December 6, 2023

William McGraw
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Ontario, California

Via Email: williammcgraw@gmail.com

**Subject:** **Soil Sampling Letter Report**
**Robison Calf Ranch (8455 Schaefer Avenue)**
**APN 216-312--04; -05**
**Ontario, California 91762**
**Project No. 0923004.1**

Reference: TAGDD: "*Phase I Environmental Site Assessment, Robinson Calf Ranch, APN 216-312-04; -05 and -09, City of Ontario, County of San Bernardino, California 91762*" (draft) October 23, 2023

Dear Sir:

The following letter report documents soil sampling conducted at the referenced site location on November 21, 2023.

**BACKGROUND**

The subject property in the city of Ontario, California, comprises a total of 2 contiguous parcels (216-312-04 and -05) located at the southwest corner of Walker Avenue and Schaefer Avenue, which occupies 18-acres. Based on aerial photographs, the subject property appears to be developed with a single residence, a former dairy structure, and scattered outbuildings. The property is utilized primarily for truck parking and maintenance.

EEI was contacted to prepare a Phase I ESA report for due diligence purposes. As part of that process three truck maintenance areas were identified with surficial oil spillage and outdoor storage of large quantities of used oil and other automotive chemicals. TAGDD recommended soil sampling to document the presence or absence of Petroleum Hydrocarbons and related chemicals.

**PREPARATION ACTIVITIES**

Prior to conducting field activities, TAGDD staff evaluated sampling locations, coordinated site access, marked the site; and mobilized a private utility locator to clear trench locations.

**SAMPLING RATIONALE & ANALYTICAL PROGRAM**

Soil sampling locations were chosen based on the presence of truck maintenance facilities noted during our Phase I ESA site reconnaissance. Three maintenance areas where large quantities of waste oil were stored and where outdoor oil changes and maintenance occurred were sampled.

One location (north end of eastern maintenance area) also held an Aboveground Storage Tank (AST) with substantial leakage of an unknown organic substance. The intent of sampling was to verify whether historical automotive maintenance activities had resulted in substantial releases.

The chosen sampling analysis procedure was to evaluate all samples for Total Petroleum Hydrocarbons with Carbon Chain Identification (CCID), which would provide information about a full range of fuel and non-fuel petroleum hydrocarbons. Based on the results of CCID analysis, a second set of 8 samples with the most elevated TPH would be further analyzed for Volatile Organic Compounds by 8260b Semi-Volatile Organics (VOC); Semi-Volatile Organics (SVOC) by EPA 8270; Polychlorinated Bisphenols by EPA 8282 (PCB); and Total CAM Metals by EPA 6010/7471A.

**FIELD SAMPLING PROCEDURES**

On November 21, 2023 TAGDD mobilized to the site with Chamberlain Backhoe, and collected soil samples at selected locations (**Figure 1**). In general, samples were collected at 1-foot, 3-feet, and 5-feet below grade. A total of 23 soil samples were collected from 7 locations.

Soil samples were collected with the backhoe bucket at selected depths. Samples were collected by forcing an 8-ounch sampling jar into the backhoe bucket soil to prevent any potential cross-contamination. Sample jars were immediately sealed and placed into a pre-chilled cooler. Following sample collection samples were delivered to a fixed laboratory (Calscience/Envirofin) under chain-of-custody and logged in by the laboratory.

**SAMPLE RESULTS**

**Table 1** summarizes soil sample results for TPH/CCID, VOC, SVOC and PCB. **Table 2** summarizes total metals results. All 23 samples were analyzed for TPH/CCID. TPH/CCID results ranged from 140 mg/kg ("ppm") to 25,000 mg/kg (analogous to "parts per million).

VOC, SVOC, and PCB were reported in µg/kg (analogous to "parts per billion). A total of five VOC were reported in 6 of the 8 selected samples. Acetone (E), 2-Butanone, Ethanol (E), Methylene Chloride, and Toluene were reported at maximum concentrations of, respectively, 710 µg/kg, 160 µg/kg, 180,000 and 10 µg/kg and 1.3 µg/kg. Acetone was reported in 3 samples; -Butanone was reported in 2 samples; Ethanol was reported in 1 sample; Methylene Chloride was reported in 1 sample; and Toluene was reported in 3 samples.

**TABLE 1**
**TPH/VOC/SVOC/PCB RESULTS**

| **Sample ID** | **Total TPH-CCID** (mg/kg) | **EPA 8260 VOC** (µg/kg) | **EPA 8270 SVOC** (mg/kg) | **EPA 8282 PCB** (µg/kg) |
|---|---|---|---|---|
| **8445-1-1** | **1600** | 10 µg/kg Methylene Chloride | ND | ND |
| **8445-1-3** | **230** | 1.1 µg/kg Toluene | 36 mg/kg Dimethyl phthalate | ND |
| 8445-1-5 | ND | - | - | - |
| **8445-2-1** | **240** | ND | ND | ND |
| 8445-2-3 | 15 | - | - | - |
| 8445-2-5 | ND | - | - | - |
| 8445-3-1 | ND | - | - | - |

| | | | | |
|---|---|---|---|---|
| 8445-3-3 | ND | - | - | - |
| 8445-3-5 | ND | - | - | - |
| **8445-4-1.5** | **150** | 180 µg/kg Acetone<br>1.3 µg/kg Toluene | ND | ND |
| 8445-4-3 | 6 | - | - | - |
| 8445-4-5 | ND | - | - | - |
| 8445-5-2 | 29 | - | - | - |
| **8445-5-3** | **380** | ND | ND | ND |
| 8445-5-5 | ND | - | - | - |
| 8445-6-1 | 10 | - | - | - |
| 8445-6-3 | 23 | - | - | - |
| 8445-6-5 | ND | - | - | - |
| **8445-7S** | **25000** | 180000 µg/kg Ethanol | ND | ND |
| **8445-7-2** | **1700** | 710 µg/kg Acetone (E)<br>160 µg/kg 2-Butanone<br>1.1 µg/kg Toluene | ND | ND |
| **8445-7-3** | **690** | 680 µg/kg Acetone (E)<br>160 µg/kg 2-Butanone<br>10000 µg/kg Ethanol (E) | ND | ND |
| 8445-7-5 | 71 | - | - | - |
| **HHRA[1]** | C17-C32 / **2400**<br>C9-C16 / **97** | Methylene Chloride **2200**<br>Toluene **1100000**<br>2-Butanone **Not Listed**<br>Acetone **Not Listed**<br>Ethanol **Not Listed** | Dimethyl phthalate **51,000** | **N/A** |
| HHRA = HUMAN HEALTH RISK ASSESSMENT (HHRA) NOTE NUMBER 3, DTSC-modified Screening Levels (DTSC-SL) June 2020 revised May 2022 | | | | |

**TABLE 2**
**TOTAL METAL RESULTS (Mg/Kg)**

| Sample ID | As | Ba | Be | Cd | Cr | Co | Cu | Pb | Ni | Vn | Zn | Hg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8445-1-1 | 2.2 | 59 | 0.17 | 0.19 | 12 | 4.6 | 18 | 6.7 | 9.1 | 27 | 66 | ND |
| 8445-1-3 | 3.5 | 141 | 0.35 | - | 40 | 8.6 | 23 | 3.8 | 13 | 99 | 65 | ND |
| 8445-2-1 | 4.8 | 99 | 0.27 | 0.31 | 16 | 5.4 | 29 | 8.1 | 9.9 | 33 | 70 | ND |
| 8445-4-1.5 | 2.1 | 97 | 0.31 | - | 16 | 5.5 | 14 | 8.1 | 8.3 | 37 | 46 | ND |
| 8445-5-3 | 3.6 | 78 | 0.24 | - | 18 | 5.9 | 22 | - | 12 | 37 | 61 | ND |
| 8445-7S | 2.3 | 70 | 0.19 | 0.29 | 13 | 3.5 | 23 | 5.4 | 6.1 | 21 | 70 | ND |
| 8445-7-2 | - | 54 | - | - | 4.7 | 2.8 | 10 | 2.7 | 10 | 11 | 28D | ND |
| 8445-7-3 | 3.5 | 110 | 0.31 | - | 18 | 7.1 | 17 | 2.9 | 10 | 42 | 52 | ND |
| - | | | | | | | | | | | | |
| **TTLC[1]** | **12*** | **10000** | **75** | **100** | **2500** | **8000** | **2500** | **1000** | **2000** | **2400** | **5000** | **20** |
| **TTLC[1]=Title 22 Total Threshold Limit Concentration / 12[2]=Commonly used California State Arsenic Screening Level** | | | | | | | | | | | | |
| **As=Arsenic Ba-Barium Be = Beryllium Cd=Cadmium Cr-Chrome Co=Cobalt Cu=Copper Pb=Lead Ni=Nickel Vn=Vanadium Zn=Zinc Hg=Mercury** | | | | | | | | | | | | |

## SCREENING EVALUATION GUIDANCE

California's DTSC uses a modified (HHRA Note 3 – DTSC Modified Screening Level (SL) tables provide chemical and metals Soil Screening levels for both residential and commercial projects (SL). These SL include Total Petroleum Hydrocarbons (TPH). In general, local cities and counties also use guidance from the 1984 LUFT (Leaking Underground Fuel Tank) Manual and other sources. Commonly used soil remediation values are 100 mg/kg for gasoline (Carbon Chain C4-C12); 100-1000 mg/kg for Diesel Range (C9-C20), and up to 10,000 mg/kg for oil/used oil.

However, the more toxic individual constituents of these hydrocarbons (benzene, toluene, ethylbenzene, xylenes); fuel additives (MTBE), Polynuclear aromatics (napthalene and others), and/or solvents (tetrachloroethene, vinyl chloride) generally are more important for screening. Values for these constituents, as well as selected metals, are also in the HHRA.

Metals also have a California hazardous level which is defined by the Title 22 "TTLC' and "STLC" as well as other criteria (leaching/wet test). TTLC values and SL's are noted in Table 2.

## CONCLUSIONS / DISCUSSION

TAGDD performed limited soil sampling for TPH at 23 locations at the subject property due to the presence three truck/vehicle maintenance areas and associated chemical use. The most impacted TPH samples (8 total) were further analyzed for a suite of analyses, including VOC, SVOC, PCB, and metals.

Results indicate that TPH at most sampled locations are below referenced screening criteria. Typical toxic fuel constituents such as benzene, as well as any solvent-related materials, are absent. Additionally TPH found was generally found at shallow depths. Metals, SVOC, and PCB were either absent or at found at low / background concentrations.

One location (8445-7) was found with elevated levels of TPH. Several constituents were present that were not listed within HHRA guidance.

## RECOMMENDATIONS

Based on the soil sampling results, no evidence of widespread used oil or fuel contaminated were noted at the maintenance areas sampled.

We recommend that sample area 8445-7, located where hydrocarbon spillage is present from an aboveground storage tank (AST) at the eastern truck maintenance area, impacted soil be excavated; characterized and property disposed in the future. We further recommend that a Soil Management Plan (SMP) be prepared for future grading activities to properly manage any petroleum or other hazardous substances that could potentially be present.

## LIMITATIONS

Findings provided herein have been derived in accordance with current standards of practice, and no warranty is expressed or implied. Standards of practice are subject to change with time. This report has been prepared for the sole use of the Client and is not intended as a regulatory submittal document. No geologic or engineering conclusions have been made. Site conditions, land use (both onsite and offsite), or other factors may change as a result of manmade influences, and additional work may be required with the passage of time.

This report should not be relied upon by other parties without the express advance written consent of TAGDD or our Client, subject to our contract limitations. Any use or reliance upon this environmental evaluation by a party other than the Client, shall be solely at the risk of such third party and without legal recourse against TA-Group DD, its employees, officers, or directors, regardless of whether the action in which recovery of damages is brought or based upon contract, tort, statue, or otherwise. The Client has the responsibility to see that all parties to the project, including the designer, contractor, subcontractor, and building official, etc. with the need to be aware of this report are aware of this report in its complete form. This report contains information which may be used in the preparation of contract specifications; however, the report is not designed as a specification document. TAGDD assumes no responsibility or liability for work or testing performed by others. Thank you for contacting TAGDD regarding this important project. If you have questions, please contact the undersigned at (760) 473-0645.

Sincerely,
**TA-Group DD, LLC**

Timothy A. Lester, CEM
Founder/Principal

**Attachments:** Figure 1: Sampling Locations
Calscience Laboratory Report, job 570-161752-2, dated December 5, 2023

***Selected References:***

American Society of Testing Methods publications for Environmental Site Assessments; "*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", ASTM E5527-21.*

CA Department of Toxic Substances Control (DTSC): *Human Health Risk Assessment (HHRA) Note Number 3, DTSC-modified Screening Levels (DTSC-SLs*); updated June 2022

CA Department of Toxic Substances Control (DTSC): https://dtsc.ca.gov/defining-hazardous-waste/

USEPA: Regional Screening Levels (RSL) Regional Screening Level (RSL) Summary Table (TR=1E-06, HQ=1) May 2023 (https://www.epa.gov/risk/forms/contact-us-about-regional-screening-levels-rsls).

# Figures

N

0 125 ft 250 ft

Scale is Approximate

**Soil Sample Locations**

Robinson Calf Ranch, Northern Parcels (8455 Schaefer)
Assessor's Parce Number 0216-312-04; -05
Ontario, San Bernardino County, California
Project 0923004

TA-Group DD, LLC

**FIGURE 1**

eurofins | Environment Testing

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Arturo Hoyos
EnviroApplications, Inc.
2831 Camino Del Rio South
Suite 214
San Diego, California 92108

Generated 11/29/2023 7:23:54 AM

## JOB DESCRIPTION

8455

## JOB NUMBER

570-161752-1

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin CA 92780

See page two for job notes and contact information.



my EOL

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

## Authorization

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Authorized for release by
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# Case Narrative

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Job ID: 570-161752-1

### Laboratory: Eurofins Calscience

**Narrative**

**Job Narrative**
**570-161752-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 11/21/2023 12:35 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

**Diesel Range Organics**
Method 8015B_DRO: The following samples were diluted due to the nature of the sample matrix: 8455-1-1 (570-161752-1) and 8455-2-1 (570-161752-4). Elevated reporting limits (RLs) are provided.

Method 8015B_DRO: The following sample was diluted due to the nature of the sample matrix: 8455-1-3 (570-161752-2). Elevated reporting limits (RLs) are provided.

Method 8015B_DRO: The following sample was diluted due to the nature of the sample matrix: 8455-4-1.5 (570-161752-10). Elevated reporting limits (RLs) are provided.

Method 8015B_DRO: Surrogate recovery for the following samples were outside control limits: 8455-7S (570-161752-19) and 8455-7-2 (570-161752-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015B_DRO: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-386021 and analytical batch 570-387129 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015B_DRO: The following sample was diluted due to the nature of the sample matrix: (570-161752-A-21-A MS). Elevated reporting limits (RLs) are provided.

Method 8015B_DRO: The following sample was diluted due to the nature of the sample matrix: (570-161752-A-21-B MSD). Elevated reporting limits (RLs) are provided.

Method 8015B_DRO: Surrogate recovery for the following sample was outside control limits: 8455-7-2 (570-161752-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Sample Summary

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 570-161752-1 | 8455-1-1 | Solid | 11/21/23 09:44 | 11/21/23 12:35 |
| 570-161752-2 | 8455-1-3 | Solid | 11/21/23 09:45 | 11/21/23 12:35 |
| 570-161752-3 | 8455-1-5 | Solid | 11/21/23 09:48 | 11/21/23 12:35 |
| 570-161752-4 | 8455-2-1 | Solid | 11/21/23 09:57 | 11/21/23 12:35 |
| 570-161752-5 | 8455-2-3 | Solid | 11/21/23 09:58 | 11/21/23 12:35 |
| 570-161752-6 | 8455--2-5 | Solid | 11/21/23 10:00 | 11/21/23 12:35 |
| 570-161752-7 | 8455-3-1 | Solid | 11/21/23 10:47 | 11/21/23 12:35 |
| 570-161752-8 | 8455-3-3 | Solid | 11/21/23 10:49 | 11/21/23 12:35 |
| 570-161752-9 | 8455-3-5 | Solid | 11/21/23 10:51 | 11/21/23 12:35 |
| 570-161752-10 | 8455-4-1.5 | Solid | 11/21/23 10:17 | 11/21/23 12:35 |
| 570-161752-11 | 8455-4-3 | Solid | 11/21/23 10:19 | 11/21/23 12:35 |
| 570-161752-12 | 8455-4-5 | Solid | 11/21/23 10:20 | 11/21/23 12:35 |
| 570-161752-13 | 8455-5-2 | Solid | 11/21/23 10:33 | 11/21/23 12:35 |
| 570-161752-14 | 8455-5-3 | Solid | 11/21/23 10:35 | 11/21/23 12:35 |
| 570-161752-15 | 8455-5-5 | Solid | 11/21/23 10:36 | 11/21/23 12:35 |
| 570-161752-16 | 8455-6-1 | Solid | 11/21/23 11:21 | 11/21/23 12:35 |
| 570-161752-17 | 8455-6-3 | Solid | 11/21/23 11:23 | 11/21/23 12:35 |
| 570-161752-18 | 8455-6-5 | Solid | 11/21/23 11:24 | 11/21/23 12:35 |
| 570-161752-19 | 8455-7S | Solid | 11/21/23 11:00 | 11/21/23 12:35 |
| 570-161752-20 | 8455-7-2 | Solid | 11/21/23 11:06 | 11/21/23 12:35 |
| 570-161752-21 | 8455-7-3 | Solid | 11/21/23 11:05 | 11/21/23 12:35 |
| 570-161752-22 | 8455-7-5 | Solid | 11/21/23 11:07 | 11/21/23 12:35 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: 8455-1-1**
**Date Collected: 11/21/23 09:44**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-1**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C7 as C7 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C8 as C8 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C9-C10 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C11-C12 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C13-C14 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C15-C16 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C17-C18 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C19-C20 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C21-C22 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C23-C24 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| C25-C28 | ND | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| **C29-C32** | **560** | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| **C33-C36** | **710** | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |
| **C6-C36** | **1600** | | 250 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:10 | 50 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *113* | | *60 - 138* | *11/21/23 14:23* | *11/27/23 15:10* | *50* |

**Client Sample ID: 8455-1-3**
**Date Collected: 11/21/23 09:45**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-2**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C7 as C7 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| **C8 as C8** | **25** | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C9-C10 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C11-C12 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C13-C14 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C15-C16 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C17-C18 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C19-C20 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C21-C22 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| C23-C24 | ND | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| **C25-C28** | **34** | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| **C29-C32** | **75** | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| **C33-C36** | **83** | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |
| **C6-C36** | **230** | | 25 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 15:35 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *110* | | *60 - 138* | *11/21/23 14:23* | *11/27/23 15:35* | *5* |

**Client Sample ID: 8455-1-5**
**Date Collected: 11/21/23 09:48**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-3**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C7 as C7 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C8 as C8 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C9-C10 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Client Sample ID: 8455-1-5**
**Date Collected: 11/21/23 09:48**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-3**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C12 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C13-C14 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C15-C16 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C17-C18 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C19-C20 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C21-C22 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C23-C24 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C25-C28 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C29-C32 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C33-C36 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |
| C6-C36 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *106* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 16:00* | *1* |

**Client Sample ID: 8455-2-1**
**Date Collected: 11/21/23 09:57**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-4**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C7 as C7 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C8 as C8 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C9-C10 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C11-C12 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C13-C14 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C15-C16 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C17-C18 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C19-C20 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C21-C22 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C23-C24 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| C25-C28 | ND | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| **C29-C32** | **120** | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| **C33-C36** | **130** | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |
| **C6-C36** | **240** | | 48 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:25 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *102* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 16:25* | *10* |

**Client Sample ID: 8455-2-3**
**Date Collected: 11/21/23 09:58**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-5**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C7 as C7 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C15-C16 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C17-C18 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Client Sample ID: 8455-2-3**
**Date Collected: 11/21/23 09:58**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-5**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C19-C20** | **8.5** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| **C23-C24** | **6.9** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C25-C28 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C29-C32 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| C33-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |
| **C6-C36** | **15** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 16:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *113* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 16:51* | *1* |

**Client Sample ID: 8455--2-5**
**Date Collected: 11/21/23 10:00**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-6**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C7 as C7 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C8 as C8 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C9-C10 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C11-C12 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C13-C14 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C15-C16 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C17-C18 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C19-C20 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C21-C22 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C23-C24 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C25-C28 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C29-C32 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C33-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |
| C6-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *107* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 17:16* | *1* |

**Client Sample ID: 8455-3-1**
**Date Collected: 11/21/23 10:47**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-7**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C7 as C7 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C8 as C8 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C9-C10 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C11-C12 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C13-C14 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C15-C16 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C17-C18 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C19-C20 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C21-C22 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C23-C24 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C25-C28 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Client Sample ID: 8455-3-1**
**Date Collected: 11/21/23 10:47**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-7**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C29-C32 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C33-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |
| C6-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 17:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *104* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 17:42* | *1* |

**Client Sample ID: 8455-3-3**
**Date Collected: 11/21/23 10:49**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-8**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C7 as C7 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C8 as C8 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C9-C10 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C11-C12 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C13-C14 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C15-C16 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C17-C18 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C19-C20 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C21-C22 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C23-C24 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C25-C28 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C29-C32 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C33-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |
| C6-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *119* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 18:07* | *1* |

**Client Sample ID: 8455-3-5**
**Date Collected: 11/21/23 10:51**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-9**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C7 as C7 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C15-C16 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C17-C18 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C19-C20 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C23-C24 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C25-C28 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C29-C32 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C33-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |
| C6-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:33 | 1 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 101 | | 60 - 138 | 11/21/23 14:24 | 11/27/23 18:33 | 1 |

**Client Sample ID: 8455-4-1.5**
**Date Collected: 11/21/23 10:17**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-10**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C7 as C7 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C8 as C8 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C9-C10 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C11-C12 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C13-C14 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C15-C16 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C17-C18 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C19-C20 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C21-C22 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C23-C24 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| C25-C28 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| **C29-C32** | **34** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| **C33-C36** | **29** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |
| **C6-C36** | **150** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 18:58 | 5 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 106 | | 60 - 138 | 11/21/23 14:24 | 11/27/23 18:58 | 5 |

**Client Sample ID: 8455-4-3**
**Date Collected: 11/21/23 10:19**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-11**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C7 as C7 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C8 as C8 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C9-C10 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C11-C12 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C13-C14 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C15-C16 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C17-C18 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C19-C20 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C21-C22 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| **C23-C24** | **5.5** | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C25-C28 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C29-C32 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| C33-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |
| **C6-C36** | **6.4** | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:24 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| n-Octacosane (Surr) | 112 | | 60 - 138 | 11/21/23 14:24 | 11/27/23 19:24 | 1 |

**Client Sample ID: 8455-4-5**
**Date Collected: 11/21/23 10:20**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-12**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Client Sample ID: 8455-4-5**
**Date Collected: 11/21/23 10:20**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-12**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C7 as C7 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C15-C16 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C17-C18 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C19-C20 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C23-C24 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C25-C28 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C29-C32 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C33-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |
| C6-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 19:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *114* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 19:49* | *1* |

**Client Sample ID: 8455-5-2**
**Date Collected: 11/21/23 10:33**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-13**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C7 as C7 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| **C8 as C8** | **5.9** | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C9-C10 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C11-C12 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C13-C14 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C15-C16 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C17-C18 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C19-C20 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C21-C22 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| **C23-C24** | **7.1** | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| **C25-C28** | **5.9** | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| **C29-C32** | **5.6** | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| C33-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |
| **C6-C36** | **29** | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *111* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 20:15* | *1* |

**Client Sample ID: 8455-5-3**
**Date Collected: 11/21/23 10:35**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-14**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| C7 as C7 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Client Sample ID: 8455-5-3**
**Date Collected: 11/21/23 10:35**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-14**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| **C15-C16** | **5.9** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| **C17-C18** | **7.2** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| **C19-C20** | **27** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| **C23-C24** | **57** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| **C25-C28** | **97** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| **C29-C32** | **110** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| **C33-C36** | **76** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |
| **C6-C36** | **380** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 20:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *111* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 20:41* | *1* |

**Client Sample ID: 8455-5-5**
**Date Collected: 11/21/23 10:36**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-15**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C7 as C7 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C15-C16 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C17-C18 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C19-C20 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C23-C24 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C25-C28 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C29-C32 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C33-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |
| C6-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/27/23 21:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *104* | | *60 - 138* | *11/21/23 14:24* | *11/27/23 21:07* | *1* |

**Client Sample ID: 8455-6-1**
**Date Collected: 11/21/23 11:21**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-16**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| **C7 as C7** | **5.0** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C15-C16 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C17-C18 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C19-C20 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Client Sample ID: 8455-6-1**
**Date Collected: 11/21/23 11:21**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-16**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C23-C24 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C25-C28 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C29-C32 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| C33-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |
| **C6-C36** | **10** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 06:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *100* | | *60 - 138* | *11/21/23 14:24* | *11/28/23 06:50* | *1* |

**Client Sample ID: 8455-6-3**
**Date Collected: 11/21/23 11:23**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-17**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| **C7 as C7** | **5.1** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C15-C16 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C17-C18 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C19-C20 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C23-C24 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C25-C28 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C29-C32 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| C33-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |
| **C6-C36** | **23** | | 5.0 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:11 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *102* | | *60 - 138* | *11/21/23 14:24* | *11/28/23 07:11* | *1* |

**Client Sample ID: 8455-6-5**
**Date Collected: 11/21/23 11:24**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-18**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C7 as C7 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C8 as C8 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C9-C10 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C11-C12 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C13-C14 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C15-C16 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C17-C18 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C19-C20 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C21-C22 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C23-C24 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C25-C28 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C29-C32 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Client Sample ID: 8455-6-5**
**Date Collected: 11/21/23 11:24**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-18**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C33-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |
| C6-C36 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *103* | | *60 - 138* | *11/21/23 14:24* | *11/28/23 07:32* | *1* |

**Client Sample ID: 8455-7S**
**Date Collected: 11/21/23 11:00**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-19**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| C7 as C7 | ND | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| C8 as C8 | ND | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C9-C10** | **510** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C11-C12** | **750** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C13-C14** | **1000** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C15-C16** | **1500** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C17-C18** | **2400** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C19-C20** | **4800** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C21-C22** | **4400** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C23-C24** | **1800** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C25-C28** | **1900** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C29-C32** | **2900** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C33-C36** | **3100** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |
| **C6-C36** | **25000** | | 500 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 07:53 | 100 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *1596* | *S1+* | *60 - 138* | *11/21/23 14:24* | *11/28/23 07:53* | *100* |

**Client Sample ID: 8455-7-5**
**Date Collected: 11/21/23 11:07**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-22**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| C7 as C7 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| C8 as C8 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| C9-C10 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| C11-C12 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| C13-C14 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| C15-C16 | ND | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| **C17-C18** | **5.3** | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| **C19-C20** | **9.0** | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| **C21-C22** | **10** | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| **C23-C24** | **7.0** | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| **C25-C28** | **7.2** | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| **C29-C32** | **9.2** | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| **C33-C36** | **7.5** | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |
| **C6-C36** | **71** | | 5.1 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 07:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *100* | | *60 - 138* | *11/21/23 14:26* | *11/28/23 07:29* | *1* |

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) - DL

**Client Sample ID: 8455-7-2**
**Date Collected: 11/21/23 11:06**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-20**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| C7 as C7 | ND | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C8 as C8** | **67** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C9-C10** | **91** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C11-C12** | **61** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C13-C14** | **97** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C15-C16** | **140** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C17-C18** | **200** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C19-C20** | **310** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C21-C22** | **330** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C23-C24** | **79** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C25-C28** | **81** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C29-C32** | **110** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C33-C36** | **110** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |
| **C6-C36** | **1700** | | 24 | | mg/Kg | | 11/21/23 14:24 | 11/28/23 19:44 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *158* | *S1+* | *60 - 138* | *11/21/23 14:24* | *11/28/23 19:44* | *5* |

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Method: SW846 8015B - Diesel Range Organics (DRO) (GC) - RA

**Client Sample ID: 8455-7-3**
**Date Collected: 11/21/23 11:05**
**Date Received: 11/21/23 12:35**

**Lab Sample ID: 570-161752-21**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C7 as C7** | **5.9** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C8 as C8** | **45** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C9-C10** | **42** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C11-C12** | **30** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C13-C14** | **37** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C15-C16** | **52** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C17-C18** | **67** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C19-C20** | **110** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C21-C22** | **140** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C23-C24** | **42** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C25-C28** | **43** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C29-C32** | **49** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C33-C36** | **34** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |
| **C6-C36** | **690** | | 4.9 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 19:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *132* | | *60 - 138* | *11/21/23 14:26* | *11/28/23 19:33* | *1* |

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 570-386020/1-A**
**Matrix: Solid**
**Analysis Batch: 386825**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 386020**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C7 as C7 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C15-C16 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C17-C18 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C19-C20 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C23-C24 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C25-C28 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C29-C32 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C33-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |
| C6-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:23 | 11/27/23 13:04 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *124* | | *60 - 138* | *11/21/23 14:23* | *11/27/23 13:04* | *1* |

**Lab Sample ID: LCS 570-386020/2-A**
**Matrix: Solid**
**Analysis Batch: 386825**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 386020**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | | | 400 | 442.1 | | mg/Kg | | 111 | 80 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *105* | | *60 - 138* |

**Lab Sample ID: LCSD 570-386020/3-A**
**Matrix: Solid**
**Analysis Batch: 386825**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 386020**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | | | 400 | 494.4 | | mg/Kg | | 124 | 80 - 130 | 11 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *120* | | *60 - 138* |

**Lab Sample ID: 570-161752-3 MS**
**Matrix: Solid**
**Analysis Batch: 386825**

**Client Sample ID: 8455-1-5**
**Prep Type: Total/NA**
**Prep Batch: 386020**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | ND | | 394 | 482.5 | | mg/Kg | | 123 | 43 - 165 | | |

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 570-161752-3 MS**
**Matrix: Solid**
**Analysis Batch: 386825**

**Client Sample ID: 8455-1-5**
**Prep Type: Total/NA**
**Prep Batch: 386020**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| *n-Octacosane (Surr)* | *107* | | *60 - 138* |

**Lab Sample ID: 570-161752-3 MSD**
**Matrix: Solid**
**Analysis Batch: 386825**

**Client Sample ID: 8455-1-5**
**Prep Type: Total/NA**
**Prep Batch: 386020**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | ND | | 402 | 521.0 | | mg/Kg | | 129 | 43 - 165 | 8 | 35 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| *n-Octacosane (Surr)* | *116* | | *60 - 138* |

**Lab Sample ID: MB 570-386021/1-A**
**Matrix: Solid**
**Analysis Batch: 387129**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 386021**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C6 as C6 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C7 as C7 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C8 as C8 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C9-C10 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C11-C12 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C13-C14 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C15-C16 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C17-C18 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C19-C20 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C21-C22 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C23-C24 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C25-C28 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C29-C32 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C33-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |
| C6-C36 | ND | | 5.0 | | mg/Kg | | 11/21/23 14:26 | 11/28/23 04:57 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *93* | | *60 - 138* | *11/21/23 14:26* | *11/28/23 04:57* | *1* |

**Lab Sample ID: LCS 570-386021/2-A**
**Matrix: Solid**
**Analysis Batch: 387129**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 386021**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | | | 400 | 396.9 | | mg/Kg | | 99 | 80 - 130 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| *n-Octacosane (Surr)* | *93* | | *60 - 138* |

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCSD 570-386021/3-A**
**Matrix: Solid**
**Analysis Batch: 387129**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 386021**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | | | 400 | 402.8 | | mg/Kg | | 101 | 80 - 130 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *94* | | *60 - 138* |

**Lab Sample ID: 570-161752-21 MS**
**Matrix: Solid**
**Analysis Batch: 387129**

**Client Sample ID: 8455-7-3**
**Prep Type: Total/NA**
**Prep Batch: 386021**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | ND | F1 | 406 | 516.5 | F1 | mg/Kg | | 27 | 43 - 165 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *82* | | *60 - 138* |

**Lab Sample ID: 570-161752-21 MSD**
**Matrix: Solid**
**Analysis Batch: 387129**

**Client Sample ID: 8455-7-3**
**Prep Type: Total/NA**
**Prep Batch: 386021**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | ND | F1 | 394 | 643.5 | | mg/Kg | | 60 | 43 - 165 | 22 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *93* | | *60 - 138* |

## GC Semi VOA

### Prep Batch: 386020

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-161752-1 | 8455-1-1 | Total/NA | Solid | 3550C | |
| 570-161752-2 | 8455-1-3 | Total/NA | Solid | 3550C | |
| 570-161752-3 | 8455-1-5 | Total/NA | Solid | 3550C | |
| 570-161752-4 | 8455-2-1 | Total/NA | Solid | 3550C | |
| 570-161752-5 | 8455-2-3 | Total/NA | Solid | 3550C | |
| 570-161752-6 | 8455--2-5 | Total/NA | Solid | 3550C | |
| 570-161752-7 | 8455-3-1 | Total/NA | Solid | 3550C | |
| 570-161752-8 | 8455-3-3 | Total/NA | Solid | 3550C | |
| 570-161752-9 | 8455-3-5 | Total/NA | Solid | 3550C | |
| 570-161752-10 | 8455-4-1.5 | Total/NA | Solid | 3550C | |
| 570-161752-11 | 8455-4-3 | Total/NA | Solid | 3550C | |
| 570-161752-12 | 8455-4-5 | Total/NA | Solid | 3550C | |
| 570-161752-13 | 8455-5-2 | Total/NA | Solid | 3550C | |
| 570-161752-14 | 8455-5-3 | Total/NA | Solid | 3550C | |
| 570-161752-15 | 8455-5-5 | Total/NA | Solid | 3550C | |
| 570-161752-16 | 8455-6-1 | Total/NA | Solid | 3550C | |
| 570-161752-17 | 8455-6-3 | Total/NA | Solid | 3550C | |
| 570-161752-18 | 8455-6-5 | Total/NA | Solid | 3550C | |
| 570-161752-19 | 8455-7S | Total/NA | Solid | 3550C | |
| 570-161752-20 - DL | 8455-7-2 | Total/NA | Solid | 3550C | |
| MB 570-386020/1-A | Method Blank | Total/NA | Solid | 3550C | |
| LCS 570-386020/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| LCSD 570-386020/3-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| 570-161752-3 MS | 8455-1-5 | Total/NA | Solid | 3550C | |
| 570-161752-3 MSD | 8455-1-5 | Total/NA | Solid | 3550C | |

### Prep Batch: 386021

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-161752-21 - RA | 8455-7-3 | Total/NA | Solid | 3550C | |
| 570-161752-22 | 8455-7-5 | Total/NA | Solid | 3550C | |
| MB 570-386021/1-A | Method Blank | Total/NA | Solid | 3550C | |
| LCS 570-386021/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| LCSD 570-386021/3-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| 570-161752-21 MS | 8455-7-3 | Total/NA | Solid | 3550C | |
| 570-161752-21 MSD | 8455-7-3 | Total/NA | Solid | 3550C | |

### Analysis Batch: 386825

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-161752-1 | 8455-1-1 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-2 | 8455-1-3 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-3 | 8455-1-5 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-4 | 8455-2-1 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-5 | 8455-2-3 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-6 | 8455--2-5 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-7 | 8455-3-1 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-8 | 8455-3-3 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-9 | 8455-3-5 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-10 | 8455-4-1.5 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-11 | 8455-4-3 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-12 | 8455-4-5 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-13 | 8455-5-2 | Total/NA | Solid | 8015B | 386020 |

## GC Semi VOA (Continued)

### Analysis Batch: 386825 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-161752-14 | 8455-5-3 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-15 | 8455-5-5 | Total/NA | Solid | 8015B | 386020 |
| MB 570-386020/1-A | Method Blank | Total/NA | Solid | 8015B | 386020 |
| LCS 570-386020/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 386020 |
| LCSD 570-386020/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 386020 |
| 570-161752-3 MS | 8455-1-5 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-3 MSD | 8455-1-5 | Total/NA | Solid | 8015B | 386020 |

### Analysis Batch: 387129

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-161752-22 | 8455-7-5 | Total/NA | Solid | 8015B | 386021 |
| MB 570-386021/1-A | Method Blank | Total/NA | Solid | 8015B | 386021 |
| LCS 570-386021/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 386021 |
| LCSD 570-386021/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 386021 |
| 570-161752-21 MS | 8455-7-3 | Total/NA | Solid | 8015B | 386021 |
| 570-161752-21 MSD | 8455-7-3 | Total/NA | Solid | 8015B | 386021 |

### Analysis Batch: 387132

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-161752-16 | 8455-6-1 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-17 | 8455-6-3 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-18 | 8455-6-5 | Total/NA | Solid | 8015B | 386020 |
| 570-161752-19 | 8455-7S | Total/NA | Solid | 8015B | 386020 |

### Analysis Batch: 387399

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-161752-21 - RA | 8455-7-3 | Total/NA | Solid | 8015B | 386021 |

### Analysis Batch: 387404

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-161752-20 - DL | 8455-7-2 | Total/NA | Solid | 8015B | 386020 |

# Lab Chronicle

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Client Sample ID: 8455-1-1
**Date Collected: 11/21/23 09:44**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-1
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.10 g | 10 mL | 386020 | 11/21/23 14:23 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 50 | 10 mL | 10 mL | 386825 | 11/27/23 15:10 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-1-3
**Date Collected: 11/21/23 09:45**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-2
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.16 g | 10 mL | 386020 | 11/21/23 14:23 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 5 | 10 mL | 10 mL | 386825 | 11/27/23 15:35 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-1-5
**Date Collected: 11/21/23 09:48**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-3
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 9.87 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 16:00 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-2-1
**Date Collected: 11/21/23 09:57**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-4
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.34 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 10 | 10 mL | 10 mL | 386825 | 11/27/23 16:25 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-2-3
**Date Collected: 11/21/23 09:58**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-5
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.07 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 16:51 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

# Lab Chronicle

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Client Sample ID: 8455--2-5
**Date Collected: 11/21/23 10:00**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-6
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.23 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 17:16 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-3-1
**Date Collected: 11/21/23 10:47**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-7
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.29 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 17:42 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-3-3
**Date Collected: 11/21/23 10:49**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-8
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.24 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 18:07 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-3-5
**Date Collected: 11/21/23 10:51**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-9
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.05 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 18:33 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-4-1.5
**Date Collected: 11/21/23 10:17**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-10
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.33 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 5 | 10 mL | 10 mL | 386825 | 11/27/23 18:58 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

# Lab Chronicle

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Client Sample ID: 8455-4-3
**Date Collected: 11/21/23 10:19**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-11
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.28 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 19:24 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-4-5
**Date Collected: 11/21/23 10:20**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-12
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 9.92 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 19:49 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-5-2
**Date Collected: 11/21/23 10:33**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-13
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.14 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 20:15 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-5-3
**Date Collected: 11/21/23 10:35**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-14
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.03 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 20:41 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

## Client Sample ID: 8455-5-5
**Date Collected: 11/21/23 10:36**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-15
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.06 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 386825 | 11/27/23 21:07 | SP9M | EET CAL 4 |
| | Instrument ID: GC69A | | | | | | | | | |

# Lab Chronicle

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Client Sample ID: 8455-6-1
**Date Collected: 11/21/23 11:21**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-16
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 9.92 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 387132 | 11/28/23 06:50 | N5Y3 | EET CAL 4 |
| | Instrument ID: GC47 | | | | | | | | | |

## Client Sample ID: 8455-6-3
**Date Collected: 11/21/23 11:23**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-17
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 9.96 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 387132 | 11/28/23 07:11 | N5Y3 | EET CAL 4 |
| | Instrument ID: GC47 | | | | | | | | | |

## Client Sample ID: 8455-6-5
**Date Collected: 11/21/23 11:24**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-18
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.21 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 387132 | 11/28/23 07:32 | N5Y3 | EET CAL 4 |
| | Instrument ID: GC47 | | | | | | | | | |

## Client Sample ID: 8455-7S
**Date Collected: 11/21/23 11:00**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-19
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 9.95 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 100 | 10 mL | 10 mL | 387132 | 11/28/23 07:53 | N5Y3 | EET CAL 4 |
| | Instrument ID: GC47 | | | | | | | | | |

## Client Sample ID: 8455-7-2
**Date Collected: 11/21/23 11:06**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-20
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | DL | | 10.35 g | 10 mL | 386020 | 11/21/23 14:24 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | DL | 5 | 10 mL | 10 mL | 387404 | 11/28/23 19:44 | N5Y3 | EET CAL 4 |
| | Instrument ID: GC47 | | | | | | | | | |

# Lab Chronicle

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Client Sample ID: 8455-7-3

**Date Collected: 11/21/23 11:05**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-21

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | RA | | 10.11 g | 10 mL | 386021 | 11/21/23 14:26 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | RA | 1 | 10 mL | 10 mL | 387399 | 11/28/23 19:33 | N5Y3 | EET CAL 4 |
| | Instrument ID: GC50 | | | | | | | | | |

## Client Sample ID: 8455-7-5

**Date Collected: 11/21/23 11:07**
**Date Received: 11/21/23 12:35**

## Lab Sample ID: 570-161752-22

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 9.75 g | 10 mL | 386021 | 11/21/23 14:26 | KH3Z | EET CAL 4 |
| Total/NA | Analysis | 8015B | | 1 | 10 mL | 10 mL | 387129 | 11/28/23 07:29 | SP9M | EET CAL 4 |
| | Instrument ID: GC50 | | | | | | | | | |

**Laboratory References:**

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| California | State | 3082 | 07-31-24 |

# Method Summary

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8015B | Diesel Range Organics (DRO) (GC) | SW846 | EET CAL 4 |
| 3550C | Ultrasonic Extraction | SW846 | EET CAL 4 |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

EET CAL 4 = Eurofins Calscience  Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Definitions/Glossary

Client: EnviroApplications, Inc.
Project/Site: 8455

Job ID: 570-161752-1

## Qualifiers

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

161752

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570-161752 Chain of Custody

# CHAIN OF CUSTODY RECORD

DATE: 11.21.23

PAGE: 1 OF 3 (3)

ZXSQ

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For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

LABORATORY CLIENT: ENVIROAPPLICATIONS INC (EAI)
ADDRESS: 2831 CAMINO DEL RIO S # 214
CITY: SAN DIEGO STATE: CA ZIP: 92108
TEL: 619 291 3631 E-MAIL: CSMITH@ENVIROAPPLICATIONS.COM

CLIENT PROJECT NAME / NUMBER: CRAIG SMITH
P.O. NO.: 01.TA6001.21
PROJECT CONTACT: TIM LESTER 760 473 0645
SAMPLER(S): (PRINT) TIM LESTER

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☒ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ STANDARD
☐ COELT EDF GLOBAL ID: CCID / TPH LOG CODE:

SPECIAL INSTRUCTIONS:
Run CCID | & highest TPH = 8260/8270/METALS (CAM 17)

## REQUESTED ANALYSES

Please check box or fill in blank as needed.

| LAB USE ONLY | SAMPLE ID | SAMPLING DATE | SAMPLING TIME | MATRIX | NO. OF CONT. | Unpreserved | Preserved | Field Filtered | TPH(g) GRO | TPH(d) DRO | TPH C6-C36 C6-C44 CCID | TPH | BTEX / MTBE 8260 | VOCs (8260) | Oxygenates (8260) | Prep (5035) En Core Terra Core | SVOCs (8270) | Pesticides (8081) | PCBs (8082) | PAHs 8270 8270 SIM | T22 Metals 6010/747X 6020/747X | Cr(VI) 7196 7199 218.6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8455 - 1-1 | 11.21.23 | 944 | Soil | 1 | | | | | | X | | | | NOTE - ALL CCID THEN USE RESULT TO CHOOSE 8260/8270/CAM | | | | | | | |
| 2 | " - 1-3 | | 945 | | 1 | | | | | | X | | | | | | | | | | | |
| 3 | " - 1-5 | | 948 | | 1 | | | | | | X | | | | | | | | | | | |
| 4 | " - 2-1 | | 957 | | 1 | | | | | | X | | | | | | | | | | | |
| 5 | " - 2-3 | | 958 | | 1 | | | | | | X | | | | | | | | | | | |
| 6 | " - 2-5 | | 1000 | | 1 | | | | | | X | | | | | | | | | | | |
| 7 | " - 3-1 | | 1047 | | 1 | | | | | | X | | | | | | | | | | | |
| 8 | " - 3-3 | | 1049 | | 1 | | | | | | X | | | | | | | | | | | |
| 9 | " - 3-5 | | 1057 | | 1 | | | | | | X | | | | | | | | | | | |
| 10 | " - H-1.5 | ↓ | 1017 | ↓ | 1 | | | | | | X | | | | | | | | | | | |

| Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: | Time: |
|---|---|---|---|
| | EC | 11/21/23 | 12:35 |
| Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: | Time: |
| Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: | Time: |

5.7 / 5.6 SC12

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# CHAIN OF CUSTODY RECORD

WO #/ LAB USE ONLY:

DATE: 11.21.23

PAGE: 2 OF 3 (3)

LABORATORY CLIENT: ENVIROAPPLICATIONS INC (EAI)

ADDRESS: 2831 CAMINO DEL RIO S # 214

CITY: SAN DIEGO STATE: CA ZIP: 92108

TEL: 619 291 3631 E-MAIL: CSMITH@ENVIROAPPLICATIONS.COM

CLIENT PROJECT NAME / NUMBER: CRAIG SMITH

PROJECT CONTACT: TIM LESTER 760 473 0645

P.O. NO.: 01.TA6001.21

SAMPLER(S): (PRINT) TIM LESTER

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☑ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS: CC10/TPH

## REQUESTED ANALYSES

Please check box or fill in blank as needed.

| LAB USE ONLY | SAMPLE ID | SAMPLING DATE | SAMPLING TIME | MATRIX | NO. OF CONT. | Unpreserved | Preserved | Field Filtered | ☐ TPH(g) ☐ GRO | ☐ TPH(d) ☐ DRO | TPH ☐ C6-C36 ☐ C6-C44 Comp | TPH ____ | BTEX / MTBE ☐ 8260 ☐ | VOCs (8260) | Oxygenates (8260) | Prep (5035) ☐ En Core ☐ Terra Core | SVOCs (8270) | Pesticides (8081) | PCBs (8082) | PAHs ☐ 8270 ☐ 8270 SIM | T22 Metals ☐ 6010/747X ☐ 6020/747 | Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | B55-4-3 | 11.21.23 | 1019 | Soil | 1 | | | | | | X | | | | NOTE - AFTER | | | | | | | |
| 12 | 11 -4-5 | | 1020 | | 1 | | | | | | X | | | | | | | | | | | |
| 13 | 11 -5-2 | | 1033 | | 1 | | | | | | X | | | | 24hr TPH choose | | | | | | | |
| 14 | 11 -5.3 | | 1035 | | 1 | | | | | | X | | | | highest S-fr | | | | | | | |
| 15 | 11 -5.5 | | 1036 | | 1 | | | | | | X | | | | | | | | | | | |
| 16 | 11 -6-1 | | 1121 | | 1 | | | | | | X | | | | 8260/8270/Comp | | | | | | | |
| 17 | 11 -6.3 | | 1123 | | 1 | | | | | | X | | | | | | | | | | | |
| 18 | 11 -6.5 | | 1124 | | 1 | | | | | | X | | | | | | | | | | | |
| 19 | 11 -7.5 | | 1100 | | 1 | | | | | | X | | | | | | | | | | | |
| 20 | 11 -7-2 | | 1101 | | 1 | | | | | | X | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: 11/21/23 | Time: 12:35 |
| Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: | Time: |
| Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: | Time: |

06/02/14 Revision

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For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

# CHAIN OF CUSTODY RECORD

WO #/LAB USE ONLY:

DATE: 11.21.23

PAGE: 3 OF 3

LABORATORY CLIENT: ENVIROAPPLICATIONS INC (EAI)

ADDRESS: 2831 CAMINO DEL RIO S # 214

CITY: SAN DIEGO STATE: CA ZIP: 92108

TEL: 619 291 3631 E-MAIL: CSMITH@ENVIROAPPLICATIONS.COM

CLIENT PROJECT NAME / NUMBER: CRAIG SMITH

P.O. NO.: 01.TA6001.21

PROJECT CONTACT: TIM LESTER 760 473 0645

SAMPLER(S): (PRINT) TIM LESTER

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☒ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ STANDARD

☐ COELT EDF GLOBAL ID: CCIO / TPH LOG CODE:

SPECIAL INSTRUCTIONS:

SEE NOTES

ALL = CCIO I will choose 5 for 8260 ETR.

REQUESTED ANALYSES

Please check box or fill in blank as needed.

| LAB USE ONLY | SAMPLE ID | SAMPLING DATE | SAMPLING TIME | MATRIX | NO. OF CONT. | Unpreserved | Preserved | Field Filtered | ☐ TPH(g) ☐ GRO | ☐ TPH(d) ☐ DRO | TPH ☐ C6-C36 ☐ C6-C44 | TPH | BTEX / MTBE ☐ 8260 ☐ | VOCs (8260) | Oxygenates (8260) | Prep (5035) ☐ En Core ☐ Terra Core | SVOCs (8270) | Pesticides (8081) | PCBs (8082) | PAHs ☐ 8270 ☐ 8270 SIM | T22 Metals ☐ 6010/747X ☐ 6020/747X | Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 8455.7.3 | 11.21.23 | 1105 | Soil | 1 | | | | | | X | | | | | | | | | | | | | | |
| 12 | " - 7.5 | " | 1107 | " | 1 | | | | | | X | | | | | | | | | | | | | | |

NOTE - ALL TPH <CCIO THEN HIGHER 5 for VOC/SVOC/8260

Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: 11/21/23 | Time: 12:38

Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: | Time:

Relinquished by: (Signature) | Received by: (Signature/Affiliation) | Date: | Time:

06/02/14 Revision

# Login Sample Receipt Checklist

Client: EnviroApplications, Inc.

Job Number: 570-161752-1

**Login Number: 161752**
**List Number: 1**
**Creator: Hernandez, Richie**

**List Source: Eurofins Calscience**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Laboratory Results

April 29, 2021

**William McGraw**
Principal
IHC State LLC
835 W. State Street
Ontario, CA 91762

Via email: williamhmcgraw@gmail.com

**Subject:** **Final Methane and Pesticide Sampling Report**
**19-Acre "Gorzeman" Dairy/Agricultural Property**
**NW Corner Walker & Edison, Ontario, San Bernardino, California**
**Project No. 1220003.2A**

Dear Sir:

The following letter report documents Final Phase II Environmental Site Assessment sampling conducted at the referenced site location on February 9, 2021 and April 26, 2021 in accordance with our approved proposals dated January 10, 2021 and April 13, 2021.

## BACKGROUND

TA-Group DD, LLC (TAGDD) conducted a Phase I Environmental Site Assessment (ESA) for the subject property, consisting of two contiguous parcels located at the northwest corner of Edison Avenue and Walker Avenue, in the City of Ontario, San Bernardino County, California. The property includes roughly 19-acres and consists of three Assessor's Parcel Numbers (APN): 0216-312-06, -07 & -08. The property is operated partially as a nursery, and partially with livestock-related operations.

The Phase I concluded that a *Recognized Environmental Condition* (REC) was present at the site, based on the historic presence of dairy and agricultural operations that posed potential methane and pesticide exposure to future residents. This report documents final results of sampling conducted during two mobilizations, in February and April 2021.

## PREPARATION ACTIVITIES

Prior to conducting field activities, TAGDD staff coordinated site access with the property owner. Due to the type of sampling to be conducted (surficial or shallow), and the absence of utilities on site, a DigAlert ticket was not requested. Methane probes were installed and sampled by Environmental Support Technologies TAGDD. Soil samples were submitted to a State Certified laboratory.

## SAMPLING RATIONALE & ANALYTICAL PROGRAM

The site has been used for dairy farming purposes since the 1980's. Methane gas originating in organics (primarily buried manure) is a common environmental concern at former dairy sites. Additionally, the use of pesticides in nursery operations and related to former agricultural uses was a concern.

Guidance regarding Pesticide Sampling (*Interim Guidance For Sampling Agricultural Properties*", DTSC, August 7, 2008) is primarily focused on former agricultural use where distribution is assumed to be uniform. Our concern at the subject site was more for drainage/collection as well as use where uniform

application was not applicable. For that reason discrete samples, rather than composites, were collected at shallow depths and analyzed for Organochlorine Pesticides (OCP/ EPA 8181A) and Total Arsenic and Lead by EPA 6010.

Methane probe installation and sampling was intended to provide initial screening information to indicate whether large quantities of buried organics might be off-gassing substantial amounts of methane. This concern was primarily present on the northern half of the site, which historically appears to have been primarily pasture. Initially we planned to sample primarily interior locations. However, due to difficult access we expected to be someone constrained but still able to sample at several locations on the northern interior.

One former Aboveground Storage Tank (AST) location was also a potential concern. Samples were collected at depths of 5 and 10-feet below grade at the former AST location. The AST reportedly stored diesel only; therefor Total Petroleum Hydrocarbons as Diesel (TPHd) by EPA Method 8015 was chosen as the analytical method.

**FIELD SAMPLING PROCEDURES**

During our February 6, 2021 mobilization, upon arriving at the site we found conditions more difficult than expected. Standing water / wet conditions, free ranging livestock, and blockages at various areas prevented us from sampling interior portions of the northern half of the site. Due to conditions most of the sampling on the north half of the property was limited to exterior access roads (P2 – P7). During our second mobilization on April 26, 2021, we completed an additional seven (7) methane and soil sample locations (SG-15 through SG-22) on the northern portion of the property.

Sampling on the property was conducted by Environmental Support Technologies (EST) utilizing a truck-mounted Strataprobe® Direct Push drill rig. The rig pushes a 1.5-inch metal probe to the desired sample depth. To collect soil samples, a 4-foot long, 1.5-inch diameter acetate sleeve is mounted in the sampler and driven to the sample depth. The sample tool is withdrawn and the acetate sleeve is cut, Teflon capped, and labelled. Shallow soil sampling for pesticides on the southern half of the property was conducted with hand equipment.

Prior to starting methane and shallow pesticide sampling, samples were collected at the former diesel AST location. The sampling rationale was intended to identify a potential release that would exceed *De Minimus* standards. Soil samples were collected at 5 and 10 feet bg.

Following AST location sampling, shallow soil samples were collected below the manure/soil interface at methane probe locations. In general, native soils were located at depths ranging from 1.5-2.5 feet, with the overburden consisting of manure/organic materials. Following the collection of soil samples during the first mobilization, probes were driven to a depth of 5-feet bg and methane probes installed. Durng the second mobilization probes were set at a depth of 4-feet bg. **Figures 1 and 2** illustrate sampling locations from the two separate mobilizations. **Figure 3** shows methane results.

Soil gas samples were collected with a ¼ inch diameter Nylaflo™ tubing fitted with a porous sampling tip (to assist in recovering a representative soil gas sample) was placed into each boring. A one-foot thick sand pack, consisting of #3 Monterey™ sand was placed into the borehole covering the sampling tip which in turn was followed by the placement of hydrated bentonite chips to the surface. Probe surface completion consisted of a two-way gas tight sample valve.

Soil gas probes were allowed to equilibrate for a minimum of 120 minutes. Soil vapor sample collection and analysis was conducted by EST using an on-site meter (RKI Eagle Methane Meter) provided by EST. A purge volume test was conducted at the first probe location (SG-1) to determine the appropriate sample volume. Soil vapor samples were then collected by extracting sample material from the tip of the vapor probe utilizing a dedicated sampling syringe. Once the soil vapor sample was collected, the syringe was transported to the on-site mobile laboratory for immediate laboratory analysis. Upon completion of testing and analysis, the vapor probes were removed, and the boring locations backfilled with hydrated bentonite chips capped with surface materials matching the surrounding area.

**OBSERVED MANURE/ORGANICS**

Organics were measured in all boring locations. **Figure 4** shows organics/manure depths noted on the northern half of the site. In general, the average depth of these materials was observed to be roughly 2-feet in thickness.

**SAMPLE RESULTS**

Sample results for TPHd, Methane, and pesticides are discussed below.

**Methane Sample Results**

Methane results ranged from 250 parts per million by volume (ppmv), to 22,750 ppmv. Carbon Dioxide ($CO_2$) was found in two samples. Hydrogen Sulfide ($H_2S$) was not found above instrument detection limits. Results are reported below in **Table 1.**

**Table 1**
Methane Gas Measurement Data

| Sample ID | METHANE CONCENTRATION (ppmv) | BAROMETRIC PRESSURE | PRESSURE IN WC | H2S | CO PPM/V |
|---|---|---|---|---|---|
| P2-M | 650 | 29.3 | 0 | 0 | 0 |
| P3-M | 540 | 29.3 | 0 | 0 | 0 |
| P4-M | 630 | 29.3 | 0 | 0 | 0 |
| P5-M | 580 | 29.3 | 0 | 0 | 0 |
| P6-M | **7,050** | 29.3 | 0 | 0 | 0 |
| P7-M | 250 | 29.3 | 0 | 0 | 0 |
| SG-15 | **22,750** | 29.1 | 0 | 0 | 0 |
| SG-16 | 790 | 29.1 | 0 | 0 | 23 |
| SG-17 | 390 | 29.1 | 0 | 0 | 0 |
| SG-18 | 410 | 29.1 | 0 | 0 | 0 |
| SG-19 | 350 | 29.1 | 0 | 0 | 0 |
| SG-20 | 580 | 29.1 | 0 | 0 | 0 |
| SG-21 | 260 | 29.1 | 0 | 0 | 6 |
| **Methane Action Levels*** | **1,000** | **NA** | **2.8** | **NA** | **NA** |

*DTSC "Advisory on Methane Assessment and Common Remedies on School Sites, 6.16.05

**Pesticide, Arsenic, and Lead Sample Results**

Pesticide, Arsenic, and Lead sample results are noted below in **Table 2**.

**Table 2**
OCP and Arsenic Results
Soil Sample Results in m/kg
EPA Methods 8181A and 6010B

| Sample ID | DDT | DDE | DDD | All Other OCP | Total Arsenic / Lead |
|---|---|---|---|---|---|
| **1220003-P2** | **6.8** | **31** | ND | ND | ND / ND |
| **1220003-P5** | ND | ND | ND | ND | ND / ND |
| **1220003-P7** | ND | ND | ND | ND | ND / ND |
| **1220003-P10** | ND | ND | ND | ND | ND / ND |
| **1220003-P12** | ND | ND | ND | ND | ND / ND |
| **1220003-P13** | ND | **11** | ND | ND | ND / ND |
| **1220003-P14** | ND | ND | ND | ND | ND / ND |
| [1]HHRA SL / Mg/Kg | **1.9** | **2.0** | **2.3** | **--** | **12 / 50** |
| [2]USEPA RSL / Mg/Kg | **1.9** | **23** | **37** | **--** | |

[1] Department of Toxic Substances Control, Human Health Risk Assessment, Note 3, June 2020
[2] USEPA Regional Screening Levels (Cancer Endpoint), Listed in HHRA Table 1, June 2020

**TPHd Sample Results**

Two samples were collected, one at a depth of 5-feet bg, and one at a depth of 10-feet bg, at the former location of a diesel AST. The 5-foot sample was non-detect (reporting limit ranging from 4.8 to 5.2 mg/kg), while the 10-foot sample reported 5.1 mg/kg.

**SCREENING EVALUATION GUIDANCE**

The City of Ontario Building Department provides guidance in their "METHANE ASSESSMENT FOR PROJECTS IN THE NEW MODEL COLONY". That guidance requires a scope of work for post-grading methane investigation, as well as investigation of all suspect areas. TAGDD's preliminary report is intended to provide preliminary assessment work. A post grading methane assessment will be needed in the future to comply with cited Ontario guidance.

The California Department of Toxic Substance Control (DTSC) "*Advisory on Methane Assessment and Common Remedies on School Sites*", dated 6.16.05, lists several action levels for school sites. Such action levels are commonly used to evaluated residential and sensitive use sites. 1,000 ppm is the most cautionary level requiring further investigation. 5,000 ppm (roughly 10% of the Lower Explosive Limit/ LEL), is considered an action level, predicated on the potential buildup of methane to the explosive limit in enclosed spaces. A pressure of 2.8 inches (water column) is also indicative of potential methane buildup.

Neither Lead nor Arsenic were found in soil samples collected to date; therefore, no risk guidance was reviewed.

Pesticide results were compared to soil screening values contained in the referenced DTSC HHRA HERO Note 3 (July 2020), which are the most current screening criteria in California. TPH guidance was primarily sourced through the same HHRA Hero Note 3 tables.

**CONCLUSIONS / DISCUSSION**

TAGDD performed interim screening level limited methane vapor and soil sampling at the subject property during two mobilizations, which consisted of collecting soil and/or soil gas samples at suspect locations.

Only two samples (PM6 and SG-15) exceeded the lower 1,000 ppmv guidance; both also exceeded the less conservative 5,000 ppmv action level. *NOTE that the City of Ontario guidelines indicate a methane barrier will be needed for any results less than 15,000 ppm/v.*

While methane was noted in all locations sampled, only two methane samples were above present above noted guidance levels. Both of the elevated results were present in the extreme northern corrals.

Pesticides and the metals Arsenic and Lead were evaluated in shallow samples on both the north and south portions of the site. Of particular interest were samples P12 an P13, collected in retainage ponds located at the southern end of the site. Only one pesticide – DDE – was found in these pond area samples. The only other sample containing OCP was sample P2, located at the center of the overall site. Sample P2 contained 31 mg/kg DDE and 6.8 mg/kg of DDT.

DDT and it's isomers DDD and DDE are pervasive in southern California agricultural areas due to widespread use prior to the 1970's. Both sample results exceed the highly conservative guidance provided by the State of California for future residential uses. However, 5 of the 7 samples analyzed did not contain DDT, DDE, or DDD. This indicates that the presence of these pesticide residues is not pervasive in shallow soils, and is therefore unlikely to be a widespread contaminant and health threat.

In general, a TPHd guidance level of 100 mg/kg is utilized in Southern California as a preliminary guidance level for diesel-range hydrocarbons, as they contain few aromatic hydrocarbons which are less of a health concern than gasoline. Additional guidance is noted in the referenced HHRA tables. The closest hydrocarbon-chain listing is for "TPH Aromatic Medium" (C9-C16) is 97 mg/kg for residential use screening. The sole TPHd result is far below this screening value and further investigation is not warranted, in our opinion.

**RECOMMENDATIONS**

- We recommend that organics be removed prior to development in or near residential structures.
- A post-construction methane monitoring plan will be needed according to City of Ontario Guidelines
- City guidelines appear to required methane barriers for any methane detections less than 15,000 ppm/v. Since most of our results were an order of magnitude lower than this guidance level, we recommend that the Owner meet with the City to determine if the low concentrations found will require mitigation.
- Post grading sampling for OCP pesticides is recommended to confirm the absence of widespread impacts from DDT and its isomers.

**LIMITATIONS**

Findings provided herein have been derived in accordance with current standards of practice, and no warranty is expressed or implied. Standards of practice are subject to change with time. This report has been prepared for the sole use of the Client. Site conditions, land use (both onsite and offsite), or other factors may change as a result of manmade influences, and additional work may be required with the passage of time.

This report should not be relied upon by other parties without the express written consent of TAGDD or our Client, subject to our contract limitations. Any use or reliance upon this environmental evaluation by a party other than the Client, shall be solely at the risk of such third party and without legal recourse against TA-Group DD, its employees, officers, or directors, regardless of whether the action in which recovery of damages is brought or based upon contract, tort, statue, or otherwise. The Client has the responsibility to see that all parties to the project, including the designer, contractor, subcontractor, and building official, etc. are aware of this report in its complete form.

This report contains information which may be used in the preparation of contract specifications; however, the report is not designed as a specification document, and may not contain sufficient information for use without additional assessment. TAGDD assumes no responsibility or liability for work or testing performed by others. In addition, this report may be subject to review by the controlling authorities. Thank you for contacting TAGDD regarding this important project. If you have questions, please contact the undersigned at (760) 473-0645.

Sincerely,
**TA-Group DD, LLC**

Timothy A. Lester, CEM
Founder/Principal

Attachments: Figures 1 - 4
Final Laboratory Reports Soil Vapor Samples, Eurofins/Calscience Laboratory dated February 16, 2021 / Work Order 570-50628-1
Environmental Support Technologies: Methane Results Reports: EST Project 3310 dated February 18 and April 28, 2021

*Selected References:*

CA Department of Toxic Substances Control: Human Health Risk Assessment (HHRA) Note Number 3, DTSC-modified Screening Levels (DTSC-SLs); June 2020

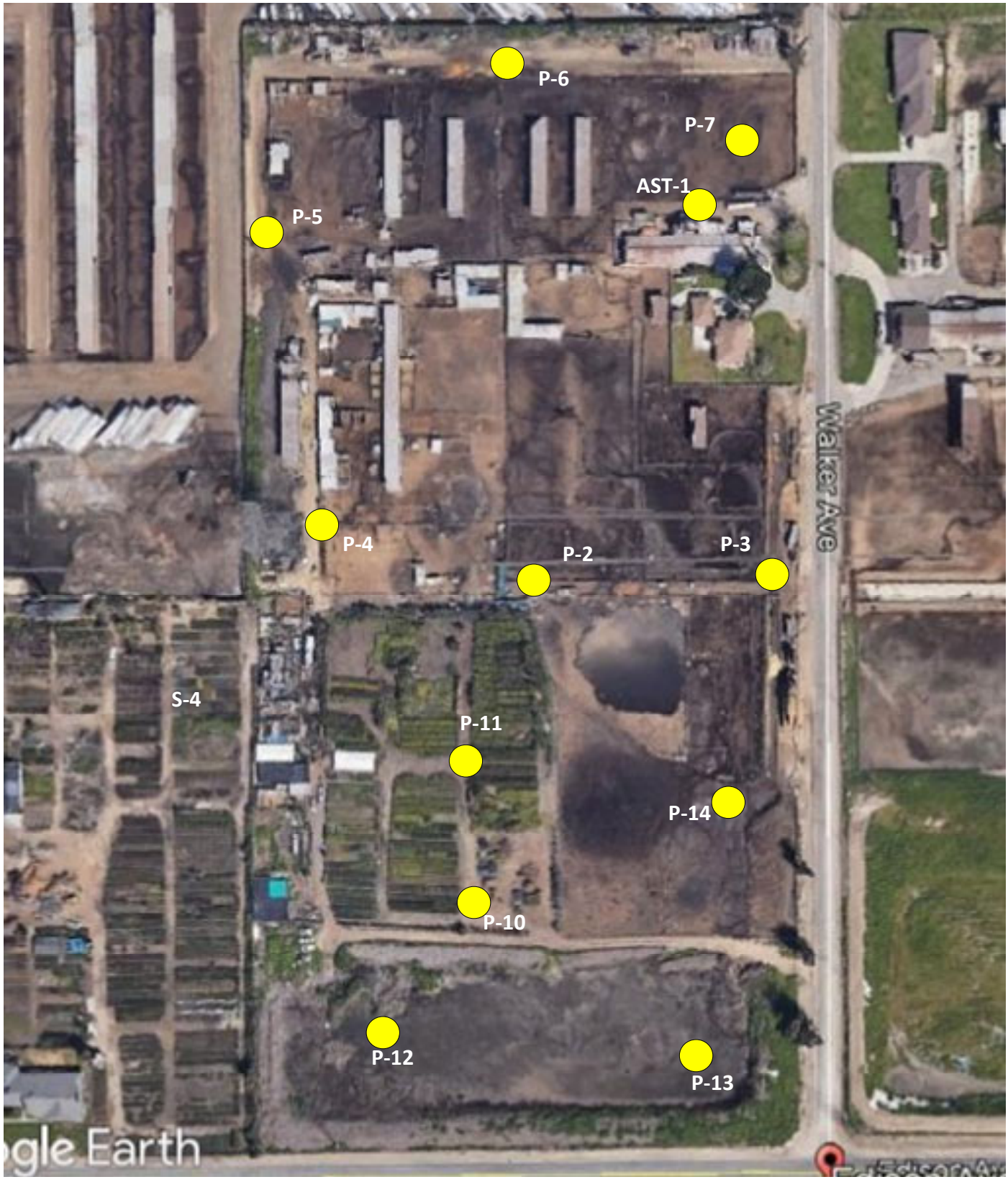
City of Ontario Building Department: “METHANE ASSESSMENT FOR PROJECTS IN THE NEW MODEL COLONY”, August 24,2006

San Francisco Regional Water Quality Control Board, Tier 1 Environmental Screening Levels, 2019, Rev 2
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

TA-Group DD; "*Phase I Environmental Site Assessment, Residential Development Property, Former Dairy/Agricultural Property, Assessor's Parcel Numbers 0216-312-06-0000 through -08-0000, 13948 Walker Avenue, City of Ontario, County of San Bernardino, California 91762*" dated Jaunary 10, 2021.

USEPA: Regional Screening Levels (RSL) for Resident Ambient Air, published in April, 2019 (https://www.epa.gov/risk/forms/contact-us-about-regional-screening-levels-rsls).

# Figures




TA-Group DD, LLC
Diligent Diligence

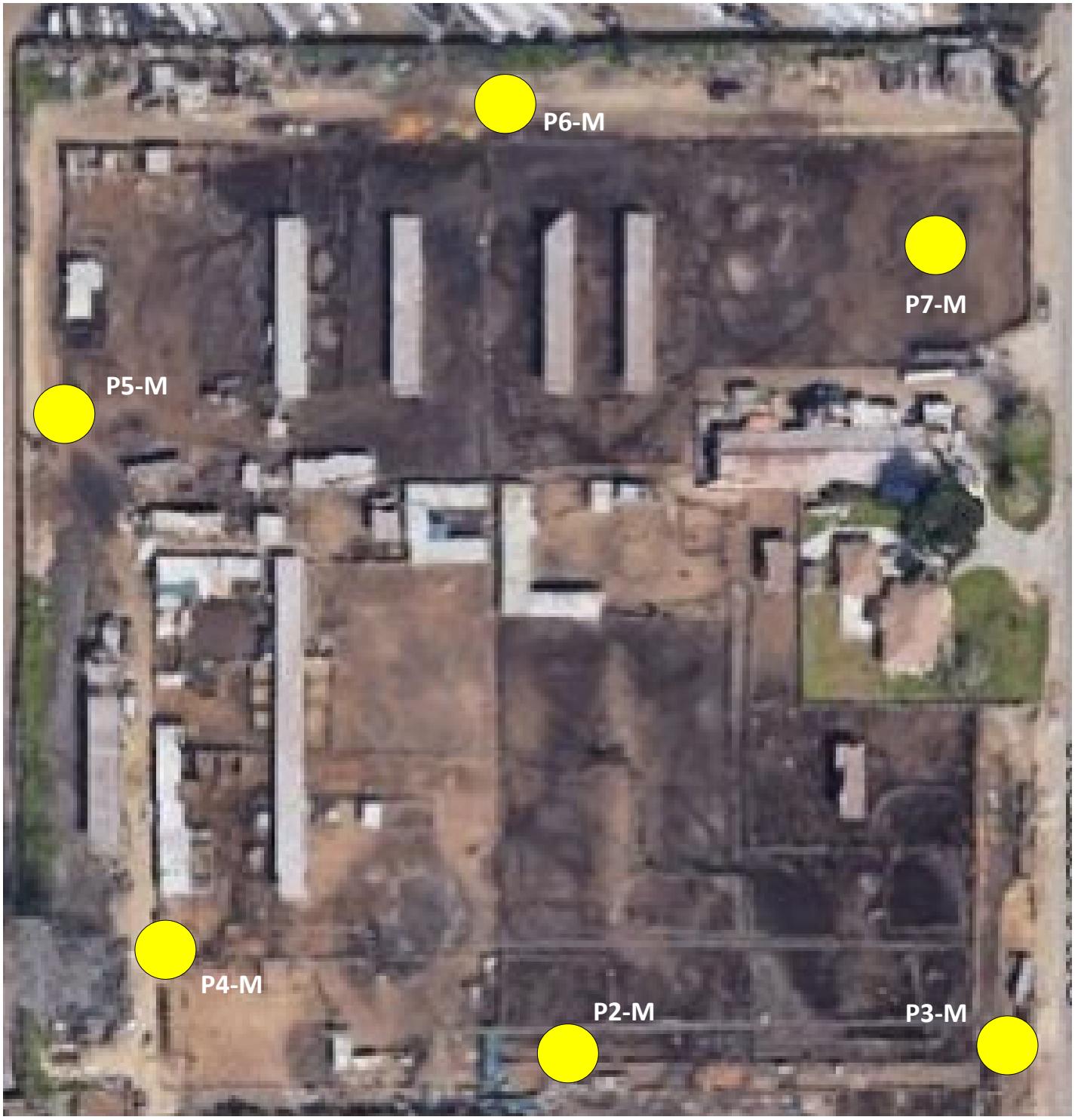
0 150 ft 300 ft

Scale is Approximate

**FIGURE 1**

**February 2021 Sample Locations**

Gorzeman Dairy Property
NW Corner Edison & Walker Avenues
California
Project 1220003.2




TA-GROUP DD, LLC
Diligent Diligence

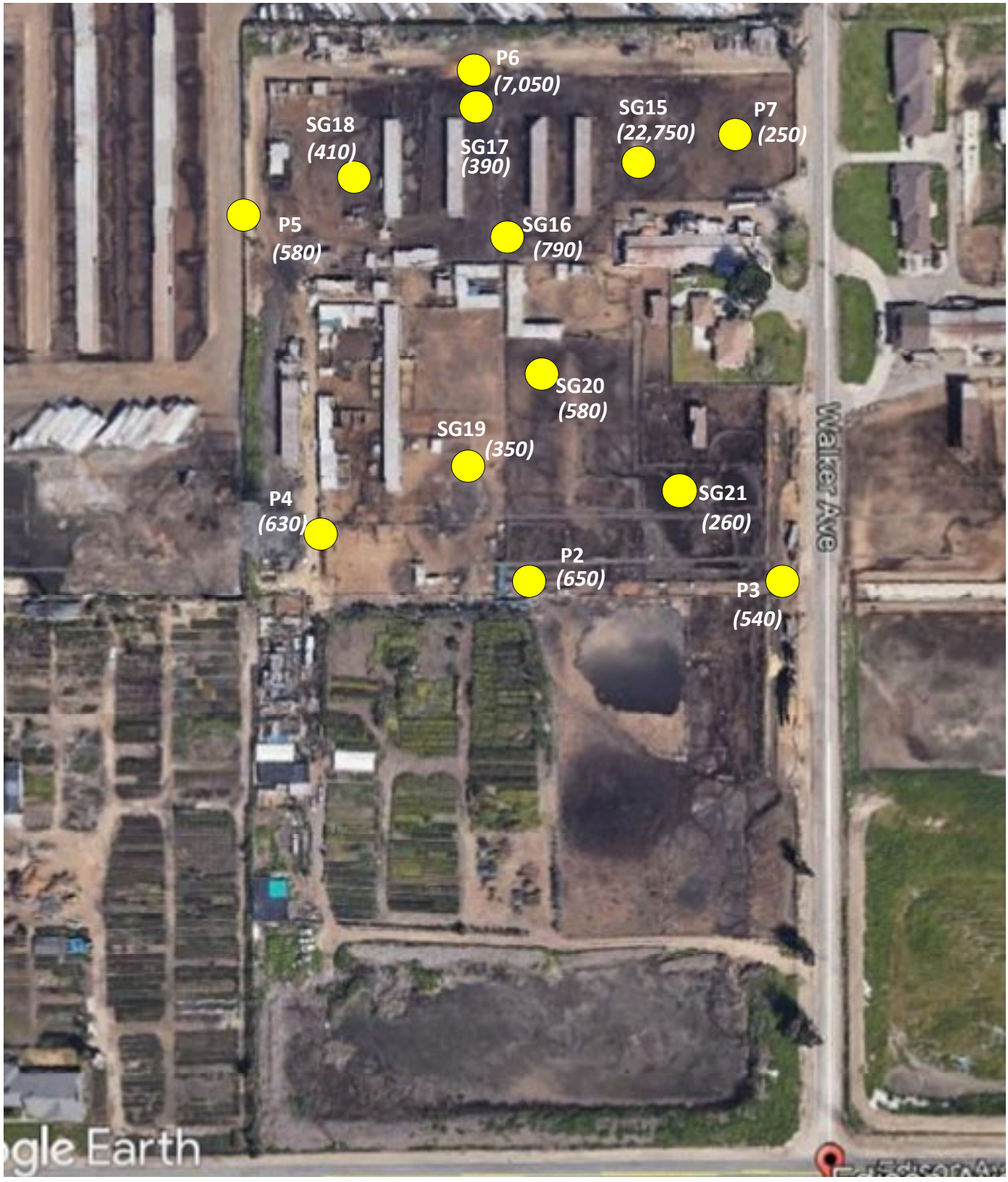
0 105 ft 210 ft

Scale is Approximate

**FIGURE 2**

**February 2021 Methane Sample Locations**

Gorzeman Dairy Property
NW Corner Edison & Walker Avenues
California
Project 1220003.2



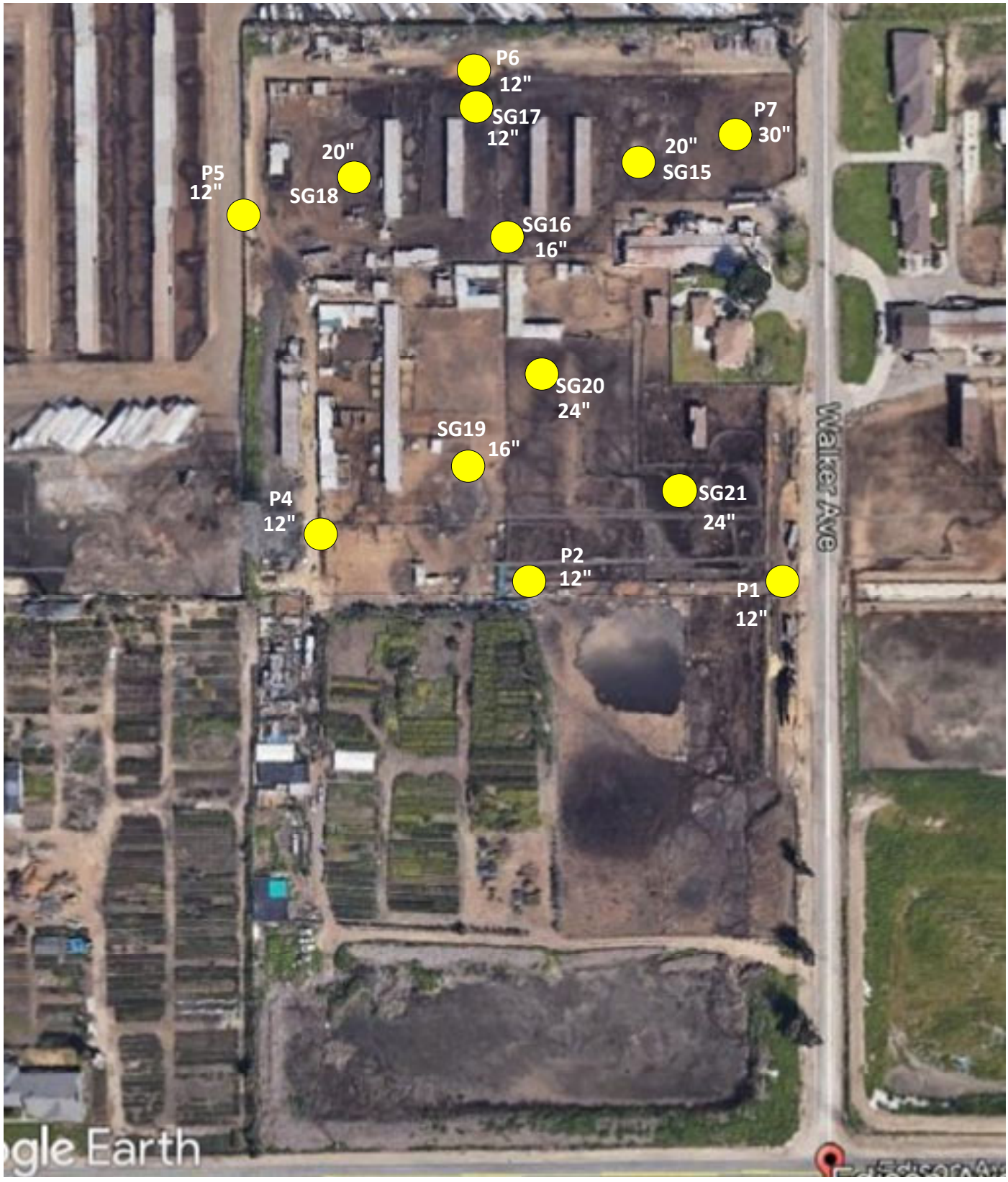

TA-Group DD, LLC
Diligent Diligence

0 150 ft 300 ft

Scale is Approximate

**FIGURE 3**

**Methane Results in ppm/v**
Gorzeman Dairy Property
NW Corner Edison & Walker Avenues
California
Project 1220003.2




TA-Group DD, LLC
Diligent Diligence

0 50 ft 100 ft

Scale is Approximate

**FIGURE 4**

**Manure/Organic Thickness in Inches**

Gorzeman Dairy Property
NW Corner Edison & Walker Avenues
California
Project 1220003.2

# LABORATORY RESULTS

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-50828-1
Client Project/Site: 01.TA6001-21

For:
EnviroApplications, Inc.
2831 Camino Del Rio South
Suite 214
San Diego, California 92108

Attn: Craig A. Smith

*Authorized for release by:*
*2/16/2021 4:43:29 PM*

Sandy Tat, Project Manager I
(714)895-5494
Sandy.Tat@eurofinset.com

LINKS

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www.eurofinsus.com/Env

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Job ID: 570-50828-1

### Laboratory: Eurofins Calscience LLC

**Narrative**

**Job Narrative**
**570-50828-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 2/10/2021 6:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8º C.

**GC Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Metals**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Sample Summary

Client: EnviroApplications, Inc.
Project/Site: 01.TA6001-21

Job ID: 570-50828-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 570-50828-1 | 1220003-P2 | Solid | 02/09/21 09:22 | 02/10/21 18:45 | |
| 570-50828-2 | 1220003-P5 | Solid | 02/09/21 08:19 | 02/10/21 18:45 | |
| 570-50828-3 | 1220003-P7 | Solid | 02/09/21 07:40 | 02/10/21 18:45 | |
| 570-50828-4 | 1220003-P10 | Solid | 02/09/21 10:00 | 02/10/21 18:45 | |
| 570-50828-5 | 1220003-P12 | Solid | 02/09/21 10:10 | 02/10/21 18:45 | |
| 570-50828-6 | 1220003-P13 | Solid | 02/09/21 10:16 | 02/10/21 18:45 | |
| 570-50828-7 | 1220003-P14 | Solid | 02/09/21 10:23 | 02/10/21 18:45 | |
| 570-50828-8 | 1220003-ASTI-5 | Solid | 02/09/21 07:19 | 02/10/21 18:45 | |
| 570-50828-9 | 1220003-ASTI-10 | Solid | 02/09/21 07:27 | 02/10/21 18:45 | |

Client: EnviroApplications, Inc.
Project/Site: 01.TA6001-21

Job ID: 570-50828-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: 1220003-ASTI-5**
**Date Collected: 02/09/21 07:19**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-8**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | ND | | 5.2 | | mg/Kg | | 02/12/21 14:45 | 02/16/21 03:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *83* | | *61 - 145* | *02/12/21 14:45* | *02/16/21 03:20* | *1* |

**Client Sample ID: 1220003-ASTI-10**
**Date Collected: 02/09/21 07:27**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-9**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **TPH as Diesel (C10-C28)** | **5.1** | | 4.8 | | mg/Kg | | 02/12/21 14:45 | 02/16/21 03:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *91* | | *61 - 145* | *02/12/21 14:45* | *02/16/21 03:45* | *1* |

## Method: 8081A - Organochlorine Pesticides (GC)

**Client Sample ID: 1220003-P2**
**Date Collected: 02/09/21 09:22**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-1**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| **4,4'-DDE** | **31** | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| **4,4'-DDT** | **6.8** | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *68* | | *37 - 151* | *02/11/21 13:06* | *02/16/21 09:07* | *1* |
| *Tetrachloro-m-xylene* | *75* | | *38 - 148* | *02/11/21 13:06* | *02/16/21 09:07* | *1* |

**Client Sample ID: 1220003-P5**
**Date Collected: 02/09/21 08:19**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-2**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| 4,4'-DDE | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| 4,4'-DDT | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Client Sample ID: 1220003-P5**
**Date Collected: 02/09/21 08:19**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-2**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *65* | | *37 - 151* | *02/11/21 13:06* | *02/16/21 09:22* | *1* |
| *Tetrachloro-m-xylene* | *72* | | *38 - 148* | *02/11/21 13:06* | *02/16/21 09:22* | *1* |

**Client Sample ID: 1220003-P7**
**Date Collected: 02/09/21 07:40**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-3**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| 4,4'-DDE | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| 4,4'-DDT | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 01:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *80* | | *37 - 151* | *02/11/21 13:06* | *02/16/21 01:05* | *1* |
| *Tetrachloro-m-xylene* | *78* | | *38 - 148* | *02/11/21 13:06* | *02/16/21 01:05* | *1* |

**Client Sample ID: 1220003-P10**
**Date Collected: 02/09/21 10:00**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-4**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| 4,4'-DDE | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Client Sample ID: 1220003-P10**
**Date Collected: 02/09/21 10:00**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-4**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDT | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 11:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *85* | | *37 - 151* | *02/11/21 12:50* | *02/16/21 11:39* | *1* |
| *Tetrachloro-m-xylene* | *76* | | *38 - 148* | *02/11/21 12:50* | *02/16/21 11:39* | *1* |

**Client Sample ID: 1220003-P12**
**Date Collected: 02/09/21 10:10**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-5**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| 4,4'-DDE | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| 4,4'-DDT | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *68* | | *37 - 151* | *02/11/21 13:06* | *02/16/21 09:37* | *1* |
| *Tetrachloro-m-xylene* | *77* | | *38 - 148* | *02/11/21 13:06* | *02/16/21 09:37* | *1* |

## Method: 8081A - Organochlorine Pesticides (GC)

**Client Sample ID: 1220003-P13**
**Date Collected: 02/09/21 10:16**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-6**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| **4,4'-DDE** | **11** | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| 4,4'-DDT | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 09:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *61* | | *37 - 151* | *02/11/21 13:06* | *02/16/21 09:53* | *1* |
| *Tetrachloro-m-xylene* | *69* | | *38 - 148* | *02/11/21 13:06* | *02/16/21 09:53* | *1* |

**Client Sample ID: 1220003-P14**
**Date Collected: 02/09/21 10:23**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-7**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| 4,4'-DDE | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| 4,4'-DDT | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Client Sample ID: 1220003-P14**
**Date Collected: 02/09/21 10:23**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-7**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 10:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *47* | | *37 - 151* | *02/11/21 13:06* | *02/16/21 10:08* | *1* |
| *Tetrachloro-m-xylene* | *64* | | *38 - 148* | *02/11/21 13:06* | *02/16/21 10:08* | *1* |

## Method: 6010B - Metals (ICP)

**Client Sample ID: 1220003-P2**
**Date Collected: 02/09/21 09:22**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-1**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 2.46 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 11:56 | 1 |
| Lead | ND | | 4.93 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 11:56 | 1 |

**Client Sample ID: 1220003-P5**
**Date Collected: 02/09/21 08:19**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-2**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 2.54 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 11:58 | 1 |
| Lead | ND | | 5.08 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 11:58 | 1 |

**Client Sample ID: 1220003-P7**
**Date Collected: 02/09/21 07:40**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-3**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 2.56 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:00 | 1 |
| Lead | ND | | 5.13 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:00 | 1 |

**Client Sample ID: 1220003-P10**
**Date Collected: 02/09/21 10:00**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-4**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 2.59 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:02 | 1 |
| Lead | ND | | 5.18 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:02 | 1 |

**Client Sample ID: 1220003-P12**
**Date Collected: 02/09/21 10:10**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-5**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 2.54 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:04 | 1 |
| Lead | ND | | 5.08 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:04 | 1 |

**Client Sample ID: 1220003-P13**
**Date Collected: 02/09/21 10:16**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-6**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 2.45 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:06 | 1 |
| Lead | ND | | 4.90 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:06 | 1 |

**Client Sample ID: 1220003-P14**
**Date Collected: 02/09/21 10:23**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-7**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 2.49 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:09 | 1 |
| Lead | ND | | 4.98 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 12:09 | 1 |

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 570-128957/1-A**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | ND | | 5.0 | | mg/Kg | | 02/12/21 14:45 | 02/15/21 14:45 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *n-Octacosane (Surr)* | *93* | | *61 - 145* | *02/12/21 14:45* | *02/15/21 14:45* | *1* |

**Lab Sample ID: LCS 570-128957/2-A**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | | | 400 | 429.5 | | mg/Kg | | 107 | 67 - 121 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *94* | | *61 - 145* |

**Lab Sample ID: LCS 570-128957/6-A**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *90* | | *61 - 145* |

**Lab Sample ID: LCSD 570-128957/3-A**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | | | 400 | 414.2 | | mg/Kg | | 104 | 67 - 121 | 4 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *84* | | *61 - 145* |

**Lab Sample ID: LCSD 570-128957/7-A**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *n-Octacosane (Surr)* | *97* | | *61 - 145* |

**Lab Sample ID: 570-50828-8 MS**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: 1220003-ASTI-5**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | ND | | 375 | 426.4 | | mg/Kg | | 114 | 33 - 153 | | |

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 570-50828-8 MS**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: 1220003-ASTI-5**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 88 | | 61 - 145 |

**Lab Sample ID: 570-50828-8 MS**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: 1220003-ASTI-5**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 95 | | 61 - 145 |

**Lab Sample ID: 570-50828-8 MSD**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: 1220003-ASTI-5**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Diesel (C10-C28) | ND | | 387 | 453.4 | | mg/Kg | | 117 | 33 - 153 | 6 | 32 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 103 | | 61 - 145 |

**Lab Sample ID: 570-50828-8 MSD**
**Matrix: Solid**
**Analysis Batch: 129244**

**Client Sample ID: 1220003-ASTI-5**
**Prep Type: Total/NA**
**Prep Batch: 128957**

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| n-Octacosane (Surr) | 84 | | 61 - 145 |

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 570-128619/1-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 128619**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| 4,4'-DDE | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| 4,4'-DDT | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 570-128619/1-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 128619**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 12:50 | 02/16/21 03:27 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *78* | | *37 - 151* | *02/11/21 12:50* | *02/16/21 03:27* | *1* |
| *Tetrachloro-m-xylene* | *86* | | *38 - 148* | *02/11/21 12:50* | *02/16/21 03:27* | *1* |

**Lab Sample ID: LCS 570-128619/2-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 128619**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aldrin | | | 25.0 | 20.85 | | ug/Kg | | 83 | 52 - 138 | | |
| alpha-BHC | | | 25.0 | 19.78 | | ug/Kg | | 79 | 51 - 140 | | |
| alpha-Chlordane | | | 25.0 | 22.42 | | ug/Kg | | 90 | 53 - 141 | | |
| beta-BHC | | | 25.0 | 20.39 | | ug/Kg | | 82 | 53 - 141 | | |
| 4,4'-DDD | | | 25.0 | 25.21 | | ug/Kg | | 101 | 54 - 154 | | |
| 4,4'-DDE | | | 25.0 | 27.88 | | ug/Kg | | 112 | 51 - 149 | | |
| 4,4'-DDT | | | 25.0 | 21.21 | | ug/Kg | | 85 | 39 - 152 | | |
| delta-BHC | | | 25.0 | 23.82 | | ug/Kg | | 95 | 20 - 132 | | |
| Dieldrin | | | 25.0 | 22.13 | | ug/Kg | | 89 | 52 - 144 | | |
| Endosulfan I | | | 25.0 | 22.03 | | ug/Kg | | 88 | 49 - 139 | | |
| Endosulfan II | | | 25.0 | 21.48 | | ug/Kg | | 86 | 51 - 150 | | |
| Endosulfan sulfate | | | 25.0 | 20.19 | | ug/Kg | | 81 | 45 - 139 | | |
| Endrin | | | 25.0 | 22.34 | | ug/Kg | | 89 | 53 - 151 | | |
| Endrin aldehyde | | | 25.0 | 19.09 | | ug/Kg | | 76 | 31 - 146 | | |
| gamma-BHC | | | 25.0 | 20.22 | | ug/Kg | | 81 | 53 - 141 | | |
| gamma-Chlordane | | | 25.0 | 21.87 | p | ug/Kg | | 87 | 46 - 156 | | |
| Heptachlor | | | 25.0 | 20.62 | | ug/Kg | | 82 | 52 - 144 | | |
| Heptachlor epoxide | | | 25.0 | 22.47 | | ug/Kg | | 90 | 54 - 141 | | |
| Methoxychlor | | | 25.0 | 22.68 | | ug/Kg | | 91 | 47 - 148 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *91* | | *37 - 151* |
| *Tetrachloro-m-xylene* | *93* | | *38 - 148* |

**Lab Sample ID: LCSD 570-128619/3-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 128619**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aldrin | | | 25.0 | 21.21 | | ug/Kg | | 85 | 52 - 138 | 2 | 30 |
| alpha-BHC | | | 25.0 | 22.77 | | ug/Kg | | 91 | 51 - 140 | 14 | 29 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 570-128619/3-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 128619**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| alpha-Chlordane | | | 25.0 | 21.50 | | ug/Kg | | 86 | 53 - 141 | 4 | 28 |
| beta-BHC | | | 25.0 | 20.99 | | ug/Kg | | 84 | 53 - 141 | 3 | 29 |
| 4,4'-DDD | | | 25.0 | 23.60 | | ug/Kg | | 94 | 54 - 154 | 7 | 30 |
| 4,4'-DDE | | | 25.0 | 23.15 | | ug/Kg | | 93 | 51 - 149 | 19 | 28 |
| 4,4'-DDT | | | 25.0 | 20.65 | | ug/Kg | | 83 | 39 - 152 | 3 | 31 |
| delta-BHC | | | 25.0 | 22.88 | | ug/Kg | | 92 | 20 - 132 | 4 | 40 |
| Dieldrin | | | 25.0 | 21.54 | | ug/Kg | | 86 | 52 - 144 | 3 | 28 |
| Endosulfan I | | | 25.0 | 20.84 | | ug/Kg | | 83 | 49 - 139 | 6 | 28 |
| Endosulfan II | | | 25.0 | 21.10 | | ug/Kg | | 84 | 51 - 150 | 2 | 29 |
| Endosulfan sulfate | | | 25.0 | 21.77 | | ug/Kg | | 87 | 45 - 139 | 7 | 30 |
| Endrin | | | 25.0 | 21.92 | | ug/Kg | | 88 | 53 - 151 | 2 | 29 |
| Endrin aldehyde | | | 25.0 | 21.30 | | ug/Kg | | 85 | 31 - 146 | 11 | 40 |
| gamma-BHC | | | 25.0 | 22.45 | | ug/Kg | | 90 | 53 - 141 | 10 | 29 |
| gamma-Chlordane | | | 25.0 | 20.98 | | ug/Kg | | 84 | 46 - 156 | 4 | 39 |
| Heptachlor | | | 25.0 | 21.99 | | ug/Kg | | 88 | 52 - 144 | 6 | 29 |
| Heptachlor epoxide | | | 25.0 | 21.45 | | ug/Kg | | 86 | 54 - 141 | 5 | 29 |
| Methoxychlor | | | 25.0 | 22.28 | | ug/Kg | | 89 | 47 - 148 | 2 | 29 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *93* | | *37 - 151* |
| *Tetrachloro-m-xylene* | *89* | | *38 - 148* |

**Lab Sample ID: 570-50828-4 MS**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: 1220003-P10**
**Prep Type: Total/NA**
**Prep Batch: 128619**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 24.8 | 15.93 | | ug/Kg | | 64 | 26 - 125 |
| alpha-BHC | ND | | 24.8 | 15.09 | | ug/Kg | | 61 | 24 - 125 |
| alpha-Chlordane | ND | | 24.8 | 15.31 | | ug/Kg | | 62 | 17 - 144 |
| beta-BHC | ND | | 24.8 | 14.36 | | ug/Kg | | 58 | 28 - 125 |
| 4,4'-DDD | ND | | 24.8 | 19.02 | | ug/Kg | | 77 | 27 - 144 |
| 4,4'-DDE | ND | | 24.8 | 18.83 | | ug/Kg | | 68 | 28 - 141 |
| 4,4'-DDT | ND | | 24.8 | 15.82 | | ug/Kg | | 64 | 10 - 154 |
| delta-BHC | ND | | 24.8 | 14.50 | | ug/Kg | | 58 | 10 - 125 |
| Dieldrin | ND | | 24.8 | 15.85 | | ug/Kg | | 64 | 19 - 145 |
| Endosulfan I | ND | | 24.8 | 15.46 | | ug/Kg | | 62 | 25 - 125 |
| Endosulfan II | ND | | 24.8 | 15.72 | | ug/Kg | | 63 | 13 - 142 |
| Endosulfan sulfate | ND | | 24.8 | 14.19 | | ug/Kg | | 57 | 14 - 126 |
| Endrin | ND | | 24.8 | 15.87 | | ug/Kg | | 64 | 28 - 139 |
| Endrin aldehyde | ND | | 24.8 | 15.36 | | ug/Kg | | 62 | 12 - 125 |
| gamma-BHC | ND | | 24.8 | 14.97 | | ug/Kg | | 60 | 24 - 125 |
| gamma-Chlordane | ND | | 24.8 | 22.36 | | ug/Kg | | 90 | 10 - 160 |
| Heptachlor | ND | | 24.8 | 14.26 | | ug/Kg | | 57 | 19 - 127 |
| Heptachlor epoxide | ND | | 24.8 | 16.63 | | ug/Kg | | 67 | 33 - 123 |
| Methoxychlor | ND | | 24.8 | 21.00 | | ug/Kg | | 85 | 19 - 128 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 570-50828-4 MS**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: 1220003-P10**
**Prep Type: Total/NA**
**Prep Batch: 128619**

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *74* | | *37 - 151* |
| *Tetrachloro-m-xylene* | *63* | | *38 - 148* |

**Lab Sample ID: 570-50828-4 MSD**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: 1220003-P10**
**Prep Type: Total/NA**
**Prep Batch: 128619**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 24.8 | 16.64 | | ug/Kg | | 67 | 26 - 125 | 4 | 40 |
| alpha-BHC | ND | | 24.8 | 18.41 | | ug/Kg | | 74 | 24 - 125 | 20 | 40 |
| alpha-Chlordane | ND | | 24.8 | 15.97 | | ug/Kg | | 64 | 17 - 144 | 4 | 40 |
| beta-BHC | ND | | 24.8 | 16.04 | | ug/Kg | | 65 | 28 - 125 | 11 | 39 |
| 4,4'-DDD | ND | | 24.8 | 16.43 | | ug/Kg | | 66 | 27 - 144 | 15 | 40 |
| 4,4'-DDE | ND | | 24.8 | 16.61 | | ug/Kg | | 60 | 28 - 141 | 13 | 32 |
| 4,4'-DDT | ND | | 24.8 | 14.09 | | ug/Kg | | 57 | 10 - 154 | 12 | 40 |
| delta-BHC | ND | | 24.8 | 17.16 | | ug/Kg | | 69 | 10 - 125 | 17 | 40 |
| Dieldrin | ND | | 24.8 | 15.77 | | ug/Kg | | 64 | 19 - 145 | 1 | 39 |
| Endosulfan I | ND | | 24.8 | 15.69 | | ug/Kg | | 63 | 25 - 125 | 2 | 39 |
| Endosulfan II | ND | | 24.8 | 15.07 | | ug/Kg | | 61 | 13 - 142 | 4 | 40 |
| Endosulfan sulfate | ND | | 24.8 | 15.20 | | ug/Kg | | 61 | 14 - 126 | 7 | 38 |
| Endrin | ND | | 24.8 | 16.06 | | ug/Kg | | 65 | 28 - 139 | 1 | 40 |
| Endrin aldehyde | ND | | 24.8 | 14.81 | | ug/Kg | | 60 | 12 - 125 | 4 | 40 |
| gamma-BHC | ND | | 24.8 | 17.91 | | ug/Kg | | 72 | 24 - 125 | 18 | 40 |
| gamma-Chlordane | ND | | 24.8 | 15.78 | | ug/Kg | | 64 | 10 - 160 | 34 | 40 |
| Heptachlor | ND | | 24.8 | 17.38 | | ug/Kg | | 70 | 19 - 127 | 20 | 40 |
| Heptachlor epoxide | ND | | 24.8 | 16.40 | | ug/Kg | | 66 | 33 - 123 | 1 | 34 |
| Methoxychlor | ND | | 24.8 | 15.41 | | ug/Kg | | 62 | 19 - 128 | 31 | 40 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *67* | | *37 - 151* |
| *Tetrachloro-m-xylene* | *75* | | *38 - 148* |

**Lab Sample ID: MB 570-128626/1-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 128626**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| alpha-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| alpha-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| beta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Chlordane | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| 4,4'-DDD | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| 4,4'-DDE | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| 4,4'-DDT | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| delta-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Dieldrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Endosulfan I | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 570-128626/1-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 128626**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endosulfan II | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Endosulfan sulfate | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Endrin | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Endrin aldehyde | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Endrin ketone | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| gamma-BHC | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| gamma-Chlordane | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Heptachlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Heptachlor epoxide | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Methoxychlor | ND | | 5.0 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |
| Toxaphene | ND | | 25 | | ug/Kg | | 02/11/21 13:06 | 02/16/21 00:22 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *93* | | *37 - 151* | *02/11/21 13:06* | *02/16/21 00:22* | *1* |
| *Tetrachloro-m-xylene* | *88* | | *38 - 148* | *02/11/21 13:06* | *02/16/21 00:22* | *1* |

**Lab Sample ID: LCS 570-128626/2-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 128626**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aldrin | | | 25.0 | 20.61 | | ug/Kg | | 82 | 52 - 138 | | |
| alpha-BHC | | | 25.0 | 21.74 | | ug/Kg | | 87 | 51 - 140 | | |
| alpha-Chlordane | | | 25.0 | 20.36 | | ug/Kg | | 81 | 53 - 141 | | |
| beta-BHC | | | 25.0 | 19.88 | | ug/Kg | | 80 | 53 - 141 | | |
| 4,4'-DDD | | | 25.0 | 21.98 | | ug/Kg | | 88 | 54 - 154 | | |
| 4,4'-DDE | | | 25.0 | 21.98 | | ug/Kg | | 88 | 51 - 149 | | |
| 4,4'-DDT | | | 25.0 | 19.37 | | ug/Kg | | 77 | 39 - 152 | | |
| delta-BHC | | | 25.0 | 22.37 | | ug/Kg | | 89 | 20 - 132 | | |
| Dieldrin | | | 25.0 | 20.38 | | ug/Kg | | 82 | 52 - 144 | | |
| Endosulfan I | | | 25.0 | 19.89 | | ug/Kg | | 80 | 49 - 139 | | |
| Endosulfan II | | | 25.0 | 19.90 | | ug/Kg | | 80 | 51 - 150 | | |
| Endosulfan sulfate | | | 25.0 | 20.36 | | ug/Kg | | 81 | 45 - 139 | | |
| Endrin | | | 25.0 | 20.93 | | ug/Kg | | 84 | 53 - 151 | | |
| Endrin aldehyde | | | 25.0 | 19.91 | | ug/Kg | | 80 | 31 - 146 | | |
| gamma-BHC | | | 25.0 | 21.56 | | ug/Kg | | 86 | 53 - 141 | | |
| gamma-Chlordane | | | 25.0 | 20.12 | | ug/Kg | | 80 | 46 - 156 | | |
| Heptachlor | | | 25.0 | 21.14 | | ug/Kg | | 85 | 52 - 144 | | |
| Heptachlor epoxide | | | 25.0 | 20.48 | | ug/Kg | | 82 | 54 - 141 | | |
| Methoxychlor | | | 25.0 | 20.49 | | ug/Kg | | 82 | 47 - 148 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *79* | | *37 - 151* |
| *Tetrachloro-m-xylene* | *85* | | *38 - 148* |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 570-128626/3-A**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 128626**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aldrin | | | 25.0 | 20.55 | | ug/Kg | | 82 | 52 - 138 | 0 | 30 |
| alpha-BHC | | | 25.0 | 21.49 | | ug/Kg | | 86 | 51 - 140 | 1 | 29 |
| alpha-Chlordane | | | 25.0 | 20.40 | | ug/Kg | | 82 | 53 - 141 | 0 | 28 |
| beta-BHC | | | 25.0 | 19.80 | | ug/Kg | | 79 | 53 - 141 | 0 | 29 |
| 4,4'-DDD | | | 25.0 | 22.43 | | ug/Kg | | 90 | 54 - 154 | 2 | 30 |
| 4,4'-DDE | | | 25.0 | 22.16 | | ug/Kg | | 89 | 51 - 149 | 1 | 28 |
| 4,4'-DDT | | | 25.0 | 19.92 | | ug/Kg | | 80 | 39 - 152 | 3 | 31 |
| delta-BHC | | | 25.0 | 22.13 | | ug/Kg | | 89 | 20 - 132 | 1 | 40 |
| Dieldrin | | | 25.0 | 20.40 | | ug/Kg | | 82 | 52 - 144 | 0 | 28 |
| Endosulfan I | | | 25.0 | 19.83 | | ug/Kg | | 79 | 49 - 139 | 0 | 28 |
| Endosulfan II | | | 25.0 | 20.31 | | ug/Kg | | 81 | 51 - 150 | 2 | 29 |
| Endosulfan sulfate | | | 25.0 | 21.23 | | ug/Kg | | 85 | 45 - 139 | 4 | 30 |
| Endrin | | | 25.0 | 20.89 | | ug/Kg | | 84 | 53 - 151 | 0 | 29 |
| Endrin aldehyde | | | 25.0 | 20.68 | | ug/Kg | | 83 | 31 - 146 | 4 | 40 |
| gamma-BHC | | | 25.0 | 21.33 | | ug/Kg | | 85 | 53 - 141 | 1 | 29 |
| gamma-Chlordane | | | 25.0 | 20.06 | | ug/Kg | | 80 | 46 - 156 | 0 | 39 |
| Heptachlor | | | 25.0 | 20.87 | | ug/Kg | | 83 | 52 - 144 | 1 | 29 |
| Heptachlor epoxide | | | 25.0 | 20.38 | | ug/Kg | | 82 | 54 - 141 | 0 | 29 |
| Methoxychlor | | | 25.0 | 21.85 | | ug/Kg | | 87 | 47 - 148 | 6 | 29 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *90* | | *37 - 151* |
| *Tetrachloro-m-xylene* | *84* | | *38 - 148* |

**Lab Sample ID: 570-50828-5 MS**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: 1220003-P12**
**Prep Type: Total/NA**
**Prep Batch: 128626**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 24.9 | 16.67 | | ug/Kg | | 67 | 26 - 125 | | |
| alpha-BHC | ND | | 24.9 | 19.44 | | ug/Kg | | 78 | 24 - 125 | | |
| alpha-Chlordane | ND | | 24.9 | 19.10 | | ug/Kg | | 77 | 17 - 144 | | |
| beta-BHC | ND | | 24.9 | 17.90 | | ug/Kg | | 72 | 28 - 125 | | |
| 4,4'-DDD | ND | | 24.9 | 21.03 | | ug/Kg | | 85 | 27 - 144 | | |
| 4,4'-DDE | ND | | 24.9 | 23.23 | | ug/Kg | | 86 | 28 - 141 | | |
| 4,4'-DDT | ND | | 24.9 | 18.14 | | ug/Kg | | 73 | 10 - 154 | | |
| delta-BHC | ND | | 24.9 | 20.68 | | ug/Kg | | 83 | 10 - 125 | | |
| Dieldrin | ND | | 24.9 | 19.08 | | ug/Kg | | 77 | 19 - 145 | | |
| Endosulfan I | ND | | 24.9 | 18.79 | | ug/Kg | | 76 | 25 - 125 | | |
| Endosulfan II | ND | | 24.9 | 18.65 | | ug/Kg | | 75 | 13 - 142 | | |
| Endosulfan sulfate | ND | | 24.9 | 18.59 | | ug/Kg | | 75 | 14 - 126 | | |
| Endrin | ND | | 24.9 | 19.91 | | ug/Kg | | 80 | 28 - 139 | | |
| Endrin aldehyde | ND | | 24.9 | 16.10 | | ug/Kg | | 65 | 12 - 125 | | |
| gamma-BHC | ND | | 24.9 | 19.28 | | ug/Kg | | 78 | 24 - 125 | | |
| gamma-Chlordane | ND | | 24.9 | 18.27 | p | ug/Kg | | 74 | 10 - 160 | | |
| Heptachlor | ND | | 24.9 | 18.75 | | ug/Kg | | 75 | 19 - 127 | | |
| Heptachlor epoxide | ND | | 24.9 | 18.77 | | ug/Kg | | 76 | 33 - 123 | | |
| Methoxychlor | ND | | 24.9 | 19.22 | | ug/Kg | | 77 | 19 - 128 | | |

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 570-50828-5 MS**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: 1220003-P12**
**Prep Type: Total/NA**
**Prep Batch: 128626**

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *74* | | *37 - 151* |
| *Tetrachloro-m-xylene* | *77* | | *38 - 148* |

**Lab Sample ID: 570-50828-5 MSD**
**Matrix: Solid**
**Analysis Batch: 129328**

**Client Sample ID: 1220003-P12**
**Prep Type: Total/NA**
**Prep Batch: 128626**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aldrin | ND | | 24.8 | 14.99 | | ug/Kg | | 60 | 26 - 125 | 11 | 40 |
| alpha-BHC | ND | | 24.8 | 18.77 | | ug/Kg | | 76 | 24 - 125 | 4 | 40 |
| alpha-Chlordane | ND | | 24.8 | 18.79 | | ug/Kg | | 76 | 17 - 144 | 2 | 40 |
| beta-BHC | ND | | 24.8 | 17.59 | | ug/Kg | | 71 | 28 - 125 | 2 | 39 |
| 4,4'-DDD | ND | | 24.8 | 22.72 | | ug/Kg | | 92 | 27 - 144 | 8 | 40 |
| 4,4'-DDE | ND | | 24.8 | 23.23 | | ug/Kg | | 86 | 28 - 141 | 0 | 32 |
| 4,4'-DDT | ND | | 24.8 | 13.34 | | ug/Kg | | 54 | 10 - 154 | 30 | 40 |
| delta-BHC | ND | | 24.8 | 20.61 | | ug/Kg | | 83 | 10 - 125 | 0 | 40 |
| Dieldrin | ND | | 24.8 | 18.81 | | ug/Kg | | 76 | 19 - 145 | 1 | 39 |
| Endosulfan I | ND | | 24.8 | 18.55 | | ug/Kg | | 75 | 25 - 125 | 1 | 39 |
| Endosulfan II | ND | | 24.8 | 18.67 | | ug/Kg | | 75 | 13 - 142 | 0 | 40 |
| Endosulfan sulfate | ND | | 24.8 | 18.52 | | ug/Kg | | 75 | 14 - 126 | 0 | 38 |
| Endrin | ND | | 24.8 | 19.63 | | ug/Kg | | 79 | 28 - 139 | 1 | 40 |
| Endrin aldehyde | ND | | 24.8 | 15.09 | | ug/Kg | | 61 | 12 - 125 | 6 | 40 |
| gamma-BHC | ND | | 24.8 | 18.75 | | ug/Kg | | 76 | 24 - 125 | 3 | 40 |
| gamma-Chlordane | ND | | 24.8 | 18.15 | p | ug/Kg | | 73 | 10 - 160 | 1 | 40 |
| Heptachlor | ND | | 24.8 | 17.74 | | ug/Kg | | 72 | 19 - 127 | 6 | 40 |
| Heptachlor epoxide | ND | | 24.8 | 18.90 | | ug/Kg | | 76 | 33 - 123 | 1 | 34 |
| Methoxychlor | ND | | 24.8 | 15.28 | | ug/Kg | | 62 | 19 - 128 | 23 | 40 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl (Surr)* | *81* | | *37 - 151* |
| *Tetrachloro-m-xylene* | *75* | | *38 - 148* |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-129086/1-A**
**Matrix: Solid**
**Analysis Batch: 129357**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 129086**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 2.51 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 09:34 | 1 |
| Lead | ND | | 5.03 | | mg/Kg | | 02/13/21 11:00 | 02/15/21 09:34 | 1 |

**Lab Sample ID: LCS 570-129086/2-A**
**Matrix: Solid**
**Analysis Batch: 129357**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 129086**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | | | 24.5 | 21.38 | | mg/Kg | | 87 | 80 - 120 | | |
| Lead | | | 24.5 | 22.84 | | mg/Kg | | 93 | 80 - 120 | | |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: LCSD 570-129086/3-A**
**Matrix: Solid**
**Analysis Batch: 129357**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 129086**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | | | 25.0 | 22.30 | | mg/Kg | | 89 | 80 - 120 | 4 | 20 |
| Lead | | | 25.0 | 23.33 | | mg/Kg | | 93 | 80 - 120 | 2 | 20 |

**Lab Sample ID: 570-50970-A-4-C MS**
**Matrix: Solid**
**Analysis Batch: 129357**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 129086**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.38 | | 24.4 | 22.88 | | mg/Kg | | 80 | 75 - 125 |
| Lead | 9.46 | | 24.4 | 28.32 | | mg/Kg | | 77 | 75 - 125 |

**Lab Sample ID: 570-50970-A-4-D MSD**
**Matrix: Solid**
**Analysis Batch: 129357**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 129086**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.38 | | 25.1 | 25.28 | | mg/Kg | | 87 | 75 - 125 | 10 | 20 |
| Lead | 9.46 | | 25.1 | 30.74 | | mg/Kg | | 85 | 75 - 125 | 8 | 20 |

## GC Semi VOA

### Prep Batch: 128619

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-50828-4 | 1220003-P10 | Total/NA | Solid | 3546 | |
| MB 570-128619/1-A | Method Blank | Total/NA | Solid | 3546 | |
| LCS 570-128619/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 570-128619/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| 570-50828-4 MS | 1220003-P10 | Total/NA | Solid | 3546 | |
| 570-50828-4 MSD | 1220003-P10 | Total/NA | Solid | 3546 | |

### Prep Batch: 128626

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-50828-1 | 1220003-P2 | Total/NA | Solid | 3546 | |
| 570-50828-2 | 1220003-P5 | Total/NA | Solid | 3546 | |
| 570-50828-3 | 1220003-P7 | Total/NA | Solid | 3546 | |
| 570-50828-5 | 1220003-P12 | Total/NA | Solid | 3546 | |
| 570-50828-6 | 1220003-P13 | Total/NA | Solid | 3546 | |
| 570-50828-7 | 1220003-P14 | Total/NA | Solid | 3546 | |
| MB 570-128626/1-A | Method Blank | Total/NA | Solid | 3546 | |
| LCS 570-128626/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 570-128626/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| 570-50828-5 MS | 1220003-P12 | Total/NA | Solid | 3546 | |
| 570-50828-5 MSD | 1220003-P12 | Total/NA | Solid | 3546 | |

### Prep Batch: 128957

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-50828-8 | 1220003-ASTI-5 | Total/NA | Solid | 3550C | |
| 570-50828-9 | 1220003-ASTI-10 | Total/NA | Solid | 3550C | |
| MB 570-128957/1-A | Method Blank | Total/NA | Solid | 3550C | |
| LCS 570-128957/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| LCS 570-128957/6-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| LCSD 570-128957/3-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| LCSD 570-128957/7-A | Lab Control Sample Dup | Total/NA | Solid | 3550C | |
| 570-50828-8 MS | 1220003-ASTI-5 | Total/NA | Solid | 3550C | |
| 570-50828-8 MS | 1220003-ASTI-5 | Total/NA | Solid | 3550C | |
| 570-50828-8 MSD | 1220003-ASTI-5 | Total/NA | Solid | 3550C | |
| 570-50828-8 MSD | 1220003-ASTI-5 | Total/NA | Solid | 3550C | |

### Analysis Batch: 129244

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-50828-8 | 1220003-ASTI-5 | Total/NA | Solid | 8015B | 128957 |
| 570-50828-9 | 1220003-ASTI-10 | Total/NA | Solid | 8015B | 128957 |
| MB 570-128957/1-A | Method Blank | Total/NA | Solid | 8015B | 128957 |
| LCS 570-128957/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 128957 |
| LCS 570-128957/6-A | Lab Control Sample | Total/NA | Solid | 8015B | 128957 |
| LCSD 570-128957/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 128957 |
| LCSD 570-128957/7-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 128957 |
| 570-50828-8 MS | 1220003-ASTI-5 | Total/NA | Solid | 8015B | 128957 |
| 570-50828-8 MS | 1220003-ASTI-5 | Total/NA | Solid | 8015B | 128957 |
| 570-50828-8 MSD | 1220003-ASTI-5 | Total/NA | Solid | 8015B | 128957 |
| 570-50828-8 MSD | 1220003-ASTI-5 | Total/NA | Solid | 8015B | 128957 |

# QC Association Summary

Client: EnviroApplications, Inc.
Project/Site: 01.TA6001-21

Job ID: 570-50828-1

## GC Semi VOA

### Analysis Batch: 129328

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-50828-1 | 1220003-P2 | Total/NA | Solid | 8081A | 128626 |
| 570-50828-2 | 1220003-P5 | Total/NA | Solid | 8081A | 128626 |
| 570-50828-3 | 1220003-P7 | Total/NA | Solid | 8081A | 128626 |
| 570-50828-4 | 1220003-P10 | Total/NA | Solid | 8081A | 128619 |
| 570-50828-5 | 1220003-P12 | Total/NA | Solid | 8081A | 128626 |
| 570-50828-6 | 1220003-P13 | Total/NA | Solid | 8081A | 128626 |
| 570-50828-7 | 1220003-P14 | Total/NA | Solid | 8081A | 128626 |
| MB 570-128619/1-A | Method Blank | Total/NA | Solid | 8081A | 128619 |
| MB 570-128626/1-A | Method Blank | Total/NA | Solid | 8081A | 128626 |
| LCS 570-128619/2-A | Lab Control Sample | Total/NA | Solid | 8081A | 128619 |
| LCS 570-128626/2-A | Lab Control Sample | Total/NA | Solid | 8081A | 128626 |
| LCSD 570-128619/3-A | Lab Control Sample Dup | Total/NA | Solid | 8081A | 128619 |
| LCSD 570-128626/3-A | Lab Control Sample Dup | Total/NA | Solid | 8081A | 128626 |
| 570-50828-4 MS | 1220003-P10 | Total/NA | Solid | 8081A | 128619 |
| 570-50828-4 MSD | 1220003-P10 | Total/NA | Solid | 8081A | 128619 |
| 570-50828-5 MS | 1220003-P12 | Total/NA | Solid | 8081A | 128626 |
| 570-50828-5 MSD | 1220003-P12 | Total/NA | Solid | 8081A | 128626 |

## Metals

### Prep Batch: 129086

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-50828-1 | 1220003-P2 | Total/NA | Solid | 3050B | |
| 570-50828-2 | 1220003-P5 | Total/NA | Solid | 3050B | |
| 570-50828-3 | 1220003-P7 | Total/NA | Solid | 3050B | |
| 570-50828-4 | 1220003-P10 | Total/NA | Solid | 3050B | |
| 570-50828-5 | 1220003-P12 | Total/NA | Solid | 3050B | |
| 570-50828-6 | 1220003-P13 | Total/NA | Solid | 3050B | |
| 570-50828-7 | 1220003-P14 | Total/NA | Solid | 3050B | |
| MB 570-129086/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 570-129086/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| LCSD 570-129086/3-A | Lab Control Sample Dup | Total/NA | Solid | 3050B | |
| 570-50970-A-4-C MS | Matrix Spike | Total/NA | Solid | 3050B | |
| 570-50970-A-4-D MSD | Matrix Spike Duplicate | Total/NA | Solid | 3050B | |

### Analysis Batch: 129357

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 570-50828-1 | 1220003-P2 | Total/NA | Solid | 6010B | 129086 |
| 570-50828-2 | 1220003-P5 | Total/NA | Solid | 6010B | 129086 |
| 570-50828-3 | 1220003-P7 | Total/NA | Solid | 6010B | 129086 |
| 570-50828-4 | 1220003-P10 | Total/NA | Solid | 6010B | 129086 |
| 570-50828-5 | 1220003-P12 | Total/NA | Solid | 6010B | 129086 |
| 570-50828-6 | 1220003-P13 | Total/NA | Solid | 6010B | 129086 |
| 570-50828-7 | 1220003-P14 | Total/NA | Solid | 6010B | 129086 |
| MB 570-129086/1-A | Method Blank | Total/NA | Solid | 6010B | 129086 |
| LCS 570-129086/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 129086 |
| LCSD 570-129086/3-A | Lab Control Sample Dup | Total/NA | Solid | 6010B | 129086 |
| 570-50970-A-4-C MS | Matrix Spike | Total/NA | Solid | 6010B | 129086 |
| 570-50970-A-4-D MSD | Matrix Spike Duplicate | Total/NA | Solid | 6010B | 129086 |

# Lab Chronicle

Client: EnviroApplications, Inc.
Project/Site: 01.TA6001-21

Job ID: 570-50828-1

## Client Sample ID: 1220003-P2

**Lab Sample ID: 570-50828-1**

**Date Collected: 02/09/21 09:22**

**Matrix: Solid**

**Date Received: 02/10/21 18:45**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 20.10 g | 10 mL | 128626 | 02/11/21 13:06 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 129328 | 02/16/21 09:07 | UHHN | ECL 1 |
| | Instrument ID: GC44 | | | | | | | | | |
| Total/NA | Prep | 3050B | | | 2.03 g | 100 mL | 129086 | 02/13/21 11:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 129357 | 02/15/21 11:56 | ULPF | ECL 1 |
| | Instrument ID: ICP8 | | | | | | | | | |

## Client Sample ID: 1220003-P5

**Lab Sample ID: 570-50828-2**

**Date Collected: 02/09/21 08:19**

**Matrix: Solid**

**Date Received: 02/10/21 18:45**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 20.12 g | 10 mL | 128626 | 02/11/21 13:06 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 129328 | 02/16/21 09:22 | UHHN | ECL 1 |
| | Instrument ID: GC44 | | | | | | | | | |
| Total/NA | Prep | 3050B | | | 1.97 g | 100 mL | 129086 | 02/13/21 11:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 129357 | 02/15/21 11:58 | ULPF | ECL 1 |
| | Instrument ID: ICP8 | | | | | | | | | |

## Client Sample ID: 1220003-P7

**Lab Sample ID: 570-50828-3**

**Date Collected: 02/09/21 07:40**

**Matrix: Solid**

**Date Received: 02/10/21 18:45**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 20.16 g | 10 mL | 128626 | 02/11/21 13:06 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 129328 | 02/16/21 01:05 | UHHN | ECL 1 |
| | Instrument ID: GC44 | | | | | | | | | |
| Total/NA | Prep | 3050B | | | 1.95 g | 100 mL | 129086 | 02/13/21 11:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 129357 | 02/15/21 12:00 | ULPF | ECL 1 |
| | Instrument ID: ICP8 | | | | | | | | | |

## Client Sample ID: 1220003-P10

**Lab Sample ID: 570-50828-4**

**Date Collected: 02/09/21 10:00**

**Matrix: Solid**

**Date Received: 02/10/21 18:45**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 20.15 g | 10 mL | 128619 | 02/11/21 12:50 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 129328 | 02/16/21 11:39 | UHHN | ECL 1 |
| | Instrument ID: GC44 | | | | | | | | | |
| Total/NA | Prep | 3050B | | | 1.93 g | 100 mL | 129086 | 02/13/21 11:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 129357 | 02/15/21 12:02 | ULPF | ECL 1 |
| | Instrument ID: ICP8 | | | | | | | | | |

# Lab Chronicle

Client: EnviroApplications, Inc.
Project/Site: 01.TA6001-21

Job ID: 570-50828-1

## Client Sample ID: 1220003-P12

**Lab Sample ID: 570-50828-5**

**Date Collected: 02/09/21 10:10**

**Matrix: Solid**

**Date Received: 02/10/21 18:45**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 20.14 g | 10 mL | 128626 | 02/11/21 13:06 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 129328 | 02/16/21 09:37 | UHHN | ECL 1 |
| | Instrument ID: GC44 | | | | | | | | | |
| Total/NA | Prep | 3050B | | | 1.97 g | 100 mL | 129086 | 02/13/21 11:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 129357 | 02/15/21 12:04 | ULPF | ECL 1 |
| | Instrument ID: ICP8 | | | | | | | | | |

## Client Sample ID: 1220003-P13

**Lab Sample ID: 570-50828-6**

**Date Collected: 02/09/21 10:16**

**Matrix: Solid**

**Date Received: 02/10/21 18:45**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 20.17 g | 10 mL | 128626 | 02/11/21 13:06 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 129328 | 02/16/21 09:53 | UHHN | ECL 1 |
| | Instrument ID: GC44 | | | | | | | | | |
| Total/NA | Prep | 3050B | | | 2.04 g | 100 mL | 129086 | 02/13/21 11:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 129357 | 02/15/21 12:06 | ULPF | ECL 1 |
| | Instrument ID: ICP8 | | | | | | | | | |

## Client Sample ID: 1220003-P14

**Lab Sample ID: 570-50828-7**

**Date Collected: 02/09/21 10:23**

**Matrix: Solid**

**Date Received: 02/10/21 18:45**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 20.13 g | 10 mL | 128626 | 02/11/21 13:06 | F7UI | ECL 1 |
| Total/NA | Analysis | 8081A | | 1 | | | 129328 | 02/16/21 10:08 | UHHN | ECL 1 |
| | Instrument ID: GC44 | | | | | | | | | |
| Total/NA | Prep | 3050B | | | 2.01 g | 100 mL | 129086 | 02/13/21 11:00 | SP7J | ECL 1 |
| Total/NA | Analysis | 6010B | | 1 | | | 129357 | 02/15/21 12:09 | ULPF | ECL 1 |
| | Instrument ID: ICP8 | | | | | | | | | |

## Client Sample ID: 1220003-ASTI-5

**Lab Sample ID: 570-50828-8**

**Date Collected: 02/09/21 07:19**

**Matrix: Solid**

**Date Received: 02/10/21 18:45**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 9.53 g | 10 mL | 128957 | 02/12/21 14:45 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 129244 | 02/16/21 03:20 | UJ3K | ECL 1 |
| | Instrument ID: GC70A | | | | | | | | | |

# Lab Chronicle

Client: EnviroApplications, Inc.
Project/Site: 01.TA6001-21

Job ID: 570-50828-1

**Client Sample ID: 1220003-ASTI-10**
**Date Collected: 02/09/21 07:27**
**Date Received: 02/10/21 18:45**

**Lab Sample ID: 570-50828-9**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550C | | | 10.33 g | 10 mL | 128957 | 02/12/21 14:45 | N5Y3 | ECL 1 |
| Total/NA | Analysis | 8015B | | 1 | | | 129244 | 02/16/21 03:45 | UJ3K | ECL 1 |
| | Instrument ID: GC70A | | | | | | | | | |

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Method Summary

Client: EnviroApplications, Inc.
Project/Site: 01.TA6001-21

Job ID: 570-50828-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8015B | Diesel Range Organics (DRO) (GC) | SW846 | ECL 1 |
| 8081A | Organochlorine Pesticides (GC) | SW846 | ECL 1 |
| 6010B | Metals (ICP) | SW846 | ECL 1 |
| 3050B | Preparation, Metals | SW846 | ECL 1 |
| 3546 | Microwave Extraction | SW846 | ECL 1 |
| 3550C | Ultrasonic Extraction | SW846 | ECL 1 |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

# Definitions/Glossary

Client: EnviroApplications, Inc.
Project/Site: 01.TA6001-21

Job ID: 570-50828-1

## Qualifiers

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| p | The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

50828

eurofins | Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

570-50828 Chain of Custody

# CHAIN OF CUSTODY RECORD

DATE: 2-10-21

PAGE: 1 OF 1

LABORATORY CLIENT: ENVIROApplications INC

ADDRESS: 2831 Camino Del Rios #214

CITY: SAN DIEGO STATE: CA ZIP: 92108

TEL: 619-291-3636 E-MAIL: CSMITH@ENVIROAPPLICATIONS.COM

CLIENT PROJECT NAME / NUMBER: CRAIG SMITH / EAI

P.O. NO.: 01.TA6001-21

PROJECT CONTACT: TIM LESTER 760-473-0648

SAMPLER(S): (PRINT) TIM LESTER

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:
LEAD ONLY ON TOTAL METALS & ARSENIC

## REQUESTED ANALYSES

Please check box or fill in blank as needed

| LAB USE ONLY | SAMPLE ID | SAMPLING DATE | SAMPLING TIME | MATRIX | NO. OF CONT. | Unpreserved | Preserved | Field Filtered | ☐ TPH(g) ☐ GRO | ☐ TPH(d) ☐ DRO | TPH ☐ C6-C36 ☐ C6-C44 | TPH DRO | BTEX / MTBE ☐ 8260 ☐ | VOCs (8260) | Oxygenates (8260) | Prep (5035) ☐ En Core ☐ Terra Core | SVOCs (8270) | Pesticides (8081) | PCBs (8082) | PAHs ☐ 8270 ☐ 8270 SIM | T22 Metals ☐ 6010/747X ☐ 6020/7473 | Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 120003-P2 | 2-5-21 | 922 | SOIL | 1 | | | | | | | X | | | | | | X | | | X | | | | | |
| 2 | 120003-P5 | | 814 | | 1 | | | | | | | | | | | | | X | | | X | | | | | |
| 3 | " -P7 | | 740 | | 1 | | | | | | | | | | | | | X | | | X | | | | | |
| 4 | " -P10 | | 1000 | | 1 | | | | | | | | | | | | | X | | | X | | | | | |
| 5 | " -P12 | | 1010 | | 1 | | | | | | | | | | | | | X | | | X | | | | | |
| 6 | " -P13 | | 1016 | | 1 | | | | | | | | | | | | | X | | | X | | | | | |
| 7 | " -P14 | | 1023 | | 1 | | | | | | | | | | | | | X | | | X | | | | | |
| 8 | " -AST1-5 | | 719 | | 1 | | | | | | | | | | | | | X | | | X | | | | | |
| 9 | " -AST1-10 | | 727 | | 1 | | | | | | | X | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | X | | | | | | | | | | | | | | |

Relinquished by: (Signature) — Received by: (Signature/Affiliation) — Date: 02/10/21 — Time: 14:25

Relinquished by: (Signature) — Received by: (Signature/Affiliation) — Date: 02/10/21 — Time: 1845

Relinquished by: (Signature) — Received by: (Signature/Affiliation) — Date: — Time:

3-9/2-8 SA

06/02/14 Revision

# Login Sample Receipt Checklist

Client: EnviroApplications, Inc.

Job Number: 570-50828-1

**Login Number: 50828**
**List Number: 1**
**Creator: Soriano, Precy**

**List Source: Eurofins Calscience**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

EST
ENVIRONMENTAL SUPPORT TECHNOLOGIES
*Soil Gas Surveys, Direct Push Drilling, Mobile Laboratories, Soil Vapor Extraction Systems*

February 18, 2021

EST3310

Mr. Timothy Lester
TA Group DD, LLC
2195 Faraday Ave, Suite K
Carlsbad, CA 92008

**Subject:** **Project Report for Methane Soil Gas Testing on February 9, 2021**

**Site:** **13948 Walker Avenue**
**Ontario, California**

Dear Mr. Lester:

Environmental Support Technologies (EST) is pleased to present this report documenting the performance of a methane soil gas testing project at the farm located at 13948 Walker Avenue in the City of Ontario, California (the Site). EST holds a City of Los Angeles Department of Building and Safety (LADBS) Methane Testing License (#10218) and is a licensed California General Engineering Contractor and Driller (#920248- C57). The scope of work performed for this project consistent with the City of Ontario Building Departments (OBD) Methane Assessment for Projects in the New Model Colony.

The general investigation and reporting requirements of the guidelines referenced above are as follows:

- The investigation and report shall be prepared by a licensed engineer or licensed geologist.
- The report shall contain a historical aerial photos and historic topographic map review.
- Interviews with the owner/land managers will be performed to determine possible locations of potential methane generation areas.
- Site reconnaissance will be performed to determine the current site usage and conditions.
- Potential methane areas will be identified.
- A proposed scope of work will be developed for post-grading methane investigation based on the historical study.

This investigation provides a preliminary assessment of subsurface methane concentrations at select areas of the Site. This investigation is not meant to replace the future work planned to be performed as required in the above-mentioned guidelines. A more comprehensive subsurface methane investigation is required after grading is completed.

## Scope of Work

The project consists of a farm located on 13948 Walker Avenue in the City of Ontario, California. Methane testing was performed at six locations at a depth of 5 feet using standard soil gas testing procedures to identify any pockets of methane. The soil gas probes were sampled two hours after installation allowing enough time for subsurface equilibrium. Provided below is a general scope of work EST completed for the methane testing at the Site.

- Preparation of a site-specific health and safety plan for methane testing activities.
- Installation of borings for methane testing at a depth of 5 feet below ground surface (bgs) at six (6) locations on the 1348 Walker Avenue property. A truck-mounted Geoprobe direct-push probe was used for the installation of the methane sampling probes on February 9, 2021. Groundwater was not encountered during drilling.
- Installation of methane sampling soil gas probes at six (6) soil boring locations at a depth of 5 feet bgs across the Site.
- Performance of methane testing on February 9, 2021 occurred after the required minimum of 2 hours of subsurface equilibration time. Gas pressure was measured prior to methane testing using Magnehelic™ pressure gauges capable of measuring pressure to 0.01 inches of water column (IWC). Gas pressure was not detected in any of the probes sampled. Pressure measurement data is provided in **Appendix A**.
- Methane, hydrogen sulfide, oxygen and carbon monoxide were measured in each probe using a portable RKI Instruments Eagle Multi-Gas Detector (RKI Eagle) equipped with a combustible gas detector that was calibrated on February 8, 2021. The RKI Eagle detection range for methane is 0 to 50,000 parts per million by volume (ppmv) with an accuracy of ±50 ppmv or ±10% of reading (whichever is greater). The detection range for hydrogen sulfide is 0 to 100 ppm with an accuracy range of ±5% of the reading or ±2 ppmv (whichever is greater). The detection range of oxygen is 0 to 40% with an accuracy of 0.5% of the reading. The detection range for carbon monoxide is 0 to 500 ppmv with an accuracy range of ±5% of the reading or ±5 ppmv. The Probe testing results are provided in **Appendix A**.
- Preparation of this project report includes the signature and stamp of the registered professional responsible for the project.

## Conclusions

EST concludes the following regarding the findings of the methane testing project performed at 13948 Walker Avenue, Ontario, California:

- Gas pressure was not detected in any of the 6 probes sampled. In the presence of positive gas pressure, methane has the potential to penetrate and accumulate in above or below ground building structures.
- The "action level" for methane in soil gas that may require further investigation and/or mandatory provisions for mitigation (e.g. sub-slab barriers, etc.) is generally considered to be 5,000 ppmv. Methane was not detected in any of the probes tested above 5,000 ppmv, with the exception of probe P6 that had a concentration of 7,050 ppmv.
- A review of the OBD Methane Assessment for Projects in the New Model Colony minimum mitigation guidelines state that methane concentrations below 15,000 parts per million (ppm) require a 10-millimeter moisture barrier and the sealing of utility conduits and other subsurface penetrations in an approved method.
- Additional methane design guidelines include a methane report prepared by a licensed engineer or geologist on required remediation for properties that contain waste sites, burial sites, ponds and/or lowlands. EST recommends the installation of additional borings on the property to determine if other areas on the property exceed the “action level” for methane and an investigation into any waste or burial sites on the Site.

## Limitations and Warranties

Environmental Management Strategies, Inc. (EST) prepared this report for the exclusive use of **TA Group DD, LLC** and assigned parties only. The services described within this document were performed in accordance with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. The information contained in this report was based on measurements performed in specific areas during a specific time period. EST' professional opinions and conclusions are based in part on interpretation of data from discrete sampling or measurement locations that may not represent actual conditions at un-sampled or un-measured locations. EST assumes no responsibility for issues arising from changes in environmental standards, practices, or regulations subsequent to performance of site assessment work. In the event that any changes occur in site conditions or uses of the property, the conclusions and recommendations contained in this document should be reviewed and modified or verified in writing by EST. EST does not warrant the accuracy of information supplied by others, or the use of segregated portions of this document.

Please contact the undersigned at (949) 679-9500 if you have any questions regarding this project.

Sincerely,

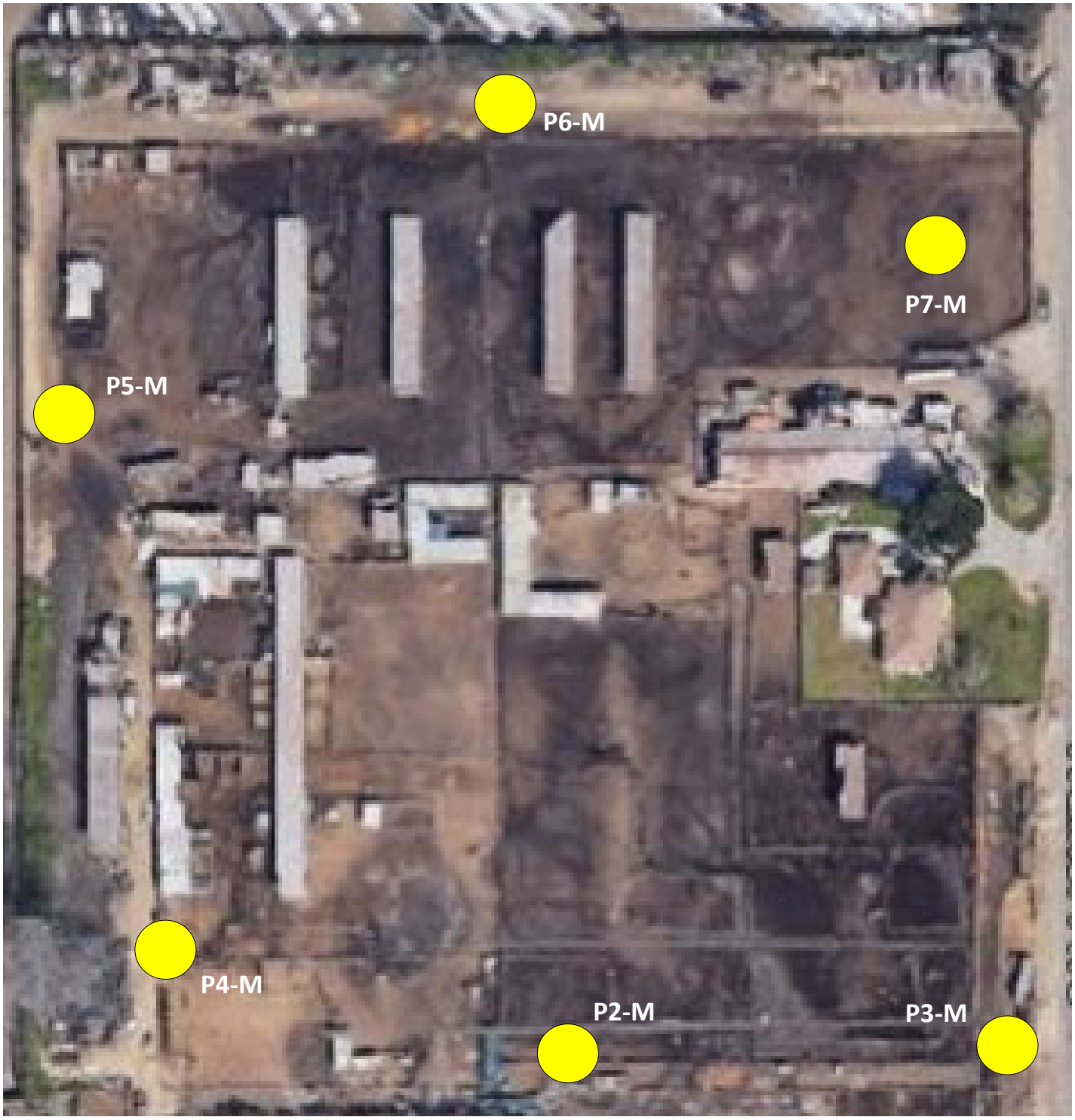
***Environmental Support Technologies***

Anthony F. Severini, PG
President

Attachments:

Methane Sample Locations Map

Appendix A: Methane Testing Field Log
Appendix B: City of Ontario Building Department Methane Assessment for Projects in the New Model Colony




TA-GROUP DD, LLC
Diligent Diligence

0 105 ft 210 ft

Scale is Approximate

**FIGURE 2**

**METHANE SAMPLE LOCATIONS**

Gorzeman Dairy Property
NW Corner Edison & Walker Avenues
California
Project 1220003.2

# APPENDIX A

**Environmental Support Technologies Methane Testing Field Report**

Page: _____

City of Los Angeles DBS Testing License No.: 10218

Instrument: RKI Eagle

Methane Accuracy: ±25 ppmv or 5% of reading (whichever is higher)

Calibration Date/Time: February 8, 2021/11:00 am

Site: Former Dairy Farm, 13948 Walker Ave

Proj. No.: EST3310 /

Sampler: AR

Date: 2/9/21

| Probe Number | Depth (ft. bgs) | Time (24 hr) (24 hr) | Pressure (IWC) | Barometric Pressure | Methane (ppmv) | $H_2S$ (ppmv) | $O_2$ (%) | CO (ppmv or %) | Comments |
|---|---|---|---|---|---|---|---|---|---|
| P7 | 5 | 9:45 | 0 | 29.3 | 250 | 0 | 10.2 | 0 | |
| P6 | 5 | 10:10 | 0 | 29.3 | 7050 | 0 | 9.5 | 0 | |
| P5 | 5 | 10:32 | 0 | 29.3 | 580 | 0 | 15.1 | 0 | |
| P4 | 5 | 10:46 | 0 | 29.3 | 630 | 0 | 16.8 | 0 | |
| P3 | 5 | 11:08 | 0 | 29.3 | 540 | 0 | 15.1 | 0 | |
| P2 | 5 | 11:30 | 0 | 29.3 | 650 | 0 | 14.7 | 0 | |
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# APPENDIX B

# City of Ontario

## BUILDING DEPARTMENT

303 EAST "B' STREET, CIVIC CENTER, ONTARIO, CALIFORNIA91764-4196
TELEPHONE: (909) 395-2023 FAX: (909) 395-2180


## METHANE ASSESSMENT FOR PROJECTS IN THE NEW MODEL COLONY

Applicants shall provide for the Building Department's review and approval, a methane assessment report addressing whether the property in questions was ever used as a dairy, poultry ranch, hog ranch, livestock feed operation site, manure stockpile site, manure/livestock burial site, run-off ponds, or for any other purpose that might result in the deposition of materials which might produce methane.

The report shall be prepared by a licensed engineer or licensed geologist and shall include the following:

- Historic aerial photos and historic topographic map review.
- Interviewing the owner/land managers for possible locations of potential methane generation areas.
- Site reconnaissance to determine the current site usage and conditions.
- Identifying potential methane areas.
- A proposed scope of work for post-grading methane investigation based on the historical study.

This report may be included as part of the soils and geology report and shall be submitted to the Building Department for review and approval at the time building permit applications are filed.

All lots in potential methane areas identified in the Methane Site Assessment report shall be tested for the presence of any methane and its concentration 30 days after building pads are graded and created.

A report, prepared by a licensed engineer or geologist and separate from the Methane Site Assessment report, summarizing the methane test conducted, the location/lot where methane is found and its concentration, and the recommended mitigation measures shall be submitted to the Building Department for review and approval. This test report could be a standalone report or be a part of the soils and geology report. This test report should be submitted together with building plans when permit applications are filed, or thereafter as soon as it is available. No building permit will be issued until the test report is approved by the Building Department, and the lots with methane and any required mitigation measures are shown on building plans.

### METHANE DESIGN GUIDELINES

| Measured Methane Concentration (ppm) | Minimum Mitigation Guidelines |
|---|---|
| < 15,000 | Provide a 10-mil moisture barrier. Seal utility conduits and other penetration in an approved method. |
| > 15,000 | Provide a 10-mil moisture barrier. Seal utility conduits and other penetration in an approved method. Also include any remediation required by the Engineer of record. |
| Waste, Burial Site, Pond, Lowland | Require methane report prepared by a licensed engineer or geologist on required remediation. |

EST
ENVIRONMENTAL SUPPORT TECHNOLOGIES
*Soil Gas Surveys, Direct Push Drilling, Mobile Laboratories, Soil Vapor Extraction Systems*

April 28, 2021

EST3310

Mr. Timothy Lester
TA Group DD, LLC
2195 Faraday Ave, Suite K
Carlsbad, CA 92008

**Subject:** **Project Report for Methane Soil Gas Testing on April 26, 2021**

**Site:** **13948 Walker Avenue**
**Ontario, California**

Dear Mr. Lester:

Environmental Support Technologies (EST) is pleased to present this report documenting the performance of a methane soil gas testing project at the farm located at 13948 Walker Avenue in the City of Ontario, California (the Site). EST holds a City of Los Angeles Department of Building and Safety (LADBS) Methane Testing License (#10218) and is a licensed California General Engineering Contractor and Driller (#920248- C57). The scope of work performed for this project consistent with the City of Ontario Building Departments (OBD) Methane Assessment for Projects in the New Model Colony.

The general investigation and reporting requirements of the guidelines referenced above are as follows:

- The investigation and report shall be prepared by a licensed engineer or licensed geologist.
- The report shall contain a historical aerial photos and historic topographic map review.
- Interviews with the owner/land managers will be performed to determine possible locations of potential methane generation areas.
- Site reconnaissance will be performed to determine the current site usage and conditions.
- Potential methane areas will be identified.
- A proposed scope of work will be developed for post-grading methane investigation based on the historical study.

This investigation provides a preliminary assessment of subsurface methane concentrations at select areas of the Site. This investigation is not meant to replace the future work planned to be performed as required in the above-mentioned guidelines. A more comprehensive subsurface methane investigation is required after grading is completed.

## Scope of Work

The project consists of a farm located on 13948 Walker Avenue in the City of Ontario, California. Methane testing was performed at seven (7) locations at a depth of 4 feet using standard soil gas testing procedures to identify any pockets of methane. The soil gas probes were sampled two hours after installation allowing enough time for subsurface equilibrium. Provided below is a general scope of work EST completed for the methane testing at the Site.

- Preparation of a site-specific health and safety plan for methane testing activities.
- Installation of borings for methane testing at a depth of 4 feet below ground surface (bgs) at 7 locations on the 1348 Walker Avenue property. A truck-mounted Geoprobe direct-push probe was used for the installation of the methane sampling probes on April 26, 2021. Groundwater was not encountered during drilling.
- Installation of methane sampling soil gas probes at 7 soil boring locations at a depth of 4 feet bgs across the Site.
- Performance of methane testing on April 26, 2021 occurred after the required minimum of 2 hours of subsurface equilibration time. Gas pressure was measured prior to methane testing using Magnehelic™ pressure gauges capable of measuring pressure to 0.01 inches of water column (IWC). Gas pressure was not detected in any of the probes sampled. Pressure measurement data is provided in **Appendix A**.
- Methane, hydrogen sulfide, oxygen and carbon monoxide were measured in each probe using a portable RKI Instruments Eagle Multi-Gas Detector (RKI Eagle) equipped with a combustible gas detector that was calibrated on April 23, 2021. The RKI Eagle detection range for methane is 0 to 50,000 parts per million by volume (ppmv) with an accuracy of ±50 ppmv or ±10% of reading (whichever is greater). The detection range for hydrogen sulfide is 0 to 100 ppm with an accuracy range of ±5% of the reading or ±2 ppmv (whichever is greater). The detection range of oxygen is 0 to 40% with an accuracy of 0.5% of the reading. The detection range for carbon monoxide is 0 to 500 ppmv with an accuracy range of ±5% of the reading or ±5 ppmv. The Probe testing results are provided in **Appendix A**.
- Preparation of this project report includes the signature and stamp of the registered professional responsible for the project.

## Conclusions

EST concludes the following regarding the findings of the methane testing project performed at 13948 Walker Avenue, Ontario, California:

- Gas pressure was not detected in any of the 7 probes sampled. In the presence of positive gas pressure, methane has the potential to penetrate and accumulate in above or below ground building structures.
- The "action level" for methane in soil gas that may require further investigation and/or mandatory provisions for mitigation (e.g. sub-slab barriers, etc.) is generally considered to be 5,000 ppmv. Methane was not detected in any of the probes tested above 5,000 ppmv, with the exception of probe SG15 that had a concentration of 22,750 ppmv.
- A review of the OBD Methane Assessment for Projects in the New Model Colony minimum mitigation guidelines state that methane concentrations above 15,000 parts per million (ppm) require a 10-millimeter moisture barrier, the sealing of utility conduits and other subsurface penetrations in an approved method and include any remediation required by the Engineer of record.
- Additional methane design guidelines include a methane report prepared by a licensed engineer or geologist on required remediation for properties that contain waste sites, burial sites, ponds and/or lowlands. EST recommends the installation of additional borings around soil vapor probe SG15 on the property to determine if other areas near the probe exceed the "action level" for methane and an investigation into any waste or burial sites on the Site.

## Limitations and Warranties

Environmental Management Strategies, Inc. (EST) prepared this report for the exclusive use of **TA Group DD, LLC** and assigned parties only. The services described within this document were performed in accordance with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. The information contained in this report was based on measurements performed in specific areas during a specific time period. EST' professional opinions and conclusions are based in part on interpretation of data from discrete sampling or measurement locations that may not represent actual conditions at un-sampled or un-measured locations. EST assumes no responsibility for issues arising from changes in environmental standards, practices, or regulations subsequent to performance of site assessment work. In the event that any changes occur in site conditions or uses of the property, the conclusions and recommendations contained in this document should be reviewed and modified or verified in writing by EST. EST does not warrant the accuracy of information supplied by others, or the use of segregated portions of this document.

Please contact the undersigned at (949) 679-9500 if you have any questions regarding this project.

Sincerely,

***Environmental Support Technologies***

Anthony F. Severini, PG
President

Attachments:

Methane Sample Locations Map

Appendix A: Methane Testing Field Log
Appendix B: City of Ontario Building Department Methane Assessment for Projects in the New Model Colony

# APPENDIX A

**Environmental Support Technologies Methane Testing Field Report**

Page: 1 of 1

City of Los Angeles DBS Testing License No.: 10218

Instrument: RKI Eagle

Methane Accuracy: ±25 ppmv or 5% of reading (whichever is higher)

Calibration Date/Time: April 23, 2021/10:00 am

Site: Former Dairy Farm/13948 Walker Avenue

Proj. No.: EST3310

Sampler: AF

Date: 4/26/2021

| Probe Number | Depth (ft. bgs) | Time (24 hr) (24 hr) | Pressure (IWC) | Barometric Pressure | Methane (ppmv) | $H_2S$ (ppmv) | $O_2$ (%) | CO (ppmv or %) | Comments |
|---|---|---|---|---|---|---|---|---|---|
| S615 | 4 | 9:15 | 0 | 29.1 | 22,750 | 0 | 9.5 | 0 | |
| S616 | 4 | 9:48 | 0 | 29.1 | 790 | 0 | 10.2 | 23 | |
| S617 | 4 | 9:58 | 0 | 29.1 | 390 | 0 | 10.0 | 0 | |
| S618 | 4 | 10:15 | 0 | 29.1 | 410 | 0 | 10.0 | 0 | |
| S619 | 4 | 10:27 | 0 | 29.1 | 350 | 0 | 8.4 | 0 | |
| S620 | 4 | 10:59 | 0 | 29.1 | 580 | 0 | 12.4 | 0 | |
| S621 | 4 | 11:16 | 0 | 29.1 | 260 | 0 | 8.4 | 6 | |
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