 | **APPROVED BY** _____

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel, silt, and debris mix (broken glass, concrete, metal, and plastic fragments)									Filled bottom of horehole with hydrated bentonite to 5.5'. Temporary soil vapor probes installed at 5' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack. Probe Depth Color Codes Yellow - 5'
5	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML					0		Refusal at ~1.5' at first attempt. Step out 1' to south refusal at 8' at step-out location.
								0		

Total Depth = 8.0 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-16

CLIENT Iron Lofts | **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 | **PROJECT LOCATION** Riverside, CA

DATE STARTED 7 Nov 2022 **COMPLETED** 7 Nov 2022 | **GROUND ELEVATION** NA **DATUM** NA

DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling | **TOP OF CASING ELEVATION** NA **DATUM** NA

DRILLING METHOD Direct Push, Hand Auger | **LATITUDE** _____ **LONGITUDE** _____

DRILLING EQUIPMENT Geoprobe 6600 | **LOGGED BY** Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki

GROUND SURFACE Gravel/Silt **BORING DIAMETER (in)** 3.25/2.25 | **APPROVED BY** _____

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel, silt, and debris mix (glass, wood, metal, plastic fragments)									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
5								0		
10								0		
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-17

CLIENT Iron Lofts | **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 | **PROJECT LOCATION** Riverside, CA

DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022 | **GROUND ELEVATION** NA **DATUM** NA

DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling | **TOP OF CASING ELEVATION** NA **DATUM** NA

DRILLING METHOD Direct Push, Hand Auger | **LATITUDE** _____ **LONGITUDE** _____

DRILLING EQUIPMENT Geoprobe 7822DT | **LOGGED BY** Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki

GROUND SURFACE Asphalt 4" **BORING DIAMETER (in)** 3.25/2.25 | **APPROVED BY** _____

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Asphalt									
	Gravel, silt, mix debris									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to medium sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
5								0		
10								0		
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

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19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-18

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Concrete 7" **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Concrete									
	SILT (ML): dark yellowish brown (10YR 4/6), ~95% fines, ~5% medium to fine sands		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
5								0		
10								0		
	Trace root matter									
15								0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

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19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-19

CLIENT Iron Lofts | **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 | **PROJECT LOCATION** Riverside, CA

DATE STARTED 3 Nov 2022 **COMPLETED** 3 Nov 2022 | **GROUND ELEVATION** NA **DATUM** NA

DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling | **TOP OF CASING ELEVATION** NA **DATUM** NA

DRILLING METHOD Direct Push, Hand Auger | **LATITUDE** _____ **LONGITUDE** _____

DRILLING EQUIPMENT Geoprobe 7822DT | **LOGGED BY** Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki

GROUND SURFACE Gravel **BORING DIAMETER (in)** 3.25/2.25 | **APPROVED BY** _____

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	GRAVEL, SOME SILT									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5', 15' and 30' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Red - 30' Blue - 15' Yellow - 5'
5								0		
10								0		
15								0		

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GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

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Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-19

CLIENT Iron Lofts **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 **PROJECT LOCATION** Riverside, CA

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	~10% fine to medium sand		ML					0		
25								0		
	SILT WITH SAND (ML): dark yellowish brown (10YR 4/6), moist, ~75% fines, ~25% fine sand		ML							
30								0		

Total Depth = 30.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

Log of Soil Boring: VP-20

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 4 Nov 2022 **COMPLETED** 4 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 7822DT
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel/ Debris **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Mix of gravel, silt, and concrete fragments									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand		ML							Temporary soil vapor probes installed at 5', 15' and 30' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Red - 30' Blue - 15' Yellow - 5'
5								0		
10								0		
15								0		
	WELL GRADED SAND WITH SILT (SW-SM): dark yellowish brown (10YR 4/6), moist, ~90% fine to coarse sand, ~10% fines		SW-SM							

(Continued Next Page)

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-20

CLIENT Iron Lofts **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 **PROJECT LOCATION** Riverside, CA

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	Continued		ML					0		
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% medium to fine sand		ML							
25								0		
30								0		

Total Depth = 30.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-21

CLIENT Iron Lofts **PROJECT NAME** Iron Lofts

GSI JOB NUMBER 6239 **PROJECT LOCATION** Riverside, CA

DATE STARTED 7 Nov 2022 **COMPLETED** 7 Nov 2022 **GROUND ELEVATION** NA **DATUM** NA

DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling **TOP OF CASING ELEVATION** NA **DATUM** NA

DRILLING METHOD Direct Push, Hand Auger **LATITUDE** _____ **LONGITUDE** _____

DRILLING EQUIPMENT Geoprobe 6600 **LOGGED BY** Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki

GROUND SURFACE Gravel/Silt **BORING DIAMETER (in)** 3.25/2.25 **APPROVED BY** _____

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel and Silt mix									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to medium sand		ML							Temporary soil vapor probes installed at 5' and 15' bgs. Probes constructed using 1/4" nylaflow tubing connected to a 1" porous poly probe tip centered in a 1' thick layer of #3 sand pack, followed by 6" layer of dry bentonite, then hydrated bentonite to the bottom of the next sand interval or ground surface. Probe Depth Color Codes Blue - 15' Yellow - 5'
5								0		
10								0		
15	SILT WITH SAND (ML): dark yellowish brown (10YR 4/6), moist, ~85% fines, ~15% fine to coarse sand		ML					0		

Total Depth = 15.5 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

GSI_SOIL BORING - TRYTHISTEMPLATE.GDT - 12/8/22 22:12 - \\SOCAL-DC\JOBS\6201-6250\6239 IRON LOFTS FORMER RIVERSIDE SCRAP\GINT\6239.GPJ

GSI Environmental
19200 Von Karman Ave. Suite 800
Irvine, CA 92612
Telephone: 949-679-1070

Log of Soil Boring: VP-22

CLIENT Iron Lofts
PROJECT NAME Iron Lofts
GSI JOB NUMBER 6239
PROJECT LOCATION Riverside, CA
DATE STARTED 7 Nov 2022 **COMPLETED** 7 Nov 2022
GROUND ELEVATION NA **DATUM** NA
DRILLING CONTRACTOR J & H Drilling Co., Inc. / MR Drilling
TOP OF CASING ELEVATION NA **DATUM** NA
DRILLING METHOD Direct Push, Hand Auger
LATITUDE **LONGITUDE**
DRILLING EQUIPMENT Geoprobe 6600
LOGGED BY Konrad K Grochocki **REVIEWED BY** Konrad K Grochocki
GROUND SURFACE Gravel/ Debris **BORING DIAMETER (in)** 3.25/2.25
APPROVED BY

Depth (ft bgs)	Soil Description	Lithology	USCS	Sample Type	Blows/ 6 inches	Recovery	Lab Sample	PID (ppm)	Water Level	Notes
	GROUND SURFACE									
	Gravel, silt and debris mix (broken glass, plastic, wood, and other debris fragments)									
	SILT (ML): dark yellowish brown (10YR 4/6), moist, ~95% fines, ~5% fine to coarse sand, trace gravel		ML							Refusal at 7', collapsed, drilled down to 5.5' to install SV probe at 5', hole collapsed again. Performed step out ~1.5' north of location. Drilled directly down, refusal at 6'. Hole collapsed while attempting to install SV probe. No probe installation at this location.
	No gravel		ML							Probe Depth Color Codes
5								0		
								0		

Total Depth = 7.0 feet.

Note: Where soil was not recovered, geologic interpretations are based on the lithology above and/or below the no sample interval, as well as observations made in the field.

APPENDIX C

Duplicate Soil Vapor Sample Evaluation

GSI ENVIRONMENTAL

APPENDIX C: DUPLICATE SAMPLE COMPARISON -- SOIL VAPOR

Primary Sample ID	Sample Date	Units	Compound	Primary Sample Result	Duplicate Sample Result	Relative Percent Difference[1] (RPD)
VP-17-15	11/16/2022	µg/m^3	Tetrachloroethene (PCE)	180	180	0.0
VP-17-15	11/16/2022	µg/m^3	Trichloroethene (TCE)	290	300	3.4
VP-17-15	11/16/2022	µg/m^3	Chloroform	<4.9	<4.9	0.0
VP-17-15	11/16/2022	µg/m^3	cis-1,2-Dichloroethene (cis-1,2-DCE)	<4	<4	0.0
VP-17-15	11/16/2022	µg/m^3	trans-1,2-Dichloroethene (trans-1,2-DCE)	<8	<8	0.0
VP-17-15	11/16/2022	µg/m^3	Vinyl Chloride (VC)	<2.6	<2.6	0.0
VP-17-15	11/16/2022	µg/m^3	1,1-Dichloroethene (1,1-DCE)	<4	<4	0.0
VP-17-15	11/16/2022	µg/m^3	1,1-Dichloroethane (1,1-DCA)	<4.1	<4.1	0.0
VP-17-15	11/16/2022	µg/m^3	1,2-Dichloroethane (1,2-DCA)	<4.1	<4.1	0.0
VP-17-15	11/16/2022	µg/m^3	Benzene	<3.2	<3.2	0.0
VP-17-15	11/16/2022	µg/m^3	Ethylbenzene	<4.4	<4.4	0.0
VP-17-15	11/16/2022	µg/m^3	Toluene	6.6	6.7	1.5
VP-17-15	11/16/2022	µg/m^3	Xylene	<8.8	<8.8	0.0
VP-17-15	11/16/2022	µg/m^3	1,2,4-Trimethylbenzene	<5	<5	0.0
VP-17-15	11/16/2022	µg/m^3	Ethylbenzene	<4.4	<4.4	0.0
VP-17-15	11/16/2022	µg/m^3	1,1,1-Trichloroethane	<5.5	<5.5	0.0
VP-17-15	11/16/2022	µg/m^3	1,1,2-Trichlorotrifluoroethane (F113)	49	51	4.0
VP-17-15	11/16/2022	µg/m^3	2-Butanone (MEK)	39	74	61.9
VP-17-15	11/16/2022	µg/m^3	Carbon disulfide	11	12	8.7
VP-17-15	11/16/2022	µg/m^3	Dichlorodifluoromethane (F12)	<5	<5	0.0
VP-17-15	11/16/2022	µg/m^3	Methylene chloride (Dichloromethane)	<3.5	<3.5	0.0
VP-17-15	11/16/2022	µg/m^3	Trichlorofluoromethane (F11)	19	19	0.0

Notes:

1. The relative percent difference (RPD) was calculated for analytes detected in at least one sample using the equation below. Data is qualified with a "J" if the RPD exceeds 50%.

Equation

$$RPD = \frac{|x_1 - x_2|}{\bar{x}} \times 100$$

x_1 = analyte concentration in primary sample
x_2 = analyte concentration in duplicate sample
$\bar{x}$ = average of x_1 and x_2

Abbreviations:

bold values indicate analyte detected at concentration exceeding the method detection limit

shaded values are qualified based duplicate evaluation.

% = percent

µg/m^3 = micrograms per cubic meter

< = analyte not detected above the method detection limit shown

J = Analytical results were reported between the method detection limit and reporting limit the laboratory

APPENDIX D

Soil Vapor Purge Volumes

SOIL GAS PURGING RECORD

Project Name: Iron Lofts - Riverside
Sampler(s): Mike Hirifad (H&P)
Project No.: 6239
Site Location: 2993 6th Street, Riverside, CA

Sampling Point ID	Sample Date	Shut-In Test[1] Start Time	Start Vacuum	End Time	End Vacuum	Purging: Calculated One Purge Volume (mL)	X3 # of Volume	Purge Rate[2] (mL/min)	Total Volume Purged (mL)	Vacuum[3] (in H_2O)	Leak Check Compound[4]	Purge Start Time	Purge End Time
VP-1-30	11/16/22	0812	-110	0813	-110	~~536~~ 678	~~1607~~ 2033	200	2033	-10	DFA	0813	0822
VP-1-15	11/16	0812	-110	0812	-110	593	1778	200	1778	-20	DFA	0813	0822
VP-1-5	11/16	0834	-110	0835	-110	536	~~2033~~ 1607	200	1607	-5	DFA	0835	0844
VP-9-30	11/16	0907	-110	0908	-110	678	2033	200	2033	-10	DFA	0908	~~0918~~ 0918
VP-9-15	11/16	0907	-110	0908	-110	593	1778	200	1778	-15	DFA	0908	~~0918~~ 0917
VP-9-5	11/16	0924	-110	0925	-110	536	1607	200	1607	-20	DFA	0925	0934
VP-2-15	11/16	0953	-110	0954	-110	593	1778	200	1778	-10	DFA	0954	1003
VP-2-5	11/16	0953	-110	0954	-110	536	1607	200	1607	-15	DFA	0954	1002
VP-3-15	11/16	1038	-110	1030	-110	593	1778	200	1778	-10	DFA	1039	1048
VP-3-5	11/16	1038	-110	1039	-110	536	1607	200	1607	-10	DFA	1039	1047
VP-11-15	11/16	1111	-110	1112	-110	593	1778	200	1778	-15	DFA	1112	1121
VP-11-5	11/16	1111	-110	1112	-110	536	1607	200	1607	-5	DFA	1112	1120
VP-10-15	11/16	1145	~~1145~~ -110	1146	-110	593	1778	200	~~1607~~ 1778	-10	DFA	1146	1156
VP-10-5	11/16	1145	-110	1146	-110	536	1607	200	1607	-5	DFA	1146	1155
VP-17-15	11/16	1217	-110	1218	-110	593	1778	200	1778	-25	DFA	1218	1226 1227
VP-17-5	11/16	1217	-110	1218	-110	536	1607	200	1607	-10	DFA	1218	1226
VP-17-15 Rep	11/16	~~1227~~	-110	~~1218~~	-110	~~536~~ 593	1778	200	2178	-25	DFA	~~1218~~	~~1226~~ 1227
	11/16	1230		1231								No purge, Shut-in	

* AA

SOIL GAS PURGING RECORD

Project Name: Iron Lofts - Riverside
Sampler(s): Mike Hertford [illegible]
Project No.: 6239
Site Location: 2143 6th Street, Riverside, CA

Sampling Point ID	Sample Date	Shut-In Test[1] Start Time	Start Vacuum	End Time	End Vacuum	Purging: Calculated One Purge Volume (mL)	# of Volume	Purge Rate[2] (mL/min)	Total Volume Purged (mL)	Vacuum[3] (in H_2O)	Leak Check Compound[4]	Purge Start Time	Purge End Time
VP-18-15	11/16	1248	-110	1249	-110	593	1778	200	1778	0 -10	DFA	1249	1258
VP-18-5	11/16	1248	-110	1249	-110	536	1607	200	1607	-5	DFA	1249	1257
VP-19-30	11/17	0723	-110	0724	-110	678	2033	200	2033	-10	DFA	0724	~~0735~~ 0733
VP-19-15	11/17	0723	-110	0724	-110	593	1778	200	1778	0	DFA	0724	~~0735~~ 0734
VP-19-5	11/17	0740 ~~0723~~	-110	0741 ~~0724~~	-110	536	1607	200	1607	-5	DFA	0741 ~~0744~~	0749
VP-20-30	11/17	0812	-110	0813	-110	678	2033	200	2033	-15	DFA	0813	0824
VP-20-15	11/17	0812	-110	0813	-110	593	1778	200	1778	-5	DFA	0813	0823
VP-20-5	11/17	0833	-110	0834	-110	536	1607	200	1607	-10	DFA	0834	0842
VP-20-30 Rep	11/17	0827	-110	0828	-110	678	2033	200	2433	-15	DFA	—	—
VP-12-30	11/17	904	-110	905	-110	~~678~~	2033	200	2033 ~~1778~~	-15 ~~905~~	DFA	905	916
VP-12-15	11/17	904	-110	905	-110	593	1778	200	1778	-10 ~~905~~	DFA	905	914
VP-12-5	11/17	922	-110	923	-110	536	1607	200	1607	-5	DFA	923	931
VP-13-15	11/17	943	-110	944	-110	593	1778	200	1778	-10	DFA	944	953
VP-13-5	11/17	943	-110	944	-110	536	1607	200	1607	-10	DFA	944	952
VP-21-15	11/17	1009	-110	1010	-110	593	1778	200	1778	-10	DFA	1010	1020
VP-21-5	11/17	1009	-110	1010	-110	536	1607	200	1607	-90	DFA	1010	1023

using 450 ml summas remainder of SV sample

increase in vacuum, [illegible] below [illegible]

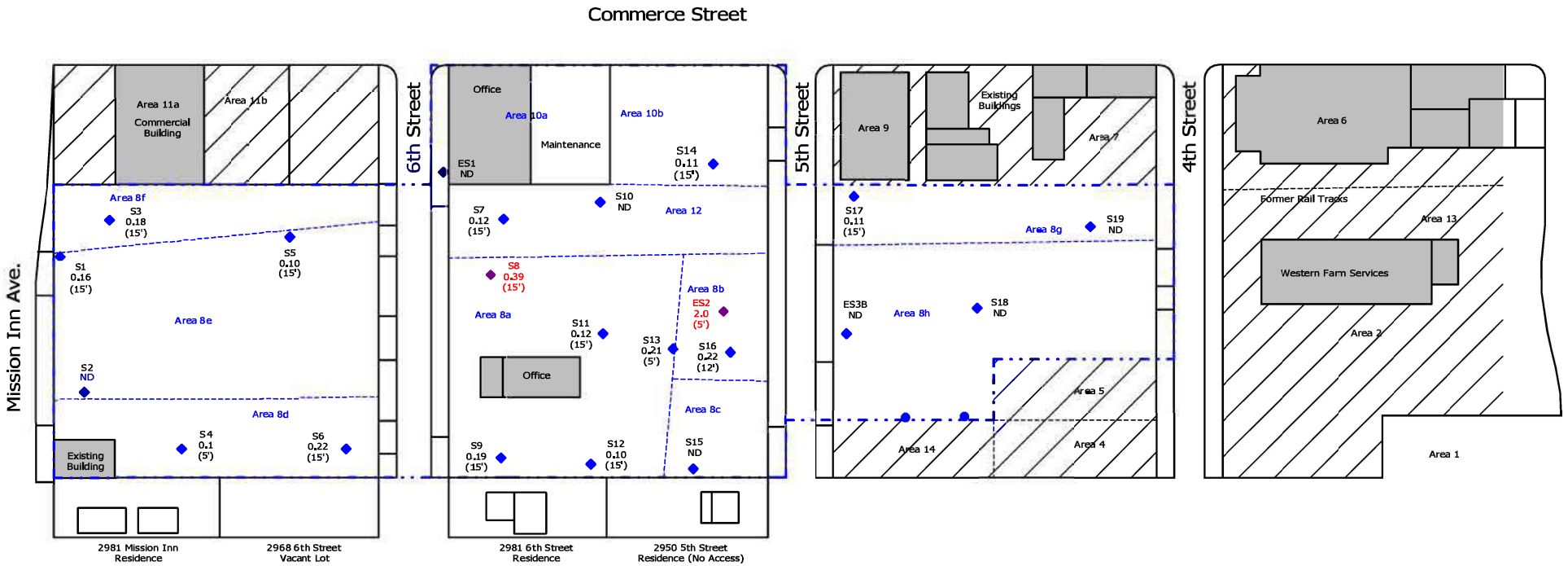
SOIL GAS PURGING RECORD

Project Name: Iron Loft - Riverside
Sampler(s): Mirko Hajifasel (HEPI)
Project No.: 6239
Site Location: 2113 6th Street, Riverside, CA

Sampling Point ID	Sample Date	Shut-In Test[1]				Purging							
		Start		End		Calculated One Purge Volume (mL)	# of Volume	Purge Rate[2] (mL/min)	Total Volume Purged (mL)	Vacuum[3] (in H_2O)	Leak Check Compound[4]	Purge Start Time	Purge End Time
		Time	Vacuum	Time	Vacuum								
VP-14-22	11/17	1046	-110	1047	-110	633	1899	200	1899	-5	DFA	1047	1058
VP-14-15	11/17	1046	-110	1047	-110	593	1778	200	1778	-10	DFA	1047	1057
VP-14-5	11/17	1105	-110	1106	-110	536	1607	200	1607	-5	DFA	1106	1115
VP-4-15	11/17	1129	-110	1130	-110	593	1778	200	1778	-10	DFA	1130	1139
VP-4-5	11/17	1129	-110	1130	-110	536	1607	200	1607	-5	DFA	1130	1138
VP-5-15	11/17	1155	-110	1156	-110	593	1778	200	1778	-10	DFA	1156	1206
VP-5-5	11/17	1155	-110	1156	-110	536	1607	200	1607	-60	DFA	1156	1205
VP-7-15	11/17	1218	-110	1219	-110	593	1778	200	1778	-10	DFA	1219	1228
VP-7-5	11/17	1218	-110	1219	-110	536	1607	200	1607	-5	DFA	1219	1227
VP-6-13	11/17	1239	-110	1240	-110	582	1745	200	1745	-10	DFA	1240	1250
VP-6-5	11/17	1239	-110	1240	-110	536	1607	200	1607	-15	DFA	1240	1249
VP-16-15	11/17	1304	-110	1305	-110	593	1778	200	1778	-10	DFA	1305	1314
VP-16-5	11/17	1304	-110	1305	-110	536	1607	200	1607	-10	DFA	1305	1313
VP-8-15	11/17	1331	-110	1332	-110	593	1778	200	1778	-45	DFA	1332	1341
VP-8-5	11/17	1331	-110	1332	-110	536	1607	200	1607	-5	DFA	1332	1340
VP-15-5	11/17	1351	-110	1352	-110	536	1607	200	1607	-25	DFA	1352	1400

APPENDIX E

Historical Soil Vapor Data



LEGEND

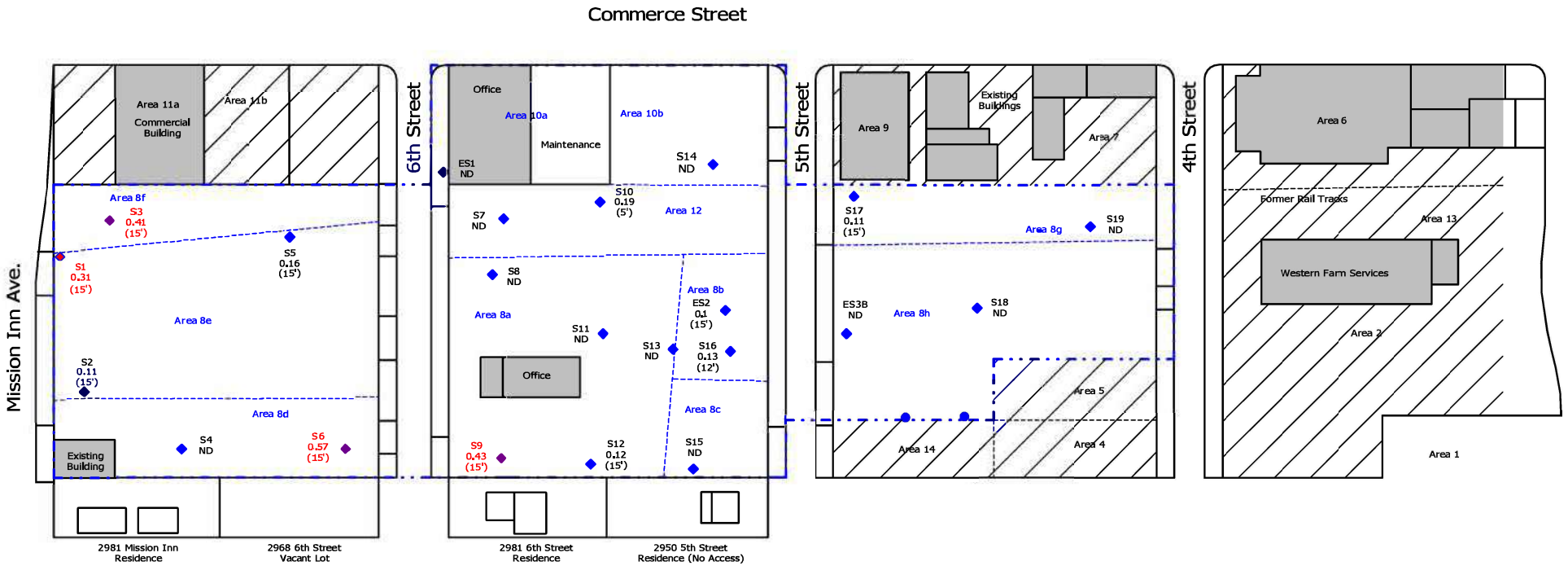
◆ Soil Gas Sampling Locations (Amec 2015)

FIGURE 9A
DISTRIBUTION OF PCE IN SOIL GAS
RIVERSIDE SCRAP IRON & METAL
Riverside, California

Maximum PCE Concentrations Shown in ug/L.
Concentrations >0.24 ug/L Shown in RED.

HILLMANN CONSULTING

APPROXIMATE SCALE IN FEET
0 100 200



LEGEND

◆ Soil Gas Sampling Locations (Amec 2015)

FIGURE 9B
DISTRIBUTION OF TCE IN SOIL GAS
RIVERSIDE SCRAP IRON & METAL
Riverside, California

Maximum TCE Concentrations Shown in ug/L.
Concentrations >0.24 ug/L Shown in RED.

HILLMANN CONSULTING

N

APPROXIMATE SCALE IN FEET

0 100 200

TABLE 7

SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) AND GASOLINE RANGE ORGANICS (GRO) IN SOIL GAS
Riverside Scrap Iron & Metal Site
Riverside, California

Results reported in micrograms per liter (µg/L)

Soil Gas Probe Designation	Depth (feet bgs)	Purge Volume (µg/L)	Date	Chloro-methane	Freon 12	Freon 11	TCE	PCE	IPA	Gasoline Range Organics
Industrial RSLs or *DTSC-modified Screeing Level*				390	440	3,100	3	*2.1*	880	NA
Ambient Air	---	---	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
	---	---	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S1	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S1	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.31**	**0.16**	ND<1.0	ND<10
S2	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S2	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.11**	ND<0.10	ND<1.0	ND<10
S3	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S3	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.37**	**0.17**	ND<1.0	ND<10
S3	15 Dup	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.41**	**0.18**	ND<1.0	ND<10
S4	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	**0.10**	ND<1.0	ND<10
S4	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S5	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S5	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.16**	**0.10**	ND<1.0	ND<10
S6	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.14**	**0.14**	ND<1.0	ND<10
S6	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.57**	**0.22**	ND<1.0	ND<10
S7	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S7	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	**0.12**	ND<1.0	ND<10
S8	5	3	10/1/2015	ND<0.10	ND<0.10	**0.12**	ND<0.10	ND<0.10	ND<1.0	ND<200
S8	15	3	10/1/2015	ND<0.10	ND<0.10	**0.18**	ND<0.10	**0.39**	ND<1.0	ND<10
S9	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S9	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.43**	**0.19**	ND<1.0	ND<10
S10	5	3	10/2/2015	ND<0.10	ND<0.10	**0.21**	**0.19**	ND<0.10	ND<1.0	ND<10
S10	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S11	5	3	10/1/2015	ND<0.10	ND<0.10	**1.9**	ND<0.10	ND<0.10	ND<1.0	ND<10
S11	15	3	10/1/2015	ND<0.10	ND<0.10	**2.6**	ND<0.10	**0.12**	ND<1.0	ND<10
S11	15 Dup	3	10/1/2015	ND<0.10	ND<0.10	**2.6**	ND<0.10	**0.12**	ND<1.0	ND<10
S12	5	3	10/1/2015	ND<0.10	ND<0.10	**1.1**	ND<0.10	ND<0.10	ND<1.0	ND<10
S12	15	3	10/1/2015	ND<0.10	ND<0.10	**1.5**	**0.12**	**0.10**	ND<1.0	ND<10
S13 (see notes)	5	3	10/1/2015	**0.49**	**0.28**	**15**	ND<0.10	**0.21**	ND<1.0	ND<10
S13 (See notes)	15	3	10/1/2015	ND<0.10	**0.34**	**12**	ND<0.10	**0.18**	ND<1.0	ND<10
S14	5	3	10/2/2015	ND<0.10	ND<0.10	**0.16**	ND<0.10	ND<0.10	ND<1.0	ND<10
S14	15	3	10/2/2015	ND<0.10	ND<0.10	**0.11**	ND<0.10	**0.11**	ND<1.0	ND<10
S15	5	3	10/1/2015	ND<0.10	ND<0.10	**1.4**	ND<0.10	ND<0.10	ND<1.0	ND<10
S15	15	3	10/1/2015	ND<0.10	ND<0.10	**1.0**	ND<0.10	ND<0.10	ND<1.0	ND<10
S16A	5	3	10/2/2015	ND<0.10	ND<0.10	**3.5**	ND<0.10	**0.12**	ND<1.0	ND<10
S16A	12	3	10/2/2015	ND<0.10	ND<0.10	**3.0**	**0.13**	**0.22**	ND<1.0	ND<10
S17	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S17	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	**0.11**	**0.11**	ND<1.0	ND<10

TABLE 7

SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) AND GASOLINE RANGE ORGANICS (GRO) IN SOIL GAS
Riverside Scrap Iron & Metal Site
Riverside, California

Results reported in micrograms per liter (µg/L)

Soil Gas Probe Designation	Depth (feet bgs)	Purge Volume (µg/L)	Date	Chloro-methane	Freon 12	Freon 11	TCE	PCE	IPA	Gasoline Range Organics
S18	5	3	10/2/2015	ND<0.10UJ	ND<0.10UJ	**0.62J**	ND<0.10UJ	ND<0.10UJ	**3.3J**	ND<10
S18	15	3	10/2/2015	ND<0.10	ND<0.10	**0.50**	ND<0.10	ND<0.10	ND<1.0	ND<10
S18	15 Dup	3	10/2/2015	ND<0.10	ND<0.10	**0.46**	ND<0.10	ND<0.10	ND<1.0	ND<10
S19	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S19	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES1	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES1	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES2	5	3	10/2/2015	ND<0.10	ND<0.10	**0.78**	ND<0.10	**2.0**	ND<1.0	ND<10
ES2	15	3	10/2/2015	ND<0.10	ND<0.10	**0.69**	**0.10**	**1.1**	ND<1.0	ND<10
ES3B	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES3B	5 Dup	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES3B	11.25	3	10/2/2015	ND<0.10	ND<0.10	**0.19**	ND<0.10	ND<0.10	ND<1.0	ND<10

Notes and Data Qualifiers

Volatile Organic Compounds (VOCs) and Gasoline Range Organics (GRO) were analyzed using United States Environmental Protection Agency (EPA) Method 8260M. All remaining VOCs were not detected. For a complete list of EPA 8260M analytes, see laboratory reports.

The Regional Screening Levels (RSLs) are from the EPA Region 9, revised June 2015, http://www.epa.gov/region9/superfund/prg/. RSLs were adjusted for a default (DTSC, 2011) attenuation factor for existing commercial buildings by multiplying the air RSLs by 1000 (representing a soil vapor-to-indoor air attenuation factor of 0.001. Therefore, the soil vapor screening levels presented are protective of existing buildings. The DTSC-modified screening level (DTSC, 2015) was used for PCE (italicized) because it was more conservative than the USEPA RSL.

S13 at 5 bgs and S13 at 15 feet bgs -Freon 11 concentrations from soil vapor samples exceeded the laboratory instrument calibration range. The samples were re-run at a higher dilution rate to quantify Freon 11 concentrations.

J - The analyte was positively identified. However, the leak detection compound IPA was detected in the sample at a concentration greater than 10 times the reporting limit of target analytes and therefore, the detected value is estimated.

UJ - The analyte was reported as not detected at the laboratory reporting limit. However, the leak detection compound IPA was detected in the sample at concentration greater than 10 times the reporting limit of the target analytes and therefore, the reporting limit is estimated.

Abbreviations

bgs = Below ground surface
ND = Not detected at the reporting limit shown
DUP = Duplicate sample
DTSC = Department of Toxic Substances Control
Freon 11 = Trichlorofluoromethane
Freon 12 = Dichlorodifluoromethane
IPA = Isopropanol
NA = Not available
PCE = Tetrachloroethene
RSL = Regional Screening Level
TCE = Trichloroethene
µg/L = Micrograms per liter

References

DTSC, 2015, Human Health Risk Assessment (HHRA) Note #3, DTSC-modified Screening Levels (DTSC-SLs), Human and Ecological Risk Office (HERO), October.

DTSC, 2011, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, October.

ADDENDUM TO THE RESULTS OF SOIL VAPOR INVESTIGATION

FORMER RIVERSIDE SCRAP IRON & METAL PROPERTY
2993 6th Street
Riverside, California 92507
Department of Toxic Substances Control Docket No HAS-FY21/22-032

Issued: July 11, 2023

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ADDENDUM TO THE RESULTS OF SOIL VAPOR INVESTIGATION

FORMER RIVERSIDE SCRAP IRON & METAL PROPERTY
2993 6th Street
Riverside, California 92507
Department of Toxic Substances Control Docket No HAS-FY21/22-032

This Addendum to the Results of Soil Vapor Investigation was prepared by the staff of GSI Environmental Inc., under the supervision of the Engineer(s) and/or Geologist(s) whose signatures appear hereon.

The findings, recommendations, specifications, or professional opinions were prepared in accordance with generally accepted professional engineering and/or geologic practice. No warranty is expressed or implied.

Issued: July 11, 2023

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GSI Job No.: 6239
Issued: July 11, 2023

GSI ENVIRONMENTAL

ADDENDUM TO THE RESULTS OF SOIL VAPOR INVESTIGATION

Former Riverside Scrap Iron & Metal Property
2993 6th Street
Riverside, California 92507

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Table 1. Analytical Results for Volatile Organic Compounds in Soil Vapor Samples

FIGURES

Figure 1. Site Location Map
Figure 2. Site Map with Sample Locations
Figure 3. PCE and TCE Concentrations in Soil Vapor (µg/m3)

APPENDICES

Appendix A. 2015 Soil Vapor Data Table and Figure (AMEC, 2015)
Appendix B. Analytical Laboratory Reports – Soil Vapor

ADDENDUM TO THE RESULTS OF SOIL VAPOR INVESTIGATION
Former Riverside Scrap Iron & Metal Property
2993 6th Street
Riverside, California 92507

1.0 INTRODUCTION

On behalf of Iron Lofts LLC (Iron Lofts), GSI Environmental Inc. (GSI) has prepared this Addendum to the Results of Soil Vapor Investigation (GSI, 2023; SVI Report Addendum) for the former Riverside Scrap Iron & Metal (RSIM) property located at 2993 6th Street in Riverside, California (the Site; Figures 1 and 2). This report presents the results of soil vapor sampling conducted at the Site in May 2023, and is an addendum to GSI's Soil Vapor Investigation Report (SVI Report) dated January 17, 2023, which reported the results of soil vapor sampling completed in November 2022. This SVI Report Addendum summarizes the results of a third soil vapor sampling event to further evaluate the presence of tetrachloroethene (PCE) and trichloroethene (TCE) in soil vapor.

Soil vapor sampling events conducted at the Site to date include the following:

- Soil vapor sampling event No. 1 – October 2015 (temporary probe locations)
- Soil vapor sampling event No. 2 – November 2022 (semi-permanent probe locations)
- Soil vapor sampling event No. 3 – May 2023 (subset of semi-permanent probes from soil vapor sampling event No. 2)

Semi-permanent soil vapor sample probes installed across the Site in November 2022 included locations in the vicinity of the 2015 temporary soil vapor probes that targeted potential on-Site source locations. For the May 2023 sampling event, soil vapor probes were selected for resampling based on concentrations of PCE and TCE detected in 2015 and 2022 that were higher relative to other areas of the Site. The results of the May 2023 sampling event are used to evaluate the temporal variability of PCE and TCE in soil vapor at the Site.

Additional discussion regarding the evaluation of risk to future development due to detected concentrations of VOCs in soil vapor at the Site is included in the Response Plan (GSI, 2023).

2.0 BACKGROUND

Soil vapor sampling was completed at locations throughout the Site in October 2015 and November 2022 (AMEC, 2015; GSI, 2023a). Specifically, in October 2015, 44 primary soil vapor samples (and 4 duplicate soil vapor samples) were collected from 22 locations installed at depths ranging between 5 and 15 feet below grade. PCE and TCE were the primary volatile organic compounds (VOCs) detected in soil vapor samples. PCE was detected in 18 soil vapor samples, but at relatively low concentrations (up to 2,000 µg/m^3, and less than 400 µg/m^3 in all but two samples). TCE was detected less frequently (12 samples) at generally similar concentrations (up to 570 µg/m^3). In general, concentrations increased with depth and no on-Site source was identified (AMEC, 2015).

In November 2022, 47 primary soil vapor samples (and 2 duplicate soil vapor samples) were collected from 21 locations installed at depths ranging between 5 and 30 feet bgs. PCE and TCE were the primary VOCs detected in soil vapor samples. PCE was detected in every soil vapor sample, but at relatively low concentrations (up to 840 µg/m^3). TCE was detected less frequently (43 of 49 total samples), but at slightly higher concentrations (up to 1,700 µg/m^3).

In general, PCE and TCE concentrations increased with depth at all soil vapor sample locations (i.e., higher concentrations were detected in deeper soil vapor samples) with the exception of two locations (VP-4 and VP-5). The highest PCE and TCE concentrations in soil vapor were observed

from soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel and southeastern property boundary of the central parcel.

A source of PCE or TCE to soil vapor was not identified on the Site and the low concentrations of PCE and TCE detected in soil vapor samples and increasing concentrations with depth were not considered indicative of an on-Site release. As previously noted in GSI's January 2023 Soil Vapor Investigation Report, it is possible that the low concentrations are attributed to minor releases associated with historical on-Site operations and/or an off-Site release that is migrating in deeper soil vapor or groundwater to the Site.

Based on the results of the November 2022 soil vapor investigation and discussion with DTSC, the additional soil vapor sampling performed in May 2023 and described herein was collected to further evaluate concentrations of VOCs in soil vapor to support project planning for the proposed Site multi-family residential redevelopment.

3.0 SCOPE OF WORK

During the November 2022 soil vapor sampling event, multi-depth soil vapor probes were installed at 21 locations and 47 soil vapor samples were collected from the following depths:

- 5 feet: VP-1 through VP-21 (21 locations)
- 13 to 15 feet: VP-1 through VP-14 and VP-16 through VP-21 (20 locations)
- 22 to 30 feet: VP-1, VP-9, VP-12, VP-14, VP-19, and VP-20 (6 locations)

During the May 2023 soil vapor sampling event, a subset of 8 of the 21 previously sampled multi-depth soil vapor probe locations were resampled and analyzed for VOCs. Soil vapor probe installation and sampling was performed in accordance with the Cal-EPA July 2015 *Advisory for Active Soil Gas Investigations (*Advisory*).*

The results of analysis for November 2022 and May 2023 soil vapor samples are included in Table 1 and on Figure 3. The results of analysis for October 2015 soil vapor samples are included in Appendix A (AMEC, 2015).

3.1 Pre-field Activities

Prior to the May 2023 sampling activities, the Site-Specific Health and Safety Plan (HASP) was reviewed in accordance with the requirements of the State of California General Industry Safety Order 5192 and Title 29 of the Code of Federal Regulations, Section 1910.120. The HASP was kept on-Site during field activities.

3.2 Soil Vapor Sampling and Analysis

Prior to the commencement of sampling, shut-in tests were conducted on the soil vapor probes. The probe heads were attached to the sampling train assembly of tubing, valves, and fittings and connected to a purge pump. A minimum vacuum of 100 inches of water column (W.C.) was applied to the sealed sampling train and monitored for at least 1 minute. After a successful shut-in test was completed, the soil vapor probe and sampling train was purged. A total of 3 purge volumes were removed from soil vapor probes prior to sampling. Each soil vapor probe was purged at a rate of 200 milliliters per minute (mL/min) and at a vacuum less than of 100 inches W.C. One purge volume is equal to the internal sample tubing volume and volume of stagnant air within the sand pack and dry bentonite layers (assuming 40 percent porosity). During purging and sampling, 1,1-difluoroethane (DFA) was applied as a leak-check tracer gas to check for ambient air leaks near the above-ground probe tubing and sampling train.

Following the completion of purging, soil vapor samples were collected into Summa canisters through flow controllers at a rate of approximately 200 mL/min. Duplicate soil vapor samples were collected at a frequency of one per day.

Soil vapor samples were analyzed for VOCs using United States Environmental Protection Agency (USEPA) Method TO-15.

4.0 SOIL VAPOR SAMPLE RESULTS

This section presents the results of soil vapor sampling and analysis, including a presentation of the analytical results, and a comparison of analytical results to risk-based screening criteria. Analytical results for soil vapor samples are presented in Table 1. The analytical laboratory reports for soil vapor samples are presented in Appendix B.

4.1 Data Quality Summary

Analytical results for soil vapor sampling were reviewed to determine the data usability. Each laboratory data package was reviewed consistent with guidance provided by the USEPA. A sample evaluation was completed for primary and duplicate soil vapor samples and did not identify any issues. The following quality assurance/quality control (QA/QC) criteria from the analysis of the project samples were reviewed as applicable: sample preservation and holding time compliance, reporting limits and sample dilution, blank sample analysis, surrogate recovery compliance, laboratory control samples, field duplicate samples and use of laboratory data qualifiers. No data qualifiers were applied based on the results of the data validation review.

Field quality control measures included leak testing with DFA and the collection of a split-t duplicate pair of soil vapor samples. The leak test compound DFA was evaluated by comparison to an action level of 10,000 µg/m^3, which is equivalent to 3.7 parts per million by volume (ppmv). DFA was not detected in any soil vapor samples in this sampling round.

4.2 Soil Vapor Results

Soil vapor samples were collected at eight locations from soil vapor probes with inlets installed at depths between 5 and 30 feet bgs in May 2023 (Figure 2).

Initial Soil Vapor Data Screening

Analytical results for soil vapor samples are evaluated by comparison to risk-based screening levels for residential and commercial/industrial Site use. Screening levels (SLs) for soil vapor are developed by applying an attenuation factor to screening levels for indoor air:

$$\text{Soil Vapor Screening Level } (SL_{sv}) = \frac{SL_{ia}}{AF}$$

Where:

SLsv	=	Soil vapor screening level (µg/m^3)
SLia	=	Indoor air screening level (µg/m^3)
AF	=	Attenuation factor (unitless)

Soil vapor SLs were calculated using the default attenuation factor published by DTSC for residential and commercial use (0.03; DTSC & State Water Resources Control Board [SWRCB], 2023); these soil vapor SLs are referred to in this report as the "DTSC SLs." Soil vapor data are evaluated by comparison to the DTSC SLs for an initial screening of soil vapor data.

As shown in Table 1, PCE, TCE, 1,2-dichloroethene (1,2-DCA), and chloroform were the only VOCs detected in at least one soil vapor sample at a concentration exceeding its DTSC AF SL, and the results for these VOCs are summarized below:

- PCE was detected in all soil vapor samples collected at concentrations ranging from 63 to 850 µg/m^3. The highest PCE concentrations in soil vapor were observed in the soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel (850 µg/m^3 at VP-1-30 REP, 810 µg/m^3 at VP-1-30, 640 µg/m^3 at VP-9-30, and 840 µg/m^3 at VP-19-30) and southeastern property boundary of the central parcel (780 µg/m^3 at VP-20-30). All soil vapor samples exceed the DTSC AF SL of 15 µg/m^3.
- TCE was detected in 22 of 23 total soil vapor samples at concentrations ranging from 6 to 2,100 µg/m^3. The highest TCE concentrations in soil vapor were also observed in the soil vapor samples with the highest PCE concentrations. Specifically, TCE was detected at the highest concentrations in the soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel (2,000 µg/m^3 at VP-1-30 REP and 1,900 µg/m^3 at VP-1-30, 1,600 µg/m^3 at VP-9-30, and 1,700 µg/m^3 at VP-19-30) and southeastern property boundary of the central parcel (2,100 µg/m^3 at VP-20-30). All soil vapor samples with detections of TCE except for one (6 µg/m^3 at VP-9-5) exceed the DTSC AF SL of 16 µg/m^3.
- 1,2-DCA was detected in one soil vapor samples at a concentrations of 17 µg/m^3, which exceeds the DTSC AF SL of 3.7 µg/m^3
- Chloroform was detected in four soil vapor samples at concentrations ranging from 19 to 24 µg/m^3, all of which exceed the DTSC AF SL of 4.0 µg/m^3.

Temporal and Spatial Variability

Semi-permanent soil vapor sample probes were installed and sampled across the Site in November 2022 and included locations near the 2015 temporary soil vapor probes that targeted potential on-Site source areas. For the May 2023 sampling event, soil vapor probes were selected for resampling based on concentrations of PCE and TCE in 2015 and 2022 that were higher relative to other areas of the Site, and included 2022 sampling locations with triple-nested soil vapor probes. The results of the May 2023 sampling event are used to evaluate the temporal variability of PCE and TCE in soil vapor at the Site.

Results identified in Exhibit A and B, below, and in Table 1, do not indicate any significant temporal variation in PCE or TCE concentrations between the November 2022 and May 2023.

Exhibit A. Temporal Trends for PCE – November vs. May

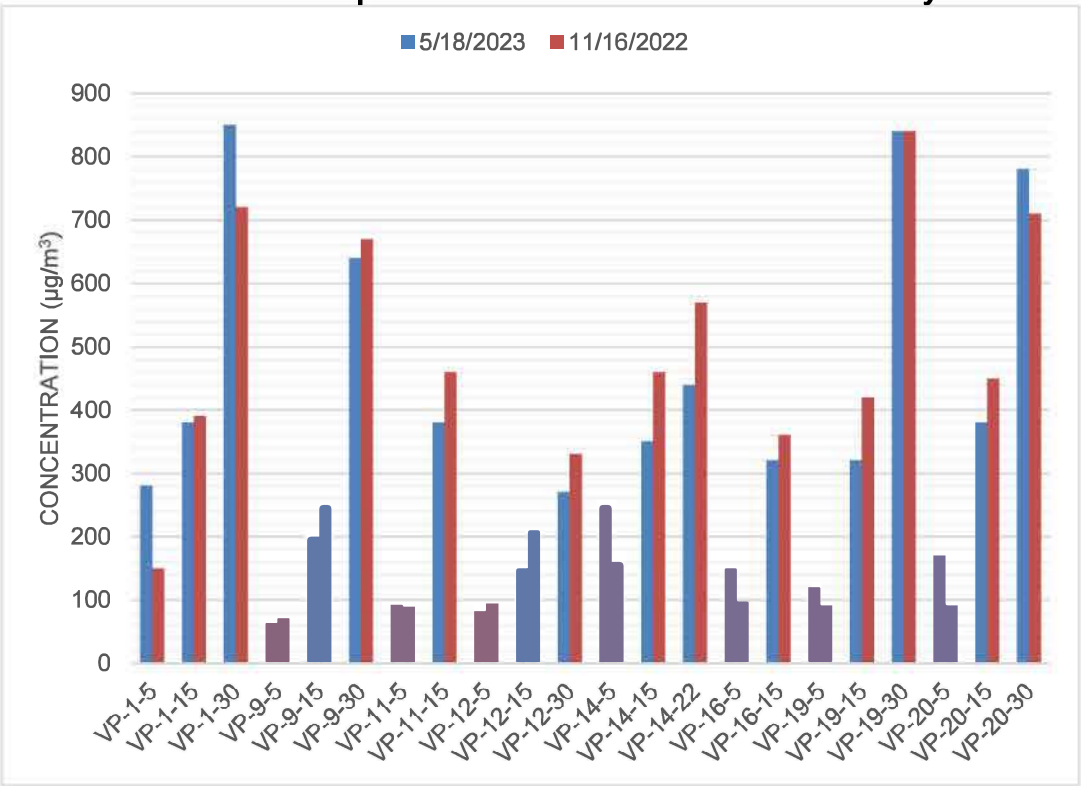
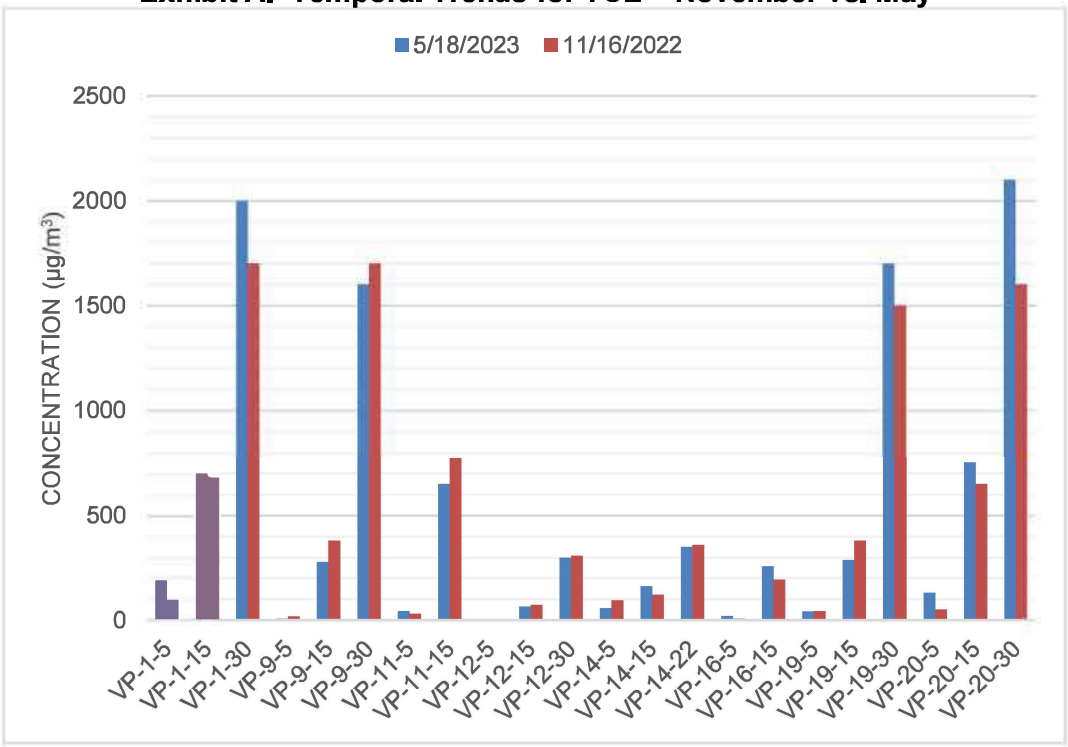


Exhibit A. Temporal Trends for TCE – November vs. May



Consistent with the November 2022 soil vapor sampling event, the highest PCE and TCE concentrations in soil vapor were observed from soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel and southeastern property boundary of the central parcel. Concentrations increased with depth at all soil vapor sample locations (i.e., higher concentrations were detected in deeper soil vapor samples) with the exception of two locations (VP-4 and VP-5; Exhibit C). In October 2015, soil vapor samples were collected at 5 and 15 feet only, and also in general had higher reported soil vapor concentrations in the deeper samples.

Exhibit C. 2022 and 2023 Maximum Concentrations of PCE and TCE by Depth (µg/m^3)

	PCE	TCE
Maximum Detected Concentration (All depth)	*850*	*2100*
Soil Vapor Samples collected at 5 feet bgs	280	190
Soil Vapor Samples collected at 13 to 15 feet bgs	460	770
Soil Vapor Samples collected at 22 to 30 feet bgs	850	2100

5.0 SUMMARY AND CONCLUSIONS

Soil vapor sampling was completed throughout the Site in October 2015 (22 locations) and November 2022 (21 locations), and sampling was repeated in May 2023 at eight of the 2022 sampling locations, which are distributed across the Site and include dual- and triple-nested soil vapor probe locations.

During the first soil vapor sampling event in October 2015, 44 primary soil vapor samples were collected from 22 locations installed at depths ranging between 5 and 15 feet. During the second soil vapor sampling event in November 2022, 47 primary soil vapor samples were collected from 21 locations installed at depths ranging between 5 and 30 feet. During the third sampling event in May 2023, 23 primary soil vapor samples were collected from 8 of the locations previously identified with higher concentrations of PCE and/or TCE relative to the other probes at the Site.

The key findings of the May 2023 soil vapor sampling event are summarized below:

- PCE and TCE were the primary VOCs detected in soil vapor samples. PCE was detected in every soil vapor sample with concentrations (up to 850 µg/m^3) above the residential DTSC AF SL. TCE was detected in all but one sample (22 of 23 total samples), but at slightly higher concentrations (up to 2,100 µg/m^3).
- PCE and TCE concentrations at the resampled locations in the May 2023 sampling event all increase with depth, as seen in the November 2022 and October 2015 sampling events, and are consistent with the November 2022 and October 2015 sample results.
- PCE and TCE concentrations in soil vapor are consistent with an off-Site source.
    - A source of PCE or TCE to soil vapor was not identified on the Site.
    - Concentrations increase with depth at all resampled soil vapor sample locations (i.e., higher concentrations were detected in deeper soil vapor samples).
    - The highest PCE and TCE concentrations in soil vapor were observed from soil vapor samples collected at 30 feet bgs at the southwestern and northeastern property boundary of the southern parcel and southeastern property boundary of the central parcel.

Analysis of three rounds of soil vapor investigation does not identify a source of PCE and TCE at the Site. Additionally, no evidence of significant temporal variability in concentrations of PCE or TCE is identified in the samples analyzed from 2015 to 2023. Low concentrations of PCE and TCE detected in soil vapor samples and increasing concentrations with depth are not indicative of an on-Site release. It is possible that the low concentrations are attributed to minor releases associated with historical on-Site operations and/or an off-Site release that is migrating in deeper soil vapor or groundwater to the Site.

Based on the consistent and relatively low concentrations of VOCs in Site soil vapor over the approximately 8-year soil vapor sampling period, and the increasing concentrations with depth, no further action is recommended to support planned residential redevelopment. Additional discussion regarding the evaluation of risk to future development due to detected concentrations of VOCs in soil vapor at the Site is included in the Response Plan (GSI, 2023).

6.0 REFERENCES

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TABLE

Table 1. Analytical Results for Volatile Organic Compounds in Soil Vapor Samples

GSI ENVIRONMENTAL

TABLE 1: Volatile Organic Compounds (VOCs) in Soil Vapor [1]

Former Riverside Scrap Iron & Metal Property
Riverside, California

Sample Location	Sample ID	Probe Depth (feet bgs)	Date Sampled	Units	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Chloroform	1,1-Dichloroethene (1,1-DCE)	1,2-Dichloroethane (1,2-DCA)	Benzene	Ethylbenzene	Toluene	Xylene	1,1,1-Trichloroethane	1,1,2-Trichloro-trifluoroethane (F113)	1,2,4-Trimethylbenzene	2-Butanone (MEK)	Carbon disulfide	Dichloro-difluoromethane (F12)	Methylene chloride (Dichloromethane)	Trichloro-fluoromethane (F11)	1,1-difluoroethane (DFA) (leak check compound)
VP-1	VP-1-5	5	11/16/2022	µg/m³	150	97	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	94	<5	<30	<6.3	<5	<3.5	22	<5.5
	VP-1-5	5	5/18/2023	µg/m³	280	190	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	170	<5	<30	<6.3	<5	<3.5	38	<5.5
	VP-1-15	15	11/16/2022	µg/m³	390	680	12	49	<4.1	25	<4.4	6.3	<8.8	<5.5	290	<5	69	69	<5	<3.5	66	<5.5
	VP-1-15	15	5/18/2023	µg/m³	380	700	<4.9	44	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	280	<5	<30	<6.3	5.4	<3.5	62	<5.5
	VP-1-30	30	11/16/2022	µg/m³	720	1700	20	120	<4.1	8.7	<4.4	4.4	<8.8	<5.5	370	<5	54	20	8.5	<3.5	85	<5.5
	VP-1-30	30	5/18/2023	µg/m³	810	1900	20	120	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	390	<5	<30	<6.3	<5	<3.5	91	<5.5
	VP-1-30 REP	30	5/18/2023	µg/m³	850	2000	21	120	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	410	<5	<30	<6.3	<5	<3.5	96	<5.5
VP-2	VP-2-5	5	11/16/2022	µg/m³	110	48	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	72	<5	<30	7.5	<5	<3.5	23	<5.5
	VP-2-15	15	11/16/2022	µg/m³	450	510	33	17	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	210	<5	<30	7.4	8.2	<3.5	56	<5.5
VP-3	VP-3-5	5	11/16/2022	µg/m³	12	28	11	<4	<4.1	6.7	<4.4	14	<8.8	<5.5	8.3	<5	<30	19	<5	9.1	5.9	14
	VP-3-15	15	11/16/2022	µg/m³	240	250	23	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	140	<5	<30	<6.3	7.9	<3.5	66	<5.5
VP-4	VP-4-5	5	11/17/2022	µg/m³	35	19	<4.9	<4	<4.1	<3.2	<4.4	11	<8.8	<5.5	15	<5	<30	67	<5	<3.5	64	<5.5
	VP-4-15	15	11/17/2022	µg/m³	180	13	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	26	<5	<30	<6.3	<5	<3.5	99	<5.5
VP-5	VP-5-5	5	11/17/2022	µg/m³	12	180	17	<4	<4.1	6.3	<4.4	23	4.9	<5.5	<7.7	<5	<30	71	<5	26	60	<5.5
	VP-5-15	15	11/17/2022	µg/m³	110	11	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	20	<5	<30	<6.3	6.7	<3.5	220	<5.5
VP-6	VP-6-5	5	11/17/2022	µg/m³	39	<5.5	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	35	<5	<30	<6.3	7.8	<3.5	91	<5.5
	VP-6-13	13	11/17/2022	µg/m³	140	32	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	39	<5	<30	73	7.2	<3.5	100	<5.5
VP-7	VP-7-5	5	11/17/2022	µg/m³	47	14	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	<7.7	<5	<30	<6.3	<5	<3.5	53	<5.5
	VP-7-15	15	11/17/2022	µg/m³	210	40	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	26	<5	<30	<6.3	6.1	<3.5	180	<5.5
VP-8	VP-8-5	5	11/17/2022	µg/m³	30	<5.5	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	<7.7	<5	<30	<6.3	<5	<3.5	14	520
	VP-8-15	15	11/17/2022	µg/m³	140	190	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	50	<5	<30	52	6.8	5.3	85	<5.5
VP-9	VP-9-5	5	11/16/2022	µg/m³	71	17	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	51	<5	<30	15	<5	<3.5	13	<5.5
	VP-9-5	5	5/18/2023	µg/m³	63	6	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	51	<5	<30	91	29	<3.5	14	<5.5
	VP-9-15	15	11/16/2022	µg/m³	250	380	6.4	6.5	<4.1	6.2	<4.4	4.7	<8.8	<5.5	230	<5	40	29	6.8	<3.5	53	<5.5
	VP-9-15	15	5/18/2023	µg/m³	200	280	<4.9	9.0	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	210	<5	<30	<6.3	<5	<3.5	48	<5.5
	VP-9-30	30	11/16/2022	µg/m³	670	1700	20	110	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	370	<5	62	12	8.4	<3.5	86	<5.5
	VP-9-30	30	5/18/2023	µg/m³	640	1600	19	100	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	350	<5	<30	<6.3	<5	<3.5	79	<5.5
VP-10	VP-10-5	5	11/16/2022	µg/m³	80	70	<4.9	<4	<4.1	3.5	<4.4	<3.8	<8.8	<5.5	37	<5	<30	8	<5	<3.5	23	<5.5
	VP-10-15	15	11/16/2022	µg/m³	270	430	<4.9	17	<4.1	<3.2	<4.4	4.3	<8.8	<5.5	99	<5	<30	13	6.3	<3.5	51	<5.5
VP-11	VP-11-5	5	11/16/2022	µg/m³	89	29	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	95	<5	<30	<6.3	5.3	<3.5	34	<5.5
	VP-11-5	5	5/18/2023	µg/m³	92	44	<4.9	<4	<4.1	<3.2	<4.4	3.9	<8.8	<5.5	180	<5	<30	<6.3	<5	<3.5	53	<5.5
	VP-11-15	15	11/16/2022	µg/m³	460	770	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	240	<5	<30	<6.3	7.9	<3.5	90	<5.5
	VP-11-15	15	5/18/2023	µg/m³	380	650	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	220	<5	<30	<6.3	<5	<3.5	78	<5.5
VP-12	VP-12-5	5	11/17/2022	µg/m³	94	<5.5	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	27	<5	<30	<6.3	<5	<3.5	68	<5.5
	VP-12-5	5	5/18/2023	µg/m³	82	<5.5	<4.9	<4	<4.1	<3.2	<4.4	4.1	<8.8	<5.5	46	<5	<30	<6.3	<5	<3.5	140	<5.5
	VP-12-15	15	11/17/2022	µg/m³	210	73	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	50	<5	<30	13	8.7	<3.5	100	<5.5
	VP-12-15	15	5/18/2023	µg/m³	150	66	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	54	<5	<30	<6.3	<5	<3.5	170	<5.5
	VP-12-30	30	11/17/2022	µg/m³	330	310	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	79	<5	32	<6.3	10	<3.5	230	<5.5
	VP-12-30	30	5/18/2023	µg/m³	270	300	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	77	<5	<30	<6.3	<5	<3.5	240	<5.5
VP-13	VP-13-5	5	11/17/2022	µg/m³	40	20	<4.9	<4	<4.1	3.4	<4.4	6.9	<8.8	<5.5	14	<5	<30	32	<5	3.6	180	<5.5
	VP-13-15	15	11/17/2022	µg/m³	120	36	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	22	<5	<30	<6.3	8.2	<3.5	410	<5.5
VP-14	VP-14-5	5	11/17/2022	µg/m³	160	94	5.9	<4	<4.1	15	6.3	77	20.1	<5.5	21	7.9	<30	120	8.4	6.2	200	<5.5
	VP-14-5	5	5/18/2023	µg/m³	250	58	<4.9	<4	<4.1	<3.2	<4.4	3.8	<8.8	<5.5	36	<5	<30	21	8.8	<3.5	410	<5.5
	VP-14-15	15	11/17/2022	µg/m³	460	120	<4.9	<4	<4.1	6.5	<4.4	27	23.4	<5.5	23	7.6	<30	<6.3	8.9	3.6	200	<5.5
	VP-14-15	15	5/18/2023	µg/m³	350	160	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	39	<5	<30	<6.3	9.1	<3.5	470	<5.5
	VP-14-22	22	11/17/2022	µg/m³	570	360	8.5	<4	<4.1	3.8	<4.4	8.7	<8.8	<5.5	51	<5	<30	16	13	<3.5	350	<5.5
	VP-14-22	22	5/18/2023	µg/m³	440	350	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	49	<5	<30	<6.3	11	<3.5	580	<5.5
VP-15	VP-15-5	5	11/17/2022	µg/m³	14	<5.5	6.9	<4	17	<3.2	<4.4	<3.8	<8.8	9.4	10	<5	<30	13	<5	<3.5	460	<5.5
VP-16	VP-16-5	5	11/17/2022	µg/m³	97	6.4	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	16	<5	<30	<6.3	<5	<3.5	23	<5.5
	VP-16-5	5	5/18/2023	µg/m³	150	18	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	13	<5	<30	<6.3	<5	<3.5	23	<5.5
	VP-16-15	15	11/17/2022	µg/m³	360	190	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	44	<5	<30	<6.3	<5	<3.5	50	<5.5
	VP-16-15	15	5/18/2023	µg/m³	320	260	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	58	<5	<30	<6.3	<5	<3.5	65	<5.5

GSI ENVIRONMENTAL

TABLE 1: Volatile Organic Compounds (VOCs) in Soil Vapor [1]
Former Riverside Scrap Iron & Metal Property
Riverside, California

Sample Location	Sample ID	Probe Depth (feet bgs)	Date Sampled	Units	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Chloroform	1,1-Dichloroethene (1,1-DCE)	1,2-Dichloroethane (1,2-DCA)	Benzene	Ethylbenzene	Toluene	Xylene	1,1,1-Trichloroethane	1,1,2-Trichloro-trifluoroethane (F113)	1,2,4-Trimethylbenzene	2-Butanone (MEK)	Carbon disulfide	Dichloro-difluoromethane (F12)	Methylene chloride (Dichloromethane)	Trichloro-fluoromethane (F11)	1,1-difluoroethane (DFA) (leak check compound)
VP-17	VP-17-5	5	11/16/2022	µg/m³	76	55	<4.9	<4	<4.1	<3.2	<4.4	6.5	<8.8	<5.5	23	<5	<30	9.3	<5	<3.5	11	<5.5
	VP-17-15	15	11/16/2022	µg/m³	180	290	<4.9	<4	<4.1	<3.2	<4.4	6.6	<8.8	<5.5	49	<5	39	11	<5	<3.5	19	<5.5
	VP-17-15 Rep	15	11/16/2022	µg/m³	180	300	<4.9	<4	<4.1	<3.2	<4.4	6.7	<8.8	<5.5	51	<5	74	12	<5	<3.5	19	<5.5
VP-18	VP-18-5	5	11/16/2022	µg/m³	49	7.6	<4.9	<4	<4.1	<3.2	<4.4	4.1	<8.8	<5.5	14	<5	<30	<6.3	<5	<3.5	41	<5.5
	VP-18-15	15	11/16/2022	µg/m³	200	110	<4.9	<4	<4.1	<3.2	<4.4	6.6	<8.8	<5.5	43	<5	100	16	<5	<3.5	79	<5.5
VP-19	VP-19-5	5	11/17/2022	µg/m³	91	41	<4.9	<4	<4.1	8.1	<4.4	6.5	<8.8	<5.5	32	<5	<30	44	<5	<3.5	11	<5.5
	VP-19-5	5	5/18/2023	µg/m³	120	40	<4.9	<4	<4.1	5.6	<4.4	7.0	<8.8	<5.5	45	<5	<30	8.7	<5	<3.5	27	<5.5
	VP-19-15	15	11/17/2022	µg/m³	420	380	<4.9	<4	<4.1	4.9	<4.4	10	<8.8	<5.5	100	<5	<30	71	<5	<3.5	52	<5.5
	VP-19-15	15	5/18/2023	µg/m³	320	290	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	130	<5	<30	<6.3	<5	<3.5	58	<5.5
	VP-19-30	30	11/17/2022	µg/m³	840	1500	7.5	26	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	180	<5	<30	<6.3	<5	<3.5	64	<5.5
	VP-19-30	30	5/18/2023	µg/m³	840	1700	<4.9	27	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	160	<5	<30	<6.3	<5	<3.5	74	<5.5
VP-20	VP-20-5	5	11/17/2022	µg/m³	91	51	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	19	<5	<30	<6.3	<5	<3.5	22	<5.5
	VP-20-5	5	5/18/2023	µg/m³	170	130	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	17	<5	<30	<6.3	<5	<3.5	41	<5.5
	VP-20-15	15	11/17/2022	µg/m³	450	650	6.7	<4	<4.1	<3.2	<4.4	4.4	<8.8	<5.5	73	<5	<30	<6.3	6.9	<3.5	82	<5.5
	VP-20-15	15	5/18/2023	µg/m³	380	750	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	85	<5	<30	<6.3	<5	<3.5	150	<5.5
	VP-20-30	30	11/17/2022	µg/m³	710	1600	21	32	<4.1	<3.2	<4.4	4.3	<8.8	<5.5	130	<5	<30	<6.3	8.9	<3.5	130	<5.5
	VP-20-30 Rep	30	11/17/2022	µg/m³	750	1700	22	31	<4.1	<3.2	<4.4	5	<8.8	<5.5	140	<5	<30	<6.3	9.9	<3.5	160	<5.5
	VP-20-30	30	5/18/2023	µg/m³	780	2100	24	45	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	150	<5	<30	<6.3	<5	<3.5	250	<5.5
VP-21	VP-21-5	5	11/17/2022	µg/m³	8	<5.5	34	<4	<4.1	39	<4.4	10	<8.8	<5.5	<7.7	<5	<30	92	<5	<3.5	160	11
	VP-21-15	15	11/17/2022	µg/m³	150	<5.5	<4.9	<4	<4.1	<3.2	<4.4	<3.8	<8.8	<5.5	39	<5	<30	<6.3	7.3	<3.5	510	<5.5
Maximum Detected Concentration				**µg/m³**	**850**	**2100**	**34**	**120**	**17**	**39**	**6.3**	**77**	**23**	**9.4**	**370**	**7.9**	**100**	**120**	**13**	**26**	**510**	**520**
DTSC-recommended Screening Levels																						
Commercial/Industrial Soil Vapor Screening Levels[2] (AF=0.03)				µg/m³	67	100	18	10,000	16	14	160	43,000	15,000	33,000	170,000	8,700	170,000	24,000	3,300	33	43,000	NA
Residential Soil Vapor Screening Levels[3] (AF=0.03)				µg/m³	15	16	4.0	2,400	3.7	3.2	37	10,000	3,300	150,000	730,000	2,100	730,000	100,000	14,700	400	180,000	NA

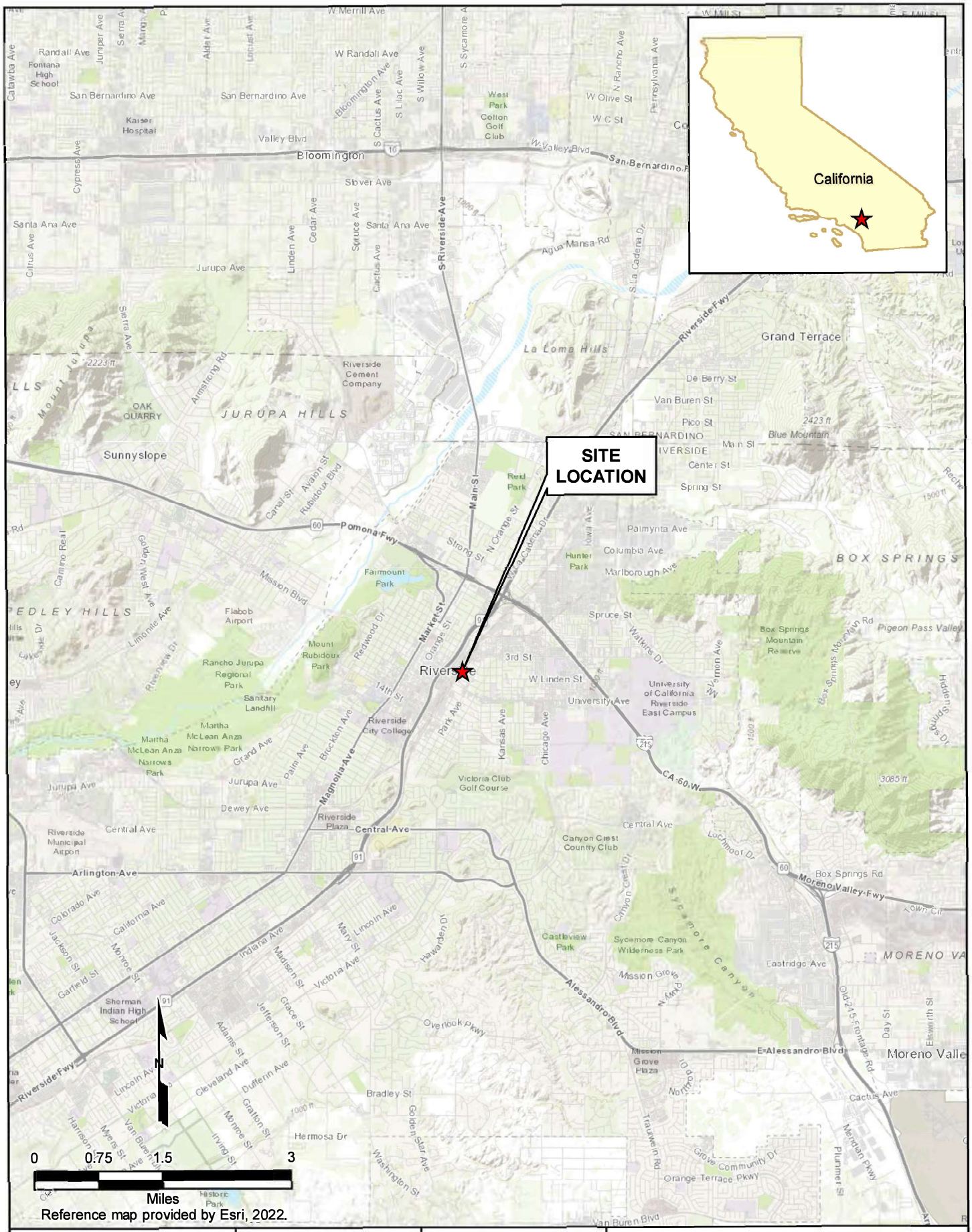
Notes:
[1] Soil vapor samples collected by H&P Mobile Geochemistry, Inc. (H&P) of Carlsbad, CA into batch-certified, 400 or 450 milliliter summa canisters under the field oversight of GSI Environmental Inc., and analyzed by H&P at a fixed laboratory using USEPA Method TO-15.

[2] Soil vapor results are compared to soil vapor screening levels generated by applying default attenuation factors (AF) for all buildings (0.03), as published by the USEPA (2015), to regional screening levels for indoor air under commercial land use published by the USEPA (2022) and modified by the DTSC (2022).
[3] Soil vapor results also are compared to soil vapor screening levels generated by applying default attenuation factors (AF) for all buildings (0.03), as published by the USEPA (2015), to regional screening levels for indoor air under residential land use published by the USEPA (2022) and modified by the DTSC (2022).
µg/m³ = micrograms per cubic meter
NA = Not available

References:
California Environmental Protection Agency (Cal/EPA). 2011. Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance). DTSC. October.
Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment (HHRA) Note, HERO HHRA Note 3, DTSC-modified Screening Levels (DTSC-SLs). May.
GSI Environmental Inc. (GSI). 2019. Interim Remedial Action Plan, Former Pep Boys Property, 1721 and 1725 North Long Beach Blvd, Compton, California 90221. June.
United States Environmental Protection Agency (USEPA). 2022. Regional Screening Levels (RSLs). November.

FIGURES

Figure 1. Site Location Map
Figure 2. Site Map with Sample Locations
Figure 3. PCE and TCE Concentrations in Soil Vapor (µg/m^3)



Reference map provided by Esri, 2022.

GSI ENVIRONMENTAL

GSI Job No.	6239	Drawn by:	AV
Issued:	2-Jun-2022	Chk'd by:	SC
Revised:		Aprv'd by:	TFW
Map ID:	RS6239_SLM	**FIGURE 1**	

SITE LOCATION MAP

Riverside Scrap Iron & Metal
Riverside, California

LEGEND

- 5 Foot Soil Vapor Probe
- 5 and 15 Foot Soil Vapor Probe
- 5, 15, and 30 Foot Soil Vapor Probe
- Site Boundary

Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) VP-6 probes were installed at 5' and 13'. VP-14 probes were installed at 5', 15', and 22'.

SCALE (Feet)
0 50 100

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

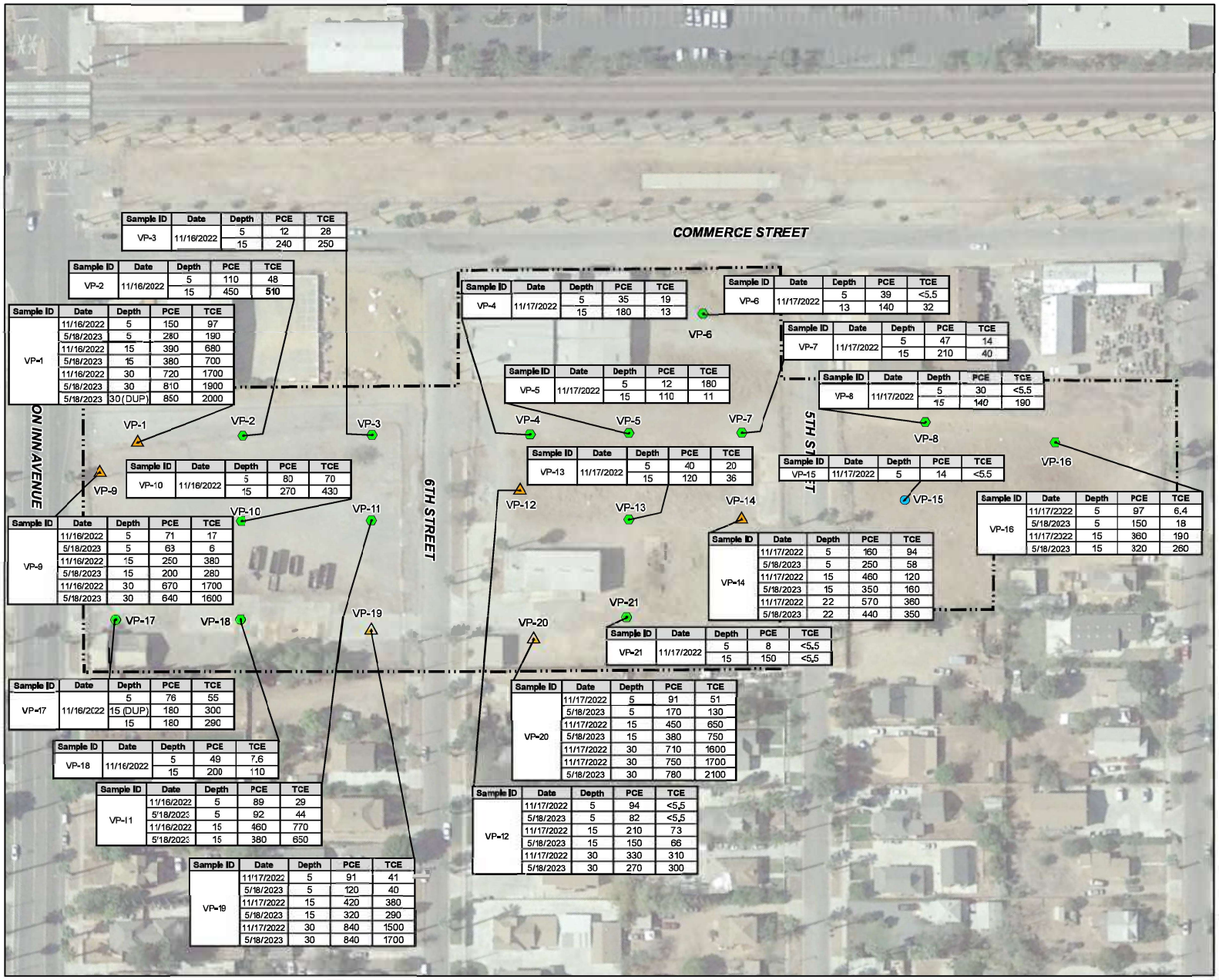
GSI ENVIRONMENTAL

SOIL VAPOR SAMPLE LOCATIONS

Riverside Scrap Iron & Metal
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	22-Nov-2022	Chk'd By:	SC
Map ID:	RS6239_SVPNov22	Appv'd By:	SC

FIGURE 2



Sample ID	Date	Depth	PCE	TCE
VP-3	11/16/2022	5	12	28
		15	240	250

Sample ID	Date	Depth	PCE	TCE
VP-2	11/16/2022	5	110	48
		15	450	510

Sample ID	Date	Depth	PCE	TCE
VP-1	11/16/2022	5	150	97
	5/18/2023	5	280	190
	11/16/2022	15	390	680
	5/18/2023	15	380	700
	11/16/2022	30	720	1700
	5/18/2023	30	810	1900
	5/18/2023	30 (DUP)	850	2000

Sample ID	Date	Depth	PCE	TCE
VP-4	11/17/2022	5	35	19
		15	180	13

Sample ID	Date	Depth	PCE	TCE
VP-6	11/17/2022	5	39	<5.5
		13	140	32

Sample ID	Date	Depth	PCE	TCE
VP-7	11/17/2022	5	47	14
		15	210	40

Sample ID	Date	Depth	PCE	TCE
VP-5	11/17/2022	5	12	180
		15	110	11

Sample ID	Date	Depth	PCE	TCE
VP-8	11/17/2022	5	30	<5.5
		15	140	190

Sample ID	Date	Depth	PCE	TCE
VP-13	11/17/2022	5	40	20
		15	120	36

Sample ID	Date	Depth	PCE	TCE
VP-15	11/17/2022	5	14	<5.5

Sample ID	Date	Depth	PCE	TCE
VP-10	11/16/2022	5	80	70
		15	270	430

Sample ID	Date	Depth	PCE	TCE
VP-16	11/17/2022	5	97	6.4
	5/18/2023	5	150	18
	11/17/2022	15	360	190
	5/18/2023	15	320	260

Sample ID	Date	Depth	PCE	TCE
VP-9	11/16/2022	5	71	17
	5/18/2023	5	63	6
	11/16/2022	15	250	380
	5/18/2023	15	200	280
	11/16/2022	30	670	1700
	5/18/2023	30	640	1600

Sample ID	Date	Depth	PCE	TCE
VP-14	11/17/2022	5	160	94
	5/18/2023	5	250	58
	11/17/2022	15	460	120
	5/18/2023	15	350	160
	11/17/2022	22	570	360
	5/18/2023	22	440	350

Sample ID	Date	Depth	PCE	TCE
VP-21	11/17/2022	5	8	<5.5
		15	150	<5.5

Sample ID	Date	Depth	PCE	TCE
VP-17	11/16/2022	5	76	55
		15 (DUP)	180	300
		15	180	290

Sample ID	Date	Depth	PCE	TCE
VP-20	11/17/2022	5	91	51
	5/18/2023	5	170	130
	11/17/2022	15	450	650
	5/18/2023	15	380	750
	11/17/2022	30	710	1600
	11/17/2022	30	750	1700
	5/18/2023	30	780	2100

Sample ID	Date	Depth	PCE	TCE
VP-18	11/16/2022	5	49	7.6
		15	200	110

Sample ID	Date	Depth	PCE	TCE
VP-11	11/16/2022	5	89	29
	5/18/2023	5	92	44
	11/16/2022	15	460	770
	5/18/2023	15	380	650

Sample ID	Date	Depth	PCE	TCE
VP-12	11/17/2022	5	94	<5.5
	5/18/2023	5	82	<5.5
	11/17/2022	15	210	73
	5/18/2023	15	150	66
	11/17/2022	30	330	310
	5/18/2023	30	270	300

Sample ID	Date	Depth	PCE	TCE
VP-19	11/17/2022	5	91	41
	5/18/2023	5	120	40
	11/17/2022	15	420	380
	5/18/2023	15	320	290
	11/17/2022	30	840	1500
	5/18/2023	30	840	1700

LEGEND

- 5 Foot Soil Vapor Probe
- 5 and 15 Foot Soil Vapor Probe
- 5, 15, and 30 Foot Soil Vapor Probe
- Site Boundary

Notes

1) Basemap downloaded from Google Earth Pro dated October 2016.
2) VP-6 probes were installed at 5' and 13'. VP-14 probes installed at 5', 15', and 22'.
3) Depth = feet below ground surface; < = not detected above the designated laboratory reporting limit; DUP = duplicate sample; PCE = tetrachloroethene; TCE = trichloroethene.
4) Concentrations are in micrograms per cubic meter (µg/m3)

SCALE (Feet)
0 50 100

Projected Coordinate System
Datum: NAD83
State Plane California Zone VI
Units: Feet

GSI ENVIRONMENTAL

PCE AND TCE IN SOIL VAPOR

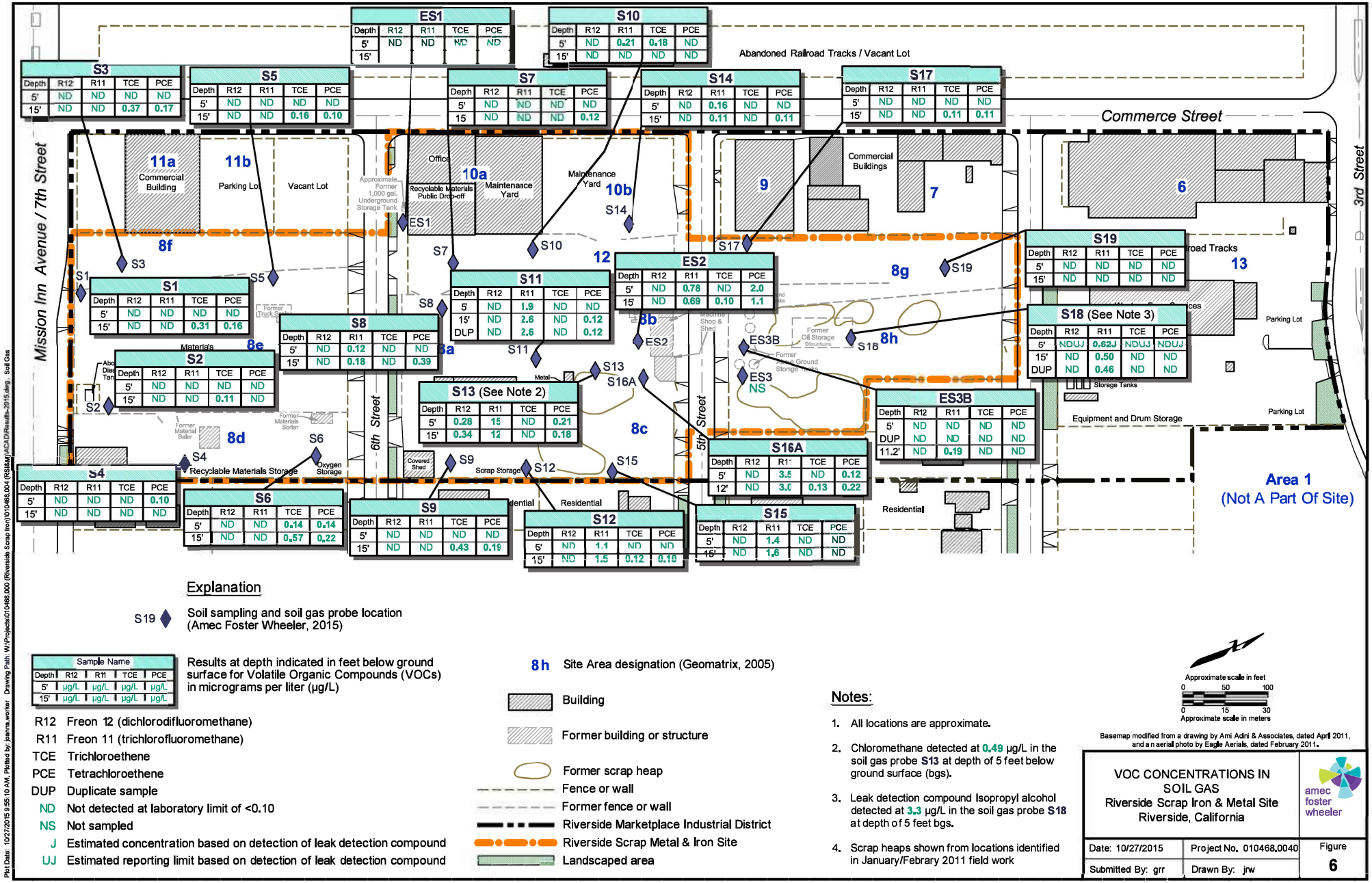
Riverside Scrap Iron & Metal
Riverside, California

GSI Job No.	6239	Drawn By:	AV
Issued:	26-May-2023	Chk'd By:	SC
Map ID:	RS6239_SVP_PCETCE	Appv'd By:	SC

FIGURE 3

APPENDIX A

2015 Data



ES1				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15'				

S10				
Depth	R12	R11	TCE	PCE
5'	ND	0.21	0.18	ND
15'	ND	ND	ND	ND

S3				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15'	ND	ND	0.37	0.17

S5				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15'	ND	ND	0.16	0.10

S7				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15	ND	ND	ND	0.12

S14				
Depth	R12	R11	TCE	PCE
5'	ND	0.16	ND	ND
15'	ND	0.11	ND	0.11

S17				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15'	ND	ND	0.11	0.11

S19				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15'	ND	ND	ND	ND

S1				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15'	ND	ND	0.31	0.16

S11				
Depth	R12	R11	TCE	PCE
5	ND	1.9	ND	ND
15'	ND	2.6	ND	0.12
DUP	ND	2.6	ND	0.12

ES2				
Depth	R12	R11	TCE	PCE
5'	ND	0.78	ND	2.0
15'	ND	0.69	0.10	1.1

S18 (See Note 3)				
Depth	R12	R11	TCE	PCE
5'	NDUJ	0.62J	NDUJ	NDUJ
15'	ND	0.50	ND	ND
DUP	ND	0.46	ND	ND

S8				
Depth	R12	R11	TCE	PCE
5'	ND	0.12	ND	ND
15'	ND	0.18	ND	0.39

S2				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15'	ND	ND	0.11	ND

S13 (See Note 2)				
Depth	R12	R11	TCE	PCE
5'	0.28	15	ND	0.21
15'	0.34	12	ND	0.18

ES3B				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
DUP	ND	ND	ND	ND
11.2'	ND	0.19	ND	ND

S16A				
Depth	R12	R11	TCE	PCE
5'	ND	3.5	ND	0.12
12'	ND	3.0	0.13	0.22

S4				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	0.10
15'	ND	ND	ND	ND

S6				
Depth	R12	R11	TCE	PCE
5'	ND	ND	0.14	0.14
15'	ND	ND	0.57	0.22

S9				
Depth	R12	R11	TCE	PCE
5'	ND	ND	ND	ND
15'	ND	ND	0.43	0.19

S12				
Depth	R12	R11	TCE	PCE
5'	ND	1.1	ND	ND
15'	ND	1.5	0.12	0.10

S15				
Depth	R12	R11	TCE	PCE
5'	ND	1.4	ND	ND
15'	ND	1.6	ND	ND

Explanation

S19 ♦ Soil sampling and soil gas probe location (Amec Foster Wheeler, 2015)

Sample Name				
Depth	R12	R11	TCE	PCE
5'	µg/L	µg/L	µg/L	µg/L
15'	µg/L	µg/L	µg/L	µg/L

Results at depth indicated in feet below ground surface for Volatile Organic Compounds (VOCs) in micrograms per liter (µg/L)

R12 Freon 12 (dichlorodifluoromethane)
R11 Freon 11 (trichlorofluoromethane)
TCE Trichloroethene
PCE Tetrachloroethene
DUP Duplicate sample
ND Not detected at laboratory limit of <0.10
NS Not sampled
J Estimated concentration based on detection of leak detection compound
UJ Estimated reporting limit based on detection of leak detection compound

8h Site Area designation (Geomatrix, 2005)

Building

Former building or structure

Former scrap heap

Fence or wall

Former fence or wall

Riverside Marketplace Industrial District

Riverside Scrap Metal & Iron Site

Landscaped area

Notes:

1. All locations are approximate.
2. Chloromethane detected at **0.49** µg/L in the soil gas probe **S13** at depth of 5 feet below ground surface (bgs).
3. Leak detection compound Isopropyl alcohol detected at **3.3** µg/L in the soil gas probe **S18** at depth of 5 feet bgs.
4. Scrap heaps shown from locations identified in January/Febrary 2011 field work

Approximate scale in feet
0 50 100
0 15 30
Approximate scale in meters

Basemap modified from a drawing by Ami Adini & Associates, dated April 2011, and a n aerial photo by Eagle Aerials, dated February 2011.

VOC CONCENTRATIONS IN SOIL GAS
Riverside Scrap Iron & Metal Site
Riverside, California

amec foster wheeler

Date: 10/27/2015	Project No. 010468.0040	Figure
Submitted By: grr	Drawn By: jrw	6

Plot Date: 10/27/2015 9:55:10 AM, Plotted by: joanna.worker Drawing Path: W:\Projects\010468.000 (Riverside Scrap Iron)\010468.004 (RSIM)\ACAD\Results-2015.dwg, Soil Gas

TABLE 7

SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) AND GASOLINE RANGE ORGANICS (GRO) IN SOIL GAS
Riverside Scrap Iron & Metal Site
Riverside, California

Results reported in micrograms per liter (µg/L)

Soil Gas Probe Designation	Depth (feet bgs)	Purge Volume (µg/L)	Date	Chloro-methane	Freon 12	Freon 11	TCE	PCE	IPA	Gasoline Range Organics
Industrial RSLs or *DTSC-modified Screeing Level*				390	440	3,100	3	*2.1*	880	NA
Ambient Air	---	---	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
	---	---	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S1	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S1	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.31**	**0.16**	ND<1.0	ND<10
S2	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S2	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.11**	ND<0.10	ND<1.0	ND<10
S3	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S3	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.37**	**0.17**	ND<1.0	ND<10
S3	15 Dup	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.41**	**0.18**	ND<1.0	ND<10
S4	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	**0.10**	ND<1.0	ND<10
S4	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S5	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S5	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.16**	**0.10**	ND<1.0	ND<10
S6	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.14**	**0.14**	ND<1.0	ND<10
S6	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.57**	**0.22**	ND<1.0	ND<10
S7	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S7	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	**0.12**	ND<1.0	ND<10
S8	5	3	10/1/2015	ND<0.10	ND<0.10	**0.12**	ND<0.10	ND<0.10	ND<1.0	ND<200
S8	15	3	10/1/2015	ND<0.10	ND<0.10	**0.18**	ND<0.10	**0.39**	ND<1.0	ND<10
S9	5	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S9	15	3	10/1/2015	ND<0.10	ND<0.10	ND<0.10	**0.43**	**0.19**	ND<1.0	ND<10
S10	5	3	10/2/2015	ND<0.10	ND<0.10	**0.21**	**0.19**	ND<0.10	ND<1.0	ND<10
S10	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S11	5	3	10/1/2015	ND<0.10	ND<0.10	**1.9**	ND<0.10	ND<0.10	ND<1.0	ND<10
S11	15	3	10/1/2015	ND<0.10	ND<0.10	**2.6**	ND<0.10	**0.12**	ND<1.0	ND<10
S11	15 Dup	3	10/1/2015	ND<0.10	ND<0.10	**2.6**	ND<0.10	**0.12**	ND<1.0	ND<10
S12	5	3	10/1/2015	ND<0.10	ND<0.10	**1.1**	ND<0.10	ND<0.10	ND<1.0	ND<10
S12	15	3	10/1/2015	ND<0.10	ND<0.10	**1.5**	**0.12**	**0.10**	ND<1.0	ND<10
S13 (see notes)	5	3	10/1/2015	**0.49**	**0.28**	**15**	ND<0.10	**0.21**	ND<1.0	ND<10
S13 (See notes)	15	3	10/1/2015	ND<0.10	**0.34**	**12**	ND<0.10	**0.18**	ND<1.0	ND<10
S14	5	3	10/2/2015	ND<0.10	ND<0.10	**0.16**	ND<0.10	ND<0.10	ND<1.0	ND<10
S14	15	3	10/2/2015	ND<0.10	ND<0.10	**0.11**	ND<0.10	**0.11**	ND<1.0	ND<10
S15	5	3	10/1/2015	ND<0.10	ND<0.10	**1.4**	ND<0.10	ND<0.10	ND<1.0	ND<10
S15	15	3	10/1/2015	ND<0.10	ND<0.10	**1.0**	ND<0.10	ND<0.10	ND<1.0	ND<10
S16A	5	3	10/2/2015	ND<0.10	ND<0.10	**3.5**	ND<0.10	**0.12**	ND<1.0	ND<10
S16A	12	3	10/2/2015	ND<0.10	ND<0.10	**3.0**	**0.13**	**0.22**	ND<1.0	ND<10
S17	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S17	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	**0.11**	**0.11**	ND<1.0	ND<10

TABLE 7

SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) AND GASOLINE RANGE ORGANICS (GRO) IN SOIL GAS
Riverside Scrap Iron & Metal Site
Riverside, California

Results reported in micrograms per liter (µg/L)

Soil Gas Probe Designation	Depth (feet bgs)	Purge Volume (µg/L)	Date	Chloro-methane	Freon 12	Freon 11	TCE	PCE	IPA	Gasoline Range Organics
S18	5	3	10/2/2015	ND<0.10UJ	ND<0.10UJ	**0.62J**	ND<0.10UJ	ND<0.10UJ	**3.3J**	ND<10
S18	15	3	10/2/2015	ND<0.10	ND<0.10	**0.50**	ND<0.10	ND<0.10	ND<1.0	ND<10
S18	15 Dup	3	10/2/2015	ND<0.10	ND<0.10	**0.46**	ND<0.10	ND<0.10	ND<1.0	ND<10
S19	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
S19	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES1	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES1	15	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES2	5	3	10/2/2015	ND<0.10	ND<0.10	**0.78**	ND<0.10	**2.0**	ND<1.0	ND<10
ES2	15	3	10/2/2015	ND<0.10	ND<0.10	**0.69**	**0.10**	**1.1**	ND<1.0	ND<10
ES3B	5	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES3B	5 Dup	3	10/2/2015	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<1.0	ND<10
ES3B	11.25	3	10/2/2015	ND<0.10	ND<0.10	**0.19**	ND<0.10	ND<0.10	ND<1.0	ND<10

Notes and Data Qualifiers

Volatile Organic Compounds (VOCs) and Gasoline Range Organics (GRO) were analyzed using United States Environmental Protection Agency (EPA) Method 8260M. All remaining VOCs were not detected. For a complete list of EPA 8260M analytes, see laboratory reports.

The Regional Screening Levels (RSLs) are from the EPA Region 9, revised June 2015, http://www.epa.gov/region9/superfund/prg/. RSLs were adjusted for a default (DTSC, 2011) attenuation factor for existing commercial buildings by multiplying the air RSLs by 1000 (representing a soil vapor-to-indoor air attenuation factor of 0.001. Therefore, the soil vapor screening levels presented are protective of existing buildings. The DTSC-modified screening level (DTSC, 2015) was used for PCE (italicized) because it was more conservative than the USEPA RSL.

S13 at 5 bgs and S13 at 15 feet bgs -Freon 11 concentrations from soil vapor samples exceeded the laboratory instrument calibration range. The samples were re-run at a higher dilution rate to quantify Freon 11 concentrations.

J - The analyte was positively identified. However, the leak detection compound IPA was detected in the sample at a concentration greater than 10 times the reporting limit of target analytes and therefore, the detected value is estimated.

UJ - The analyte was reported as not detected at the laboratory reporting limit. However, the leak detection compound IPA was detected in the sample at concentration greater than 10 times the reporting limit of the target analytes and therefore, the reporting limit is estimated.

Abbreviations

bgs = Below ground surface
ND = Not detected at the reporting limit shown
DUP = Duplicate sample
DTSC = Department of Toxic Substances Control
Freon 11 = Trichlorofluoromethane
Freon 12 = Dichlorodifluoromethane
IPA = Isopropanol
NA = Not available
PCE = Tetrachloroethene
RSL = Regional Screening Level
TCE = Trichloroethene
µg/L = Micrograms per liter

References

DTSC, 2015, Human Health Risk Assessment (HHRA) Note #3, DTSC-modified Screening Levels (DTSC-SLs), Human and Ecological Risk Office (HERO), October.

DTSC, 2011, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, October.

APPENDIX B

Analytical Laboratory Reports – Soil Vapor

H&P Mobile Geochemistry Inc.

25 May 2023

Samantha Curtis
GSI Environmental, Inc
7595 Irvine Center Dr, Ste 250
Irvine, CA 92618

H&P Project: GSI051923-10
Client Project: 6239 / 2993 6th St

Dear Samantha Curtis:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 18-May-23 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Lisa Eminhizer
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC) for the fields of proficiency and analytes listed on those certificates. H& P is approved as an Environmental Testing Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs for the fields of proficiency and analytes included in the certification process and to the extent offered by the accreditation agency . Unless otherwise noted, accreditation certificate numbers, expiration of certificates, and scope of accreditation can be found at: www.handpmg.com/about/certifications . Fields of services and analytes contained in this report that are not listed on the certificates should be considered uncertified or unavailable for certification.

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Geochemistry Inc.

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VP-1-15	E305052-01	Vapor	18-May-23	18-May-23
VP-1-30	E305052-02	Vapor	18-May-23	18-May-23
VP-1-30 REP	E305052-03	Vapor	18-May-23	18-May-23
VP-1-5	E305052-04	Vapor	18-May-23	18-May-23
VP-9-5	E305052-05	Vapor	18-May-23	18-May-23
VP-9-15	E305052-06	Vapor	18-May-23	18-May-23
VP-9-30	E305052-07	Vapor	18-May-23	18-May-23
VP-11-5	E305052-08	Vapor	18-May-23	18-May-23
VP-11-15	E305052-09	Vapor	18-May-23	18-May-23
VP-19-5	E305052-10	Vapor	18-May-23	18-May-23
VP-19-15	E305052-11	Vapor	18-May-23	18-May-23
VP-19-30	E305052-12	Vapor	18-May-23	18-May-23
VP-12-5	E305052-13	Vapor	18-May-23	18-May-23
VP-12-15	E305052-14	Vapor	18-May-23	18-May-23
VP-12-30	E305052-15	Vapor	18-May-23	18-May-23
VP-20-5	E305052-16	Vapor	18-May-23	18-May-23
VP-20-15	E305052-17	Vapor	18-May-23	18-May-23
VP-20-30	E305052-18	Vapor	18-May-23	18-May-23
VP-14-5	E305052-19	Vapor	18-May-23	18-May-23
VP-14-15	E305052-20	Vapor	18-May-23	18-May-23
VP-14-22	E305052-21	Vapor	18-May-23	18-May-23
VP-16-5	E305052-22	Vapor	18-May-23	18-May-23
VP-16-15	E305052-23	Vapor	18-May-23	18-May-23

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

DETECTIONS SUMMARY

Sample ID: **VP-1-15** Laboratory ID: **E305052-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**5.4**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**62**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**44**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**280**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**700**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**380**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-1-30** Laboratory ID: **E305052-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**91**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**120**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**390**	7.7	ug/m3	EPA TO-15	
Chloroform	**20**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**1900**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**810**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-1-30 REP** Laboratory ID: **E305052-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**96**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**120**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**410**	7.7	ug/m3	EPA TO-15	
Chloroform	**21**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**2000**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**850**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-1-5** Laboratory ID: **E305052-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**38**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**170**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**190**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**280**	6.9	ug/m3	EPA TO-15	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Sample ID: **VP-9-5** Laboratory ID: **E305052-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**29**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**14**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**51**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**91**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**6.0**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**63**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-9-15** Laboratory ID: **E305052-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**48**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**9.0**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**210**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**280**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**200**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-9-30** Laboratory ID: **E305052-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**79**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**100**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**350**	7.7	ug/m3	EPA TO-15	
Chloroform	**19**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**1600**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**640**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-11-5** Laboratory ID: **E305052-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**53**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**180**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**44**	5.5	ug/m3	EPA TO-15	
Toluene	**3.9**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**92**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-11-15** Laboratory ID: **E305052-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**78**	5.6	ug/m3	EPA TO-15	

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Sample ID: **VP-11-15** Laboratory ID: **E305052-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1,2-Trichlorotrifluoroethane (F113)	**220**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**650**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**380**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-19-5** Laboratory ID: **E305052-10**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**27**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**45**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**8.7**	6.3	ug/m3	EPA TO-15	
Benzene	**5.6**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**40**	5.5	ug/m3	EPA TO-15	
Toluene	**7.0**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**120**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-19-15** Laboratory ID: **E305052-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**58**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**130**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**290**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**320**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-19-30** Laboratory ID: **E305052-12**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**74**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**27**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**160**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**1700**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**840**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-12-5** Laboratory ID: **E305052-13**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**140**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**46**	7.7	ug/m3	EPA TO-15	
Toluene	**4.1**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**82**	6.9	ug/m3	EPA TO-15	

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Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Sample ID: **VP-12-15** Laboratory ID: **E305052-14**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**170**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**54**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**66**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**150**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-12-30** Laboratory ID: **E305052-15**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**240**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**77**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**300**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**270**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-20-5** Laboratory ID: **E305052-16**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**41**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**17**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**130**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**170**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-20-15** Laboratory ID: **E305052-17**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**150**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**85**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**750**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**380**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-20-30** Laboratory ID: **E305052-18**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**250**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**45**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**150**	7.7	ug/m3	EPA TO-15	
Chloroform	**24**	4.9	ug/m3	EPA TO-15	
Trichloroethene	**2100**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**780**	6.9	ug/m3	EPA TO-15	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Sample ID: **VP-14-5** Laboratory ID: **E305052-19**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**8.8**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**410**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**36**	7.7	ug/m3	EPA TO-15	
Carbon disulfide	**21**	6.3	ug/m3	EPA TO-15	
Trichloroethene	**58**	5.5	ug/m3	EPA TO-15	
Toluene	**3.8**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**250**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-14-15** Laboratory ID: **E305052-20**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**9.1**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**470**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**39**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**160**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**350**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-14-22** Laboratory ID: **E305052-21**

Analyte	Result	Reporting Limit	Units	Method	Notes
Dichlorodifluoromethane (F12)	**11**	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**580**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**49**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**350**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**440**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-16-5** Laboratory ID: **E305052-22**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**23**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**13**	7.7	ug/m3	EPA TO-15	
Trichloroethene	**18**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**150**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-16-15** Laboratory ID: **E305052-23**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**65**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**58**	7.7	ug/m3	EPA TO-15	

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Sample ID: **VP-16-15** Laboratory ID: **E305052-23**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**260**	5.5	ug/m3	EPA TO-15	
Tetrachloroethene	**320**	6.9	ug/m3	EPA TO-15	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-15 (E305052-01) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	**5.4**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**62**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**44**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**280**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**700**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**380**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-15 (E305052-01) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*111 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.1 %*		*77-127*	"	"	"	"	
VP-1-30 (E305052-02) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**91**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**120**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**390**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**20**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-30 (E305052-02) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**1900**	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**810**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*112 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.0 %*		*77-127*	"	"	"	"	

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Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-30 REP (E305052-03) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**96**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**120**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**410**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**21**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**2000**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**850**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-30 REP (E305052-03) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*116 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*97.9 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.2 %*		*77-127*	"	"	"	"	
VP-1-5 (E305052-04) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**38**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**170**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1-5 (E305052-04) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**190**	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**280**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.7 %*		*77-127*	"	"	"	"	

H&P Mobile
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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-5 (E305052-05) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	**29**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**14**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**51**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**91**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**6.0**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**63**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-5 (E305052-05) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*112 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.8 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.0 %*		*77-127*	"	"	"	"	
VP-9-15 (E305052-06) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**48**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**9.0**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**210**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-15 (E305052-06) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**280**	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**200**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.4 %*		*77-127*	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-30 (E305052-07) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**79**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**100**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**350**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**19**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**1600**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**640**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9-30 (E305052-07) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.3 %*		*77-127*	"	"	"	"	
VP-11-5 (E305052-08) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**53**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**180**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-11-5 (E305052-08) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**44**	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**3.9**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**92**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*115 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.3 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-11-15 (E305052-09) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**78**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**220**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**650**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**380**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-11-15 (E305052-09) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*115 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*98.8 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.2 %*		*77-127*	"	"	"	"	
VP-19-5 (E305052-10) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**27**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**45**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**8.7**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**5.6**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-5 (E305052-10) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**40**	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**7.0**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**120**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*114 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.6 %*		*77-127*	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-15 (E305052-11) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**58**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**130**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**290**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**320**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-15 (E305052-11) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	23-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*117 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.6 %*		*77-127*	"	"	"	"	
VP-19-30 (E305052-12) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**74**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**27**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**160**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-19-30 (E305052-12) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**1700**	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**840**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.2 %*		*77-127*	"	"	"	"	

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Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-5 (E305052-13) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**140**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**46**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**4.1**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**82**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

H&P Mobile
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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-5 (E305052-13) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*117 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.7 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.6 %*		*77-127*	"	"	"	"	
VP-12-15 (E305052-14) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**170**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**54**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-15 (E305052-14) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**66**	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**150**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.6 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-30 (E305052-15) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**240**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**77**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**300**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**270**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-12-30 (E305052-15) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*112 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.8 %*		*77-127*	"	"	"	"	
VP-20-5 (E305052-16) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**41**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**17**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-5 (E305052-16) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**130**	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**170**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*112 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.1 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-15 (E305052-17) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**150**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**85**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**750**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**380**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-15 (E305052-17) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*112 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.2 %*		*77-127*	"	"	"	"	
VP-20-30 (E305052-18) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**250**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**45**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**150**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**24**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-20-30 (E305052-18) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**2100**	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**780**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*114 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.7 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-5 (E305052-19) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	**8.8**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**410**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**36**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**21**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**58**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**3.8**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**250**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-5 (E305052-19) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.1 %*		*77-127*	"	"	"	"	
VP-14-15 (E305052-20) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	**9.1**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**470**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**39**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-15 (E305052-20) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**160**	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**350**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*114 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.9 %*		*77-127*	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-22 (E305052-21) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	**11**	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**580**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**49**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**350**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**440**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-14-22 (E305052-21) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*117 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.9 %*		*77-127*	"	"	"	"	
VP-16-5 (E305052-22) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**23**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**13**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-16-5 (E305052-22) Vapor Sampled: 18-May-23 Received: 18-May-23									
Trichloroethene	**18**	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**150**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.6 %*		*77-127*	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-16-15 (E305052-23) Vapor Sampled: 18-May-23 Received: 18-May-23									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**65**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**58**	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**260**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**320**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-16-15 (E305052-23) Vapor Sampled: 18-May-23 Received: 18-May-23									
o-Xylene	ND	4.4	ug/m3	1	EE32309	23-May-23	24-May-23	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*112 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.6 %*		*77-127*	"	"	"	"	

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE32309 - TO-15										
Blank (EE32309-BLK1)				Prepared & Analyzed: 23-May-23						
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3							
Dichlorodifluoromethane (F12)	ND	5.0	"							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
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Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE32309 - TO-15										
Blank (EE32309-BLK1)				Prepared & Analyzed: 23-May-23						
Chlorobenzene	ND	4.7	ug/m3							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							
Surrogate: 1,2-Dichloroethane-d4	*232*		"	*214*		*109*	*76-134*			
Surrogate: Toluene-d8	*215*		"	*208*		*103*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*319*		"	*363*		*88.0*	*77-127*			
Blank (EE32309-BLK2)				Prepared: 23-May-23 Analyzed: 24-May-23						
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3							
Dichlorodifluoromethane (F12)	ND	5.0	"							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							

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7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE32309 - TO-15										
Blank (EE32309-BLK2)				Prepared: 23-May-23 Analyzed: 24-May-23						
1,1-Dichloroethane	ND	4.1	ug/m3							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							
Chlorobenzene	ND	4.7	"							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE32309 - TO-15										
Blank (EE32309-BLK2)				Prepared: 23-May-23 Analyzed: 24-May-23						
1,2,4-Trichlorobenzene	ND	38	ug/m3							
Hexachlorobutadiene	ND	54	"							
Surrogate: 1,2-Dichloroethane-d4	*235*		"	*214*		*110*	*76-134*			
Surrogate: Toluene-d8	*208*		"	*208*		*100*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*314*		"	*363*		*86.6*	*77-127*			
LCS (EE32309-BS1)				Prepared: 23-May-23 Analyzed: 24-May-23						
Dichlorodifluoromethane (F12)	110	5.0	ug/m3	101		113	59-128			
Vinyl chloride	61	2.6	"	52.0		117	64-127			
Chloroethane	56	8.0	"	53.6		104	63-127			
Trichlorofluoromethane (F11)	140	5.6	"	113		127	62-126			QL-1H
1,1-Dichloroethene	83	4.0	"	80.8		103	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	160	7.7	"	155		102	66-126			
Methylene chloride (Dichloromethane)	70	3.5	"	70.8		99.4	62-115			
trans-1,2-Dichloroethene	77	8.0	"	80.8		95.7	67-124			
1,1-Dichloroethane	82	4.1	"	82.4		98.9	68-126			
cis-1,2-Dichloroethene	77	4.0	"	80.0		96.7	70-121			
Chloroform	100	4.9	"	99.2		105	68-123			
1,1,1-Trichloroethane	110	5.5	"	111		99.3	68-125			
1,2-Dichloroethane (EDC)	94	4.1	"	82.4		114	65-128			
Benzene	58	3.2	"	64.8		89.7	69-119			
Carbon tetrachloride	120	6.4	"	128		95.2	68-132			
Trichloroethene	120	5.5	"	110		105	71-123			
Toluene	71	3.8	"	76.8		91.9	66-119			
1,1,2-Trichloroethane	110	5.5	"	111		98.1	73-119			
Tetrachloroethene	130	6.9	"	138		91.6	66-124			
1,1,1,2-Tetrachloroethane	120	7.0	"	140		82.3	67-129			
Ethylbenzene	71	4.4	"	88.4		80.3	70-124			
m,p-Xylene	72	8.8	"	88.4		80.9	61-134			
o-Xylene	71	4.4	"	88.4		80.3	67-125			
1,1,2,2-Tetrachloroethane	120	7.0	"	140		83.1	65-127			
Surrogate: 1,2-Dichloroethane-d4	*247*		"	*214*		*116*	*76-134*			

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE32309 - TO-15										
LCS (EE32309-BS1)				Prepared: 23-May-23 Analyzed: 24-May-23						
Surrogate: Toluene-d8	*211*		*ug/m3*	*208*		*102*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*337*		"	*363*		*92.8*	*77-127*			
LCS (EE32309-BS2)				Prepared: 23-May-23 Analyzed: 24-May-23						
Dichlorodifluoromethane (F12)	130	5.0	ug/m3	101		128	59-128			QL-1H
Vinyl chloride	68	2.6	"	52.0		130	64-127			QL-1H
Chloroethane	59	8.0	"	53.6		111	63-127			
Trichlorofluoromethane (F11)	170	5.6	"	113		147	62-126			QL-1H
1,1-Dichloroethene	92	4.0	"	80.8		114	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	170	7.7	"	155		110	66-126			
Methylene chloride (Dichloromethane)	81	3.5	"	70.8		115	62-115			
trans-1,2-Dichloroethene	82	8.0	"	80.8		101	67-124			
1,1-Dichloroethane	85	4.1	"	82.4		103	68-126			
cis-1,2-Dichloroethene	80	4.0	"	80.0		100	70-121			
Chloroform	110	4.9	"	99.2		112	68-123			
1,1,1-Trichloroethane	120	5.5	"	111		109	68-125			
1,2-Dichloroethane (EDC)	100	4.1	"	82.4		121	65-128			
Benzene	61	3.2	"	64.8		93.4	69-119			
Carbon tetrachloride	130	6.4	"	128		104	68-132			
Trichloroethene	120	5.5	"	110		107	71-123			
Toluene	74	3.8	"	76.8		96.7	66-119			
1,1,2-Trichloroethane	120	5.5	"	111		104	73-119			
Tetrachloroethene	130	6.9	"	138		96.7	66-124			
1,1,1,2-Tetrachloroethane	120	7.0	"	140		84.3	67-129			
Ethylbenzene	71	4.4	"	88.4		80.3	70-124			
m,p-Xylene	73	8.8	"	88.4		82.1	61-134			
o-Xylene	72	4.4	"	88.4		81.8	67-125			
1,1,2,2-Tetrachloroethane	120	7.0	"	140		84.0	65-127			
Surrogate: 1,2-Dichloroethane-d4	*260*		"	*214*		*122*	*76-134*			
Surrogate: Toluene-d8	*222*		"	*208*		*107*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*333*		"	*363*		*91.7*	*77-127*			

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GSI Environmental, Inc	Project: GSI051923-10	
7595 Irvine Center Dr, Ste 250	Project Number: 6239 / 2993 6th St	Reported:
Irvine, CA 92618	Project Manager: Samantha Curtis	25-May-23 08:23

Notes and Definitions

QL-1H	The LCS and/or LCSD recoveries fell above the established control specifications for this analyte. Any result for this compound is qualified and should be considered biased high.
LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

All soil results are reported in wet weight.

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15 and H&P 8260SV.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification number 2741.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

Mobile Geochemistry, Inc.
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& Field Office - Signal Hill, CA
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VAPOR / AIR Chain of Custody

DATE: 5/18/23
Page 1 of 3

Lab Client and Project Information

Lab Client/Consultant: GSI	Project Name / #: 6239
Lab Client Project Manager: SAMANTHA CURTIS	Project Location: 2993 6TH ST
Lab Client Address: 7595 IRVINE CENTER DR SUITE 250	Report E-Mail(s): SCURTIS KKAROCHOCKI @GSI-NET.COM
Lab Client City, State, Zip: IRVINE CA 92618	
Phone Number: 949 892 5239	

Sample Receipt (Lab Use Only)

Date Rec'd: 5/19/23 Control #: 23024802
H&P Project # GSI051923-10
Lab Work Order # E305052
Sample Intact: ☑ Yes ☐ No ☐ See Notes Below
Receipt Gauge ID: 60206 Temp: RT
Outside Lab:
Receipt Notes/Tracking #:
Lab PM Initials: HB for SM

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☒ Excel EDD ☐ Other EDD: _____
☐ CA Geotracker Global ID: _____

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify): _____

Sampler Information

Sampler(s): C. WHITE
Signature: C White
Date: 5/18/23

Additional Instructions to Laboratory:

* *Preferred VOC units (please choose one):*
☐ µg/L ☑ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube,etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
VP-1-15		05/18/23	0802	SV	400	607	-1	X						X						
VP-1-30		"	0800	"	"	603	-1	X						X						
VP-1-30 REP		"	0807	"	"	602	-1	X						X						
VP-1-5		"	0800	"	"	608	-1	X						X						
VP-9-5		"	0846	"	"	609	-2	X						X						
VP-9-15		"	0846	"	"	610	-2	X						X						
VP-9-30		"	0844	"	"	611	-1	X						X						
VP-11-5		"	0917	"	"	613	-1	X						X						
VP-11-15		"	0917	"	"	614	-2	X						X						
VP-19-5		"	1140	"	"	616	-8	X						X						

Approved/Relinquished by:	Company: GSI	Date: 5/18/23	Time: 1500	Received by: C. WHITE	Company: H&P	Date: 5/18/23	Time: 1500
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

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VAPOR / AIR Chain of Custody

DATE: 5/18/23

Lab Client and Project Information

Lab Client/Consultant: GSI	Project Name / #: 6239
Lab Client Project Manager: SAMANTHA CURTIS	Project Location: 2993 6TH ST
Lab Client Address: 7595 IRVINE CENTER DR SUITE 250	Report E-Mail(s): SCURTIS KKUROCHOCKI @GSI-NET.COM
Lab Client City, State, Zip: IRVINE CA 92618	
PhoneNumber: 949 892 5239	

Reporting Requirements
- [x] Standard Report [ ] Level III [ ] Level IV
- [x] Excel EDD [ ] Other EDD: _____
- [ ] CA Geotracker Global ID: _____

Turnaround Time
- [x] **Standard** (7 days for preliminary report, 10 days for final report)
- [ ] Rush (specify): _____

Sampler Information
Sampler(s): C. WHITE
Signature: C. White
Date: 5/18/23

Sample Receipt (Lab Use Only)

Date Rec'd: 5/19/23 Control#: 230248.02
H&P Project # GSI051923-10
Lab Work Order # 6 E305052
Sample Intact: [x] Yes [ ] No [ ] See Notes Below
Receipt Gauge ID: 60206 Temp: RT
Outside Lab:
Receipt Notes/Tracking #: H&P COC
Lab PM Initials: SM

Additional Instructions to Laboratory:

* *Preferred VOC units (please choose one):*
[ ] µg/L [ ] µg/m³ [ ] ppbv [ ] ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List [x] TO-15	VOCs Short List / Project List [ ] TO-15	Oxygenates [ ] TO-15	Naphthalene [ ] TO-15	TPHv as Gas [ ] TO-15m	Aromatic/Aliphatic Fractions [ ] TO-15m	Leak Check Compound [x] PFA [ ] IPA [ ] He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 [ ] CO2 [ ] O2 [ ] N2				
VP-19-15		05/18/23	0959	SV	400 mL	615	-2	X						X							
VP-19-30		"	0959	"	"	612	-2	X						X							
VP-12-5		"	1230	"	"	623	-3	X						X							
VP-12-15		"	1230	"	"	617	-3	X						X							
VP-12-30		"	1230	"	"	624	-2	X						X							
VP-20-5		"	1306	"	"	619	-2	X						X							
VP-20-15		"	1306	"	"	626	-3	X						X							
VP-20-30		"	1306	"	"	618	-2	X						X							
VP-14-5		"	1344	"	"	630	-3	X						X							
VP-14-15		"	1344	"	"	622	-3	X						X							

Approved/Relinquished by:	Company: GSI	Date: 5/18/23	Time: 1500	Received by: C. WHITE	Company: H&P	Date: 5/18/23	Time: 1500
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

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VAPOR / AIR Chain of Custody

DATE: 5/18/23
Page 3 of 3

Lab Client and Project Information

Lab Client/Consultant: GSI	Project Name / #: 6239
Lab Client Project Manager: SAMANTHA CURTIS	Project Location: 2993 6TH ST
Lab Client Address: 7595 IRVINE CENTER DR SUITE 250	Report E-Mail(s): SCURTIS K.KLOCHOCKI @GSI-NET.COM
Lab Client City, State, Zip: IRVINE CA 92618	
Phone Number: 949 892 5239	

Reporting Requirements

- [x] Standard Report [ ] Level III [ ] Level IV
- [x] Excel EDD [ ] Other EDD:
- [ ] CA Geotracker Global ID:

Turnaround Time

- [x] **Standard** (7 days for preliminary report, 10 days for final report)
- [ ] **Rush** (specify):

Sampler Information

Sampler(s): C. WHITE
Signature:
Date: 5/18/23

Sample Receipt (Lab Use Only)

Date Rec'd: 5/19/23 Control #: 230248.02
H&P Project # GSI051923-10
Lab Work Order # E305052
Sample Intact: [x] Yes [ ] No [ ] See Notes Below
Receipt Gauge ID: 60206 Temp: RT
Outside Lab:
Receipt Notes/Tracking #:
Lab PM Initials: SM

Additional Instructions to Laboratory:

* *Preferred VOC units (please choose one):*
[ ] µg/L [ ] µg/m³ [ ] ppbv [ ] ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List [ ] 8260SV [x] TO-15	VOCs Short List / Project List [ ] 8260SV [ ] TO-15	Oxygenates [ ] 8260SV [ ] TO-15	Naphthalene [ ] 8260SV [ ] TO-15	TPHv as Gas [ ] 8260SVm [ ] TO-15m	Aromatic/Aliphatic Fractions [ ] 8260SVm [ ] TO-15m	Leak Check Compound [x] DFA [ ] IPA [ ] He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 [ ] CO2 [ ] O2 [ ] N2				
VP-14-22		05/18/23	1344	SV	400mL	621	-3	X						X						
VP-11b-5		"	1432	"	"	620	-3	X						X						
VP-16-15		"	1432	"	"	628	-3	X						X						

Approved/Relinquished by:	Company: GSI	Date: 5/18/23	Time: 1500	Received by: C. WHITE	Company: H&P	Date: 5/18/23	Time: 1500
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

H&P Mobile Geochemistry Inc.

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: LGSIDS1823-TECH
Site Address: 2993 6TH ST
Consultant: LGSI
Consultant Rep(s): KONRAD

Date: 5/18/23
Page: 1 of 2
H&P Rep(s): C. WHITE

Reviewed: EC
Scanned:

Equipment Info
Inline Gauge ID#: —
Pump ID#: 015, 039, 012

Purge Volume Information
PV Amount: 3 PV
PV Includes: ☒ Tubing ☒ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information						
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O
1	VP-1-15	607	059	0754	-29	0802	0	15	16.25	1/4	12.	2.25	6	2.25	x	x	1778	200	8:54	200	-60
2	VP-1-30	603	334	0754	-28	0800	0	30	31.5	1/4	12	2.25	6	2.25	x	x	2033	200	10:10	200	-10
3	VP-1-30 REP	602	334	0803	-26	0807	0	30	31.5	1/4	12.	2.25	6	2.25	x	x	2433	200	—	200	-10
4	VP-1-5	608	156	0754	-29	0800	0	5	6	1/4	12	2.25	6	2.25	x	x	1607	200	8:03	200	-5
5	VP-9-5	609	002	0840	-26	0846	0	5	6	1/4	12	2.25	6	2.25	x	x	1607	200	8:03	200	-80
6	VP-9-15	610	115	0840	-30+	0846	●	15	16.25	1/4	12.	2.25	6	2.25	x	x	1778	200	8:54	200	-85
7	VP-9-30	611	317	0840	-27	0844	0	30	31.5	1/4	12.	2.25	6	2.25	x	x	2033	200	10:10	200	-5
8	VP-11-5	613	160	0913	-30+	0917	0	5	6	1/4	12	2.25	6	2.25	x	x	1607	200	8:03	200	-5
9	VP-11-15	614	081	0913	-30+	0917	0	15	16.25	1/4	12	2.25	6	2.25	x	x	1778	200	8:54	200	-15
(10)	VP-19-5	616	211	1113	-30	1140	-5	5	6	1/4	12	2.25	6	2.25	x	x	1607	200	8:03	200	-95
11	VP-19-15	615	032	0956	-30+	0959	0	15	16.25	1/4	12	2.25	6	2.25	x	x	1778	200	8:54	200	-25
12	VP-19-30	612	071	0956	-26	0959	0	30	31.5	1/4	12.	2.25	6	2.25	x	x	2033	200	10:10	200	-15

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
YLW SHALLOW
BLUE MID
RED DEEP
(10) -100 AFTER 1 MINUTE OF PURGE. START/STOP AND PAUSE TO MAINTAIN <-100"
PARTIAL COLLECTION ⊙

H&P Mobile Geochemistry Inc.

FMS005
Revision: 3
Revised: 1/15/16
Effective: 1/25/16
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: GS1051823-IECH
Site Address: 2993 6TH ST
Consultant: GSI
Consultant Rep(s): KONRAD

Date: 5/18/23
Page: 2 of 2
H&P Rep(s): C. WHITE

Reviewed: EC
Scanned: YB

Equipment Info
Inline Gauge ID#: —
Pump ID#: 015,039,012

Purge Volume Information
PV Amount: 3PV
PV Includes: ☒ Tubing ☒ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample and Summa Information							Probe Specs							Purge & Collection Information						
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O
1	VP-12-5	623	108	1226	-28	1230	0	5	6	1/4	12	2.25	6	2.25	x	x	1607	200	8:03	200	-15
2	VP-12-15	617	292	1226	-29	1230	0	15	16.25	1/4	12	2.25	6	2.25	x	x	1778	200	8:54	200	-5
3	VP-12-30	624	123	1226	-26	1230	0	30	31.5	1/4	12	2.25	6	2.25	x	x	2033	200	10:10	200	-5
4	VP-20-5	619	383	1302	-29	1306	0	5	6	1/4	12	2.25	6	2.25	x	x	1607	200	8:03	200	-5
5	VP-20-15	626	234	1302	-26	1306	0	15	16.25	1/4	12	2.25	6	2.25	x	x	1778	200	8:54	200	-10
6	VP-20-30	618	182	1302	-27	1306	0	30	31.5	1/4	12	2.25	6	2.25	x	x	2033	200	10:10	200	-10
7	VP-14-5	630	042	1339	-26	1344	0	5	6	1/4	12	2.25	6	2.25	x	x	1607 EW	200	9:03 9:50 EW	200	-5
8	VP-14-15	622	152	1339	-28	1344	0	15	16.25	1/4	12	2.25	6	2.25	x	x	1778	200	8:54	200	-5
9	VP-14-22	621	147	1339	-25	1344	0	22	23.5	1/4	12	2.25	6	2.25	x	x	1607 1834 EW	200	8:03 9:30 EW	200	-15
10	VP-16-5	620	289	1428	-26	1432	0	5	6	1/4	12	2.25	6	2.25	x	x	1607	200	8:03	200	-15
11	VP-16-15	628	387	1428	-29	1432	0	15	16.25	1/4	12	2.25	6	2.25	x	x	1778	200	8:54	200	-5
12																					

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):